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THE EMERGENCE OF PIDGIN & CREOLE LANGUAGES

Hawai'i Creole
Fitzroy Kriol
New South Wales Pidgin English
Melanesian Pidgin
Tok Pisin Pijin Bislama
Roper Kriol
Hawai'i Pidgin English
Chinese Pidgin English
Pacific Pidgin English
Pidgin Fijian

JEFF SIEGEL

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Jeff Siegel

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Abbreviations

| | |
|-------|--------------------------------------|
| 1 | first person |
| 2 | second person |
| 3 | third person |
| ABIL | abilitative |
| ABL | ablative |
| ACP | accomplished |
| ADJ | adjective |
| ANT | anterior |
| AOR | aorist |
| ART | article |
| ASP | aspect marker |
| ASS | asserted reality |
| AUX | auxiliary |
| BFLA | bilingual first language acquisition |
| BV | Basic Variety |
| C | connective particle |
| CAUS | causative |
| CEO | Central Eastern Oceanic |
| CLF | classifier |
| COMPL | completive |
| CONJ | conjunction |
| CONT | continuative |
| COP | copula |
| CPE | Chinese Pidgin English |
| CV | coverb |
| D | determinative particle |
| DEF | definite |
| DEM | demonstrative |
| DESC | descriptive |
| DET | determiner |

| | |
|---------|--|
| DIR | directional |
| DSID | desiderative |
| DU | dual |
| EM | emphasis |
| EMPH | emphatic |
| EVID | evidential |
| EXCL | exclusive |
| EXT | extreme |
| FOC | focus |
| FUT | future |
| G1 | first generation of immigrants |
| G2 | second generation (first locally born) |
| G3 | third generation (second locally born) |
| GEN | genitive |
| HAB | habitual |
| HC | Hawai'i Creole |
| HCE | Hawai'i Creole English |
| HER | <i>Hawaii Education Review</i> |
| HPE | Hawai'i Pidgin English |
| IL | interlanguage |
| INCH | inchoative |
| INCL | inclusive |
| IND-FUT | indefinite future |
| INFL | inflection |
| INS | insisted reality |
| INT | intentional |
| IRR | irrealis |
| ITER | iterative |
| Kwa | Kwaio |
| L1 | first language |
| L1A | first language acquisition |
| L2 | second language |
| L2A | second language acquisition |
| LBH | Language Bioprogram Hypothesis |
| LIG | ligature |
| LOC | locative |

| | |
|-------|-----------------------------------|
| MDP | multiple derivation prefix |
| MP | Melanesian Pidgin |
| NC | nominal classifier |
| NEC | necessity |
| NEG | negative |
| Ngu | Nguna |
| NOM | nominalizer |
| NONSG | non-singular |
| NONST | non-stative |
| NSWPE | New South Wales Pidgin English |
| NTPE | Northern Territory Pidgin English |
| NUM | numeral |
| OBJ | object |
| OBLIG | obligation |
| OM | object marker |
| P.C. | personal communication |
| P/C | pidgin and creole |
| PACP | past accomplished |
| PF | Pidgin Fijian |
| PFT | perfect |
| PFV | perfective |
| PL | plural |
| PLD | primary linguistic data |
| PM | predicate marker |
| PNG | Papua New Guinea |
| PNGE | Papua New Guinea English |
| POSS | possessive |
| POT | potential |
| PPE | Pacific Pidgin English |
| PPRG | past progressive |
| PPUNC | past punctual |
| PR | predicate |
| PREP | preposition |
| PROG | progressive |
| PROX | temporal proximity |
| PRP | personal article |

| | |
|------|-----------------------------|
| PRS | present |
| PRT | particle |
| PST | past |
| PUNC | punctual |
| RECP | reciprocal |
| REFL | reflexive |
| REL | relative |
| REP | repeated |
| SF | Standard Fijian |
| SG | singular |
| SLA | second language acquisition |
| SLS | second language studies |
| SP | Solomons Pijin |
| SRP | subject-referencing pronoun |
| SUB | subordinator |
| TA | tense-aspect marker |
| TL | target language |
| TMA | tense-modality-aspect |
| To'a | To'aba'ita |
| Tol | Tolai |
| TP | Tok Pisin |
| TR | transitive |
| UG | Universal Grammar |
| VB | Vanuatu Bislama |

1 Introduction

When people who speak different languages come into sustained contact, new varieties of language sometimes emerge. These are called ‘contact varieties’. This book deals primarily with contact varieties that have emerged in the Australia-Pacific region within the last 150 years as the result of colonialism. Although the focus is on two particular types of contact varieties, pidgins and creoles, other types are mentioned as well, including ‘indigenized varieties’ and ‘language shift varieties’. Since all these terms are used in a variety of ways in the literature on language contact, I begin with some definitions.

1.1 Definitions

Pidgins and creoles are new languages that develop out of a need for communication among people who do not share a common language—for example, among plantation labourers from diverse geographic origins. Most of the forms in the lexicon of the new language come from one of the languages in the contact situation, called the ‘lexifier’ (or sometimes the ‘superstrate’)—usually the language of the group in control of the area where contact occurs. However, the meanings and functions of the lexical forms, as well as the phonology and grammatical rules of the pidgin or creole, are different to those of the lexifier, and may sometimes resemble those of one or more of the other languages in contact, usually referred to in pidgin and creole studies as the ‘substrate languages’.

An example is the following sentence from Fitzroy Kriol, a creole spoken in the Kimberley region of Western Australia (Hudson 1983: 66):

- (1) *Dei bin stab-am-bat orla kid from taka.*
3PL PST starve-TR-ITER PL child ABL food
‘They denied the children a meal (as punishment).’

All the lexical forms in this sentence are derived from English, but with changes that conform to the phonology of the substrate languages, such as Walmajarri—for example: *dei* from *they* and *stab* from *starve*. Some of the words have meanings different from English—for example: *stab* does not really mean ‘starve’. And *taka*, does not mean ‘food’ in general, as *tucker* does

in Australian English, but rather ‘vegetable food’ as opposed to ‘game’, which in Fitzroy Kriol is *mit* (from *meat*). This reflects a distinction in Walmajarri between *miyi* ‘edible vegetable product’ and *kuyi* ‘game or meat bought in a store’ (Hudson 1983: 137). Furthermore, some forms from English have taken on grammatical functions: *bin* (from *been*) as a past tense marker, *-am* (from *him* and/or *them*) as a suffix indicating the verb is transitive, *-bat* (from *about*) as a suffix marking repeated or continuing action, and *orla* (from *all the*) indicating plural.

Such contact languages begin to emerge when people first develop their own individual ways of communicating, often by using words and phrases they have learned from other languages (most often from the lexifier) that they think others might be familiar with. The combination of these individualized ways of communicating is called a ‘jargon’ or ‘pre-pidgin’. Here are some examples from the early ‘South Seas Jargon’, that emerged from contact between Pacific Islanders and Europeans in the 1800s (from Clark 1979: 29–30, 37)

- (2) a. *Only he got using all the same pigeon.* (Gilbert Islands, 1860)
- b. *Me saba plenty.* (Gilbert Islands, 1860)
- c. *Canoe too little, by and bye broke—All man go away, canoe gone, very good me stop.* (Lifu [Loyalty Islands], 1850)
- d. *He too much bad man.* (Kosrae, 1860)

If the groups remain in contact, or if several groups start to use the pre-pidgin as a lingua franca, certain communicative conventions may develop, resulting in new language—a pidgin. In the Pacific, this occurred after 1863 when Islanders from diverse regions were recruited to work on plantations in Queensland and Samoa (described in more detail in Chapter 4). A stable pidgin emerged, using some features from the pre-pidgin more consistently, while dropping others:

- (3) a. *White man allsame woman, he no savee fight.* (Kolombangara (western Solomon Islands), 1880) (Coote 1882: 206)
- b. *Suppose me come along school, by-and-by me no savee fight.* [‘If I come to school, I won’t be able to fight.’] (Bundaberg (Queensland), 1886) (Young 1926: 47)
- c. *Me no care, me no belong this fellow place, man here no good—rogue.* (Tanna (New Hebrides), 1877) (Giles 1968 [1877]: 40)

These examples show the use of *allsame* from *all the same* to mean ‘like, similar to’; *savee* (*saba* in example 2b) meaning ‘know how to’, and extended

to mean ‘be able to’, and *by-and-by* used to indicate the future. Also shown is the emergence of *along* as a general locative preposition. On the other hand, the use of the word *bad* in the pre-pidgin was replaced by *no good*. All these features have correspondences in modern Melanesian Pidgin, spoken in Papua New Guinea, the Solomon Islands, and Vanuatu.

Once a stable pidgin has emerged, it generally continues to be learned as an auxiliary language and used only when necessary for intergroup communication. Its vocabulary remains small, and it has little if any grammatical morphology. This is called a ‘restricted pidgin’. An example in the Pacific is Pidgin Fijian, described in Chapter 2. This language—which has Fijian, not English, as the lexifier—emerged on plantations in Fiji in the late 1800s, and is now used most often in commercial settings for communication among indigenous Fijians, descendants of indentured labourers from India, and Chinese merchants (Siegel 1987).

In some cases, however, the use of a pidgin is extended into wider areas—for example, as the everyday lingua franca in a multilingual community, and even as a language used in religion and government. As a result, the language expands lexically and grammatically, and is fittingly called an ‘expanded pidgin’. This is what happened with Melanesian Pidgin, which expanded when it became an important lingua franca after labourers brought it back to their home countries (Chapter 4).

In another scenario, people in a newly emerging mixed community use a pidgin on a daily basis, and some of them shift to it as their primary language, which they speak to their children. Because of this extended use, the pidgin would already be expanded or in the process of expanding. Thus, children growing up in this context acquire the expanded pidgin as their mother tongue (or first language), and it becomes their community language. At this stage it is then called a ‘creole’. Like any other vernacular language, a creole has a full lexicon and a complex set of grammatical rules, and is not at all restricted in use, having a complete range of informal functions. An example is Fitzroy Kriol, referred to above, and also the closely related Roper Kriol, spoken in northern Australia. This creole, described in Chapter 8, is thought to have emerged among Australian Aboriginal children brought up at a mission station where their parents took refuge from settlers who were killing Aboriginal people in order to set up cattle stations on their land.

Disagreements exist about the precise definitions of ‘pidgin’ and ‘creole’, arising from researchers focussing on different aspects of these languages. The perfect example is Melanesian ‘Pidgin’. Some linguists who emphasize

sociolinguistic criteria call it a pidgin, because it is a second language rather than the mother tongue for the large majority of its speakers. Others call it a creole because it has some native speakers and it is used in a wide range of functions. Those who consider only linguistic criteria call it a creole because the grammatical features which it has developed are just as complex as those of clearly recognized creoles. For example, the following sentence from Bislama (the dialect of Melanesian Pidgin spoken in Vanuatu) shows grammatical features similar to those of Fitzroy Kriol, shown in example (1):

- (4) *Dokta i bin pul-um-aot olgeta tut blong olfala.*
doctor 3SG.SRP PST pull-TR-DIR all tooth GEN old.man
'The doctor pulled out all of the old man's teeth.' (Crowley 2004: 83)

The common features are the preverbal past tense marker, a transitive suffix, and a second-level verbal suffix, here a directional rather than an iterative marker. Bakker (forthcoming) suggests the term 'Pidgincreole' for such varieties. However, I retain the traditional term 'expanded pidgin' for Melanesian Pidgin, because the vast majority of its speakers still speak other languages as well, and it is not the vernacular language of any distinct, newly emerged community.

A great deal of controversy also exists about what kind of languages can be labelled creoles and whether or not creoles can be distinguished as a class of languages according to linguistic criteria (e.g. McWhorter 1998, 2001, 2003; DeGraff 2001*a*, 2001*b*, 2003). Nevertheless, most linguists do agree that they can be delimited by sociohistorical criteria—for example, that they are varieties of language that developed as a result of language contact (Mufwene 2001; DeGraff 2003). This issue is not a focus of this book, and the languages referred to as creoles are those for which the label is not controversial.

In contrast to pidgins and creoles, indigenized varieties are new dialects, rather than new languages. They arise in colonies where the colonial language has had widespread use in the education system and has been learned as a second language by a large proportion of the population. Like an expanded pidgin, an indigenized variety is used in a multilingual environment and functions as a lingua franca for daily interactions. Unlike an expanded pidgin, however, its grammatical rules are much closer to those of the lexifier (the colonial language), although some of the lexicon, phonology, and morphosyntax are influenced by the indigenous substrate languages (thus, indigenized). Here are some examples from Fiji English (Mugler and Tent 2004: 773, 775):

- (5) a. *Us gang own this store.*
 b. *Jone and them coming to the party tonight, eh?*

The indigenized varieties that have been most studied are based on English, and are often called ‘New Englishes’ or ‘World Englishes’. Other examples besides Fiji English are Singapore English and Papua New Guinea (PNG) English. All three of these indigenized varieties are referred to at various places in this book.

Another type of new dialect is a ‘language shift variety’. This kind of contact variety emerges when a whole population has shifted to another language, again most often a result of colonial rule, and their original language has affected the way that they speak the colonial language they have shifted to. This is often thought to be the result of a process called ‘substratum interference’ (Thomason and Kaufman 1988). Examples are South African Indian English (Mesthrie 1992) and Irish English (e.g. Harris 1991). Again, the grammatical rules of a language shift variety do not differ significantly from those of the colonial language, as shown in these examples from Irish English (Filppula 2004: 79, 89):

- (6) a. *They always keep the horse up above. It doesn't be usually down in the field.*
 b. *There was four boys of us, and there's three of them dead.*

An obvious problem with the definitions of these last two contact varieties is that it is often difficult to distinguish whether two ways of speaking are separate languages, or dialects of the same language (an issue discussed in Siegel 2001). While there are some clear cases of language versus dialect, there is no precise linguistic dividing line that can distinguish them. Similarly, the other types of contact varieties described here are graded phenomena rather than essential categories. For example, there are pidgins, such as Fanakalo (South Africa) that fall somewhere between the restricted and expanded categories. And as we have seen with Melanesian Pidgin, it is sometimes hard to draw the line between an expanded pidgin and a creole. Further complicating matters, some creoles have a continuum of varieties ranging from those linguistically furthest from the lexifier (traditionally called the ‘basilect’) to those closest to the lexifier (the ‘acrolect’), with intermediate varieties (the ‘mesolect’). Acrolectal varieties often have many linguistic similarities with indigenized or language shift varieties—for example, ‘light’ Roper Kriol and Aboriginal English (e.g. Eades 1996). Nevertheless, there are also unambiguous examples of these categories, such

as ‘heavy’ (or basilectal) Roper Kriol as a creole and Pidgin Fijian as a restricted pidgin.

1.2 Questions about the emergence of pidgins and creoles

Explanations about the emergence of pidgin and creole contact languages have also been surrounded by controversy. Three aspects of these languages have been the most contentious. The first has to do with ‘simplification’ or ‘formal simplicity’, a notion which is itself contentious. Pidgins and creoles are thought to be ‘simpler’ than their lexifiers, especially in terms of grammatical morphology. In restricted pidgins, as defined above, there is virtually no grammatical morphology. Although expanded pidgins and creoles have developed a great deal of grammatical morphology, there are still areas where they appear to be simpler than their lexifiers. For example, in Tok Pisin (the Papua New Guinea dialect of Melanesian Pidgin):

- (7) a. *Asde em i wok long gaden.* ‘Yesterday he/she worked in the garden.’
b. *Tupela dok i kam long em.* ‘The two dogs came to him/her.’

Here there is no past tense marking on the verbs *wok* ‘work’ or *kam* ‘come’, no plural marking on *dok* ‘dog’, and one form *em* can mean ‘he, she, it, him, her’. While there is currently a considerable amount of disagreement about whether or not creole languages are simpler than other languages in general (e.g. McWhorter 2001 versus DeGraff 2001*b*), there is general agreement that creoles are less complex than their lexifiers at least in some areas of grammar, such as verbal morphology. Some particular questions with regard to simplification are:

1. What is the origin of the formal simplicity found in restricted pidgins? Is it a consequence of speakers of the lexifier simplifying their language in talking to others? Or could it be a consequence of language learning?
2. What is the origin of formal simplicity in creoles? Is it the consequence of having a restricted pidgin predecessor? Or is it the result of the lexifier undergoing normal processes of language change?

The second area of controversy involves the question of the origin of grammatical innovations in expanded pidgins and creoles—that is, the grammatical morphology and rules that are not found in the preceding pidgin. For example, again in Tok Pisin:

(8) *Mipela lukim ol pik pinis.* ‘We have seen the pigs.’

Here we see the suffix *-pela* as a plural marker on the pronoun *mi* and a transitive suffix *-im* on the verb *luk* ‘look, see’ (similar to that in the Fitzroy Kriol and Bislama examples above). There are also two periphrastic grammatical markers: *ol*, a pronominal plural marker, and *pinis* a postverbal completive marker. None of these features is found in earlier varieties of Melanesian Pidgin or in the lexifier, English. Some particular questions with regard to the origins of such innovations are:

1. Do the innovations arise from the expansion of a restricted pidgin predecessor or from the gradual restructuring of the lexifier through the usual processes of language change?
2. Do the innovations reflect universal features of human language or features of the substrate languages?
3. If creoles do have substrate features, then:
 - a. Why do some creoles appear to have more substrate features than their pidgin predecessors, even though creole speakers, unlike pidgin speakers, never knew the substrate languages?
 - b. Why do some substrate features end up in creoles but others do not?

The final questions concern the ‘life cycle’ of pidgins and creoles (e.g. Hall 1966):

1. Does a creole generally have a pidgin predecessor?
2. Does a continuum of varieties (e.g. basilect to acrolect) normally emerge after a creole has developed?

1.3 About this book

This book examines all of the questions and controversies outlined above. This is done on the basis of sociohistorical and linguistic data, with a concentration on the morphosyntax of Pacific pidgins and creoles. Much of the data comes from articles I have published over the last ten years, but the analysis and arguments have been revised and woven together to form a more coherent picture of the emergence of pidgins and creoles.

The book is aimed not only at linguists who specialize in contact languages, but also at general linguists and scholars in the field of second language acquisition (SLA). The result is that readers from these various audiences will most probably find particular parts of the discussion to be very elementary—for example, the preceding introduction for those in the

field of pidgin and creole studies, the description of the principles and parameters approach (Chapter 2) for general linguists, and the account of various theories of SLA (Chapters 2 and 5) for those in that field.

Creolists may also wonder why I give so much prominence to the Language Bioprogram Hypothesis (Bickerton 1981, 1984*a*) when its validity has generally not been accepted in their field for many years. However, the hypothesis is still being referred to uncritically outside this field (e.g. Aronoff, Meir, and Sandler 2005; Hudson Kam and Newport 2005), and therefore a detailed explanation of why it is not valid is critical for non-creolist readers.

Thus, I hope that the book will have something new to offer readers from a wide range of linguistic subdisciplines, but that they will be happy to skim over any material that is all too familiar to them.

1.3.1 Origins of the data

The many linguistic examples originally came either from my own data or from a variety of published sources, including grammars and literature using various pidgins and creoles. In looking at historical features, I rely on examples from travellers' accounts, histories, newspapers, and court hearings. The applicability and reliability of such documentary evidence is discussed by Clark (1979: 23–4) and Crowley (1990*a*: 33–45, 1991: 59). Most of the historical information about Hawai'i Creole comes second-hand from the work of Sarah Roberts (especially, 1998, 2000, 2005).

1.3.2 Outline

Chapter 2 begins with a demonstration of the notion of simplification or simplicity, using data from Pidgin Fijian. After a discussion of the disagreement about how the notion should be defined and measured, the scope is narrowed down to one type—morphological simplicity. A scale of 'lexicality' as opposed to 'grammaticality' is proposed as an indicator of this kind of simplicity. The chapter goes on to argue that the origins of this formal simplicity in restricted pidgins is the same as that found in adult second language acquisition (SLA), and it examines various explanations from the SLA literature. The chapter then introduces the phenomenon of mixing and levelling that accounts for the stabilization of contact varieties. It concludes by exploring some of the possible reasons for the retention of morphological

simplicity in contact languages, rather than convergence with the target language as normally occurs in SLA.

Chapter 3 examines morphological simplicity in creoles and various explanations put forward to account for it, including the existence of a restricted pidgin predecessor, exemplified by early Hawai'i Pidgin English. After a brief further discussion of mixing and levelling, the chapter goes on to talk about the morphological expansion in restricted pidgins that precedes the emergence of creoles, again illustrating this phenomenon with data from expanded Hawai'i Pidgin English.

The possible sources of this morphological expansion are described in Chapter 4: language-internal developments, linguistic universals, and the influence of other languages. The universalist position, as promoted by Derek Bickerton, is examined in detail in light of recent research on the development of Hawai'i Creole (also known as Hawai'i Creole English). The adoption of morphology from the lexifier, other contact varieties, and the substrate languages is considered. The most important influence of other languages on morphological expansion, however, appears to be the use of lexical forms from the lexifier with grammatical functions of morphemes from the substrate languages. This is illustrated in detail with examples from Melanesian Pidgin and then again from Hawai'i Creole.

In order to answer the question of how features from the substrate languages get into expanding pidgins and eventually creoles, Chapter 5 delves into the process of language transfer. It concentrates on two types: word order transfer and the transfer of the functions of grammatical morphemes of one language to the lexical forms of another—what I call functional transfer. Evidence of transfer is examined in three contexts: second language acquisition, bilingual first language acquisition, and second language use. Some motivations for transfer and its connections with the emergence of creoles are put forward, and then other views discussed. The chapter ends by looking at some possible explanations for how functional transfer occurs in the minds of individuals.

Chapter 6 formulates some constraints on substrate influence to explain why only a subset of substrate features end up in an expanded pidgin or creole. This is done by examining the core features of the Central Eastern Oceanic substrate languages of Melanesian Pidgin, and analysing the possible reasons for some of these features being found in Melanesian Pidgin while others are not. The constraints include factors that affect whether or not particular substrate features can be transferred and thus become available to the expanding pidgin. Also discussed are principles that determine

whether or not transferred features are retained in the emerging contact variety during levelling.

One of the principles that determines the retention of particular features during levelling is substrate reinforcement, the topic of Chapter 7. Substrate reinforcement is illustrated in the development of the three current dialects of Melanesian Pidgin: Papua New Guinea Tok Pisin, Vanuatu Bislama, and Solomon Islands (or Solomons) Pijin. Five grammatical features that differentiate the dialects are examined. For each feature, it is shown first that at least two variants were previously in use. Then evidence is presented illustrating correspondence between the particular variant retained in the dialect and a feature of the substrate languages of that geographic area.

Chapter 8 presents two case studies that illustrate that the availability constraints (affecting transfer) and reinforcement principles (affecting retention), as described in the preceding two chapters can be used to account for substrate influence in creoles. The first case study deals with the Tense-Modality-Aspect (TMA) system of Tayo, a French-lexifier creole spoken in New Caledonia. The second study is concerned with the verb complex of Roper Kriol, mentioned above. Some sociohistorical information is given for each creole before the analysis is done.

Chapter 9 investigates the notion of decreolization and the development of continua of variation. The first part of the chapter investigates the supposed existence of a post-creole (or post-pidgin) continuum of variation between Melanesian Pidgin and English. The second part looks at two types of decreolization in Hawai'i Creole—conventional and covert.

The final chapter summarizes the findings about the emergence of pidgins and creoles presented in the book, and reviews their implications for various other explanations.

2 Morphological Simplicity in Pidgins

One of the fundamental notions used to define pidgin and creole languages is ‘simplification’—that each of these languages is somehow less complex than its lexifier. In discussing this notion, however, I prefer the term ‘simplicity’, which describes a state, rather than ‘simplification’, which implies a process involving reduction of complexity. This chapter begins with a clear illustration of comparative simplicity, using data from Pidgin Fijian. It then discusses some of the many ways that simplicity can be defined and measured, and goes on to specify a particular type that I will refer to throughout this work—morphological simplicity. The final sections of the chapter explore the origins of this kind of simplicity in restricted pidgins and second language acquisition, and some of the reasons for its retention in contact languages.

2.1 Simplicity in Pidgin Fijian

We begin with some background information on the historical development and current use of Pidgin Fijian, and then go on to look at its linguistic features.

2.1.1 Historical development and current use

Fiji is a group of 300 islands in the southwest Pacific on the border of the cultural areas of Melanesia and Polynesia. The Fijian language, spoken throughout the group, consists of many dialects, some of which are not mutually intelligible. However, one particular variety of the language—today known as Standard Fijian—has served as the lingua franca among the indigenous population (Geraghty 1984).

Fijians first had extensive contact with Europeans in the early 1800s, initially with shipwrecked sailors and then with people involved in the sandalwood and *bêche-de-mer* (sea cucumber) trades. Since the Fijians remained firmly in control of their islands, long-term visitors and residents learned their language (the Fijian lingua franca) to communicate with them. Wesleyan missionaries arrived in 1835, followed by settlers, who

started small plantations in the late 1850s. The first plantation labourers were Fijians, and the language used to run the plantations was Fijian. Even when Fiji became a British colony in 1870, the general policy of using Fijian continued.

However, since the early days of contact, many Europeans had been using various 'simplified' versions of Fijian. Although these versions were highly variable, some salient linguistic features had begun to be conventionalized, such as the overgeneralized use of the Fijian independent pronouns and the aspect marker *sā*. As many of the plantation owners were newcomers who had to learn Fijian quickly, this 'pidginized' Fijian, or pre-pidgin, was often used as the plantation language.

In 1864 indentured labourers began to be imported from other Pacific Islands. They came mainly from what are the current countries of Vanuatu, the Solomon Islands, and Kiribati, and spoke dozens of different Oceanic languages. Although these Pacific Islanders soon replaced Fijians as labourers on the plantations, Fijian (often pidginized Fijian) continued to be used as the plantation language, and it also became the lingua franca among the Pacific Islanders themselves. This wider use of the Fijian pre-pidgin soon led to the emergence of a stable Pidgin Fijian.

The importation of Pacific labour ended in 1911. The small number of Pacific Islanders who remained in Fiji assimilated into the Fijian community, and their descendants now speak Fijian indistinguishable from that of indigenous Fijians. However, Pidgin Fijian has been passed on from generation to generation and has survived with a new function: a vehicle for interethnic communication with Fiji's Indian community. Large numbers of indentured labourers were imported from India from 1879 to 1916, and their descendants, speaking Fiji Hindi, make up a large proportion of Fiji's citizens.

The current population of Fiji is approximately 893,000. Fijians (the name used for the indigenous population only) make up 51 per cent, Fiji Indians (or Indo-Fijians) 44 per cent, and other groups (including Europeans, people of mixed race, other Pacific Islanders and Chinese) 5 per cent. Today Pidgin Fijian can be heard in many interactions between Fijians and Indians, primarily on the main islands of Viti Levu and Vanua Levu where large numbers of the two groups live near each other. Many Chinese people (who make up 0.6 per cent of the population) also speak Pidgin Fijian. Another pidgin, Pidgin Hindustani, is also used. Both pidgins are still widely spoken, although they are gradually being displaced by Fiji English (Siegel 1987)—especially in the capital, Suva.

2.1.2 Linguistic features

The following examples of Pidgin Fijian are taken from more extended data recorded during fieldwork in Fiji in the 1980s. Recent visits to Fiji have confirmed that it is still spoken in basically the same form as reported here.

Examples of Pidgin Fijian (abbreviated as PF) are compared to Standard Fijian (abbreviated as SF). Standard Fijian orthography is used for both: = /^mb/, <c> = /ð/, <d> = /ⁿd/, <g> = /ŋ/, <q> = /^ŋg/. (For a detailed description of SF, see Schütz 1985.)

2.1.2.1 Bound morphology

PF has a lack of productive bound inflectional morphology in both the verb phrase and the noun phrase. In SF, the most common verbal inflections are the portmanteau suffixes marking transitivity and object: *-Ci*, *-Ca* or *-Caka* (where *C* is any consonant). In PF, this suffix is absent or fused to the verb stem:

- (1) PF: *kokoya sa musu na tabana*
 3SG PM cut ART branch
 ‘He cut down the branch.’
 SF: *e musu-ka na taba-na* (o *koya*)
 3SG cut-TR.OM DEF branch-3SG.POSS PRP 3SG
- (2) PF: *raita koyau*
 see 1SG
 ‘Look at me.’
 SF: *rai-ci au*
 see-TR 1SG

In the PF noun phrase, the instrumental prefix of SF is not found, and the inalienable possessive suffixes are not productive. Most semantically inalienable nouns in PF have the 3SG possessive suffix *-na* of SF fused to the stem—for example: *tamana* ‘father’ (in SF ‘his/her father’); *tinana* ‘mother’ (in SF ‘his/her mother’).

- (3) PF: *tamana koyau*
 father 1SG
 ‘my father’
 SF: *na tama-qu*
 DEF father-1SG.POSS

2.1.2.2 *Noun Phrase**Pronouns:*

SF has from 70 to 135 pronouns, depending on how they are counted, indicating person, the inclusive-exclusive distinction, and number (singular, dual, paucal, and plural). There is a subject-marking set, an objective set, an independent set and four possessive sets: a postposed set for inalienable, and one preposed set each for edible, drinkable, and neutral alienable referents. In PF there are only six categories (see Table 2.1, which shows only one of the SF possessive sets). Note that the SF paucal forms have been adopted for the PF plural pronouns. The third-person pronoun is not used for inanimates; rather PF *na ka* ‘the thing’.

Articles and demonstratives:

PF has a generalized article *na* based on the definite article in SF (see examples 4, 8, 10), but it is not used where the proper article is used in SF. The three-way deictic distinction in SF is not found in PF; rather, there appears to be only one demonstrative: *(o)qo*, the distal demonstrative in SF (example 17).

Possession:

In contrast to the complex system of possessive morphology in SF, possession in PF is indicated simply by the juxtaposition of the possessed and the possessor (including pronouns). The ordering is variable, but the possessor

Table 2.1. Pronouns in Standard Fijian and Pidgin Fijian

| | Standard Fijian pronouns | | | | Pidgin Fijian pronouns |
|---------------|--------------------------|-----------------|----------------------|----------------------|------------------------|
| | subject marking | objective | independent | possessive (neutral) | |
| 1 singular | <i>au</i> | <i>au</i> | <i>o yau</i> | <i>noqu</i> | <i>koyau/koau</i> |
| 2 singular | <i>o</i> | <i>iko</i> | <i>o iko</i> | <i>nomu</i> | <i>koiko</i> |
| 3 singular | <i>e</i> | <i>a</i> | <i>o koya</i> | <i>nona</i> | <i>kokoya/(o)qo</i> |
| 1 excl.dual | <i>keirau</i> | <i>keirau</i> | <i>o (i)keirau</i> | <i>neirau</i> | } <i>keitou/kitou</i> |
| 1 excl.paucal | <i>keitou</i> | <i>keitou</i> | <i>o (i)keitou</i> | <i>neitou</i> | |
| 1 excl.plural | <i>keimami</i> | <i>keimami</i> | <i>o (i)keimami</i> | <i>neimami</i> | |
| 1 incl.dual | <i>(e) daru</i> | <i>kedaru</i> | <i>o (i)kedaru</i> | <i>nodaru</i> | |
| 1 incl.paucal | <i>((e) da)tou</i> | <i>kedatou</i> | <i>o (i)kedatou</i> | <i>nodatou</i> | |
| 1 incl.plural | <i>(e) da</i> | <i>keda</i> | <i>o (i)keda</i> | <i>noda</i> | } <i>kemudou</i> |
| 2 dual | <i>(o) drau</i> | <i>kemudrau</i> | <i>o (i)kemudrau</i> | <i>nomudrau</i> | |
| 2 paucal | <i>(o) dou</i> | <i>kemudou</i> | <i>o (i)kemudou</i> | <i>nomudou</i> | |
| 2 plural | <i>(o) nī</i> | <i>kemunī</i> | <i>o (i)kemunī</i> | <i>nomunī</i> | } <i>koratou</i> |
| 3 dual | <i>(e) rau</i> | <i>rau</i> | <i>o (i)rau</i> | <i>nodrau</i> | |
| 3 paucal | <i>(e) ratou</i> | <i>iratou</i> | <i>o iratou</i> | <i>nodratou</i> | |
| 3 plural | <i>(e) ra</i> | <i>ira</i> | <i>o ira</i> | <i>nodra</i> | |

most commonly occurs first in current PF, in contrast to the earlier plantation PF where it occurred last (see Siegel 1992).

- (4) PF: *koyau na vale* OR *na vale koyau*
 1SG ART house ART house 1SG
 ‘my house’
 SF: *na no-qu vale*
 DEF POSS-1SG house

Prepositional phrases:

PF has prepositional phrases like SF, but there are fewer prepositions. In addition, PF does not require the locative preposition in locative sentences:

- (5) PF: *kokoya sa lako Nadi?*
 3SG PM go Nadi
 ‘Did he go to Nadi?’
 SF: *e ā lako i Nadi?*
 3SG PST go to Nadi

2.1.2.3 *Verb phrase*

Predicate marker:

Like the pre-pidgin, PF has a generalized predicate marker *sa*, based on an aspect marker in SF (examples 5, 6, 7, 10).

Tense-modality-aspect (TMA) marking:

There are no grammatical TMA markers in PF; time relations are expressed with adverbs (adopted from the lexifier)—for example: *malua* ‘later’, *liu* ‘before’, *mataka* ‘tomorrow’, *nikua* ‘now’. PF also uses many expressions with the word for ‘time’ or the loanword *time* from English—for example: *gauna qo* ‘at this time’, *na taim* ‘(at) the time, when’. In addition, PF uses the word *oti* ‘finish’ to mark the end of an action or state, as in SF:

- (6) PF: *nikua sa vakamaui oti*
 now PM married finish
 ‘I’m married.’
 SF: *au sã vakamaui oti*
 1SG ASP married COMPL
- (7) PF: *gauna keitou oti takataka keitou sa lako siwa*
 time 1PL finish work 1PL PM go fishing
 ‘When we finished work, we went fishing.’
 SF: *ni oti na neimami cakacaka keimami ā lai siwa*
 SUB finish DEF 1PL.EXCL.POSS work 1PL.EXCL PST go fishing

Copula:

PF uses a locational verb *tiko* ('stay, exist' in SF) as a copula for locational and existential sentences:

(8) PF: *na lawa tiko*

ART net COP

'There's a net.'

SF: *e tiko na lawa*

3SG exist DEF net

(9) PF: *sa tiko lomani koro*

PM COP inside village

'(He) is in the village.'

SF: *e tiko e loma ni koro*

3SG stay LOC inside POSS village

The copula is also used in 'have' possessive constructions:

(10) PF: *koyau sa tiko lima na gone*

1SG PM COP five ART child

'I have five kids.'

SF: *e lima na levu-qu*

3SG five DEF child-1SG.POSS

2.1.2.4 Sentence level syntax

Ordering of phrases:

PF is generally SVO (see examples 1, 10, 11). This follows the ordering of SF: subject-marking pronoun, verb, object. However, while in SF a fully specified (i.e. non-pronominal) subject most often comes after the object, in PF it comes before the verb (with no subject-marking pronoun)—for example:

(11) PF: *kokoya sa musu na tabana*

3SG PM cut ART branch

'He cut down the branch.'

SF: *e musu-ka na taba-na o Betieli*

3SG cut-TR.OM DEF branch-3SG.POSS PRP B.

However, SOV ordering, as in Fiji Hindi, can also be found in the speech of some Indian speakers—for example:

(12) PF: *koau dua na bisnis sa rawa tiko*

1SG one ART business PM able COP

'I can have a business.'

Negatives:

PF has a general negative marker which precedes the verb—quite different from SF, where a negative verb is used.

- (13) PF: *koau na gone sega via kari*
 1SG ART child NEG like curry
 ‘My child doesn’t like curry.’
 SF: *e sega ni vinaka-ta na kari na luve-qu*
 3SG NEG SUB deem.good-TR DEF curry DEF child-1SG

Expressing other semantic relationships:

As with the use of adverbs rather than TMA markers, PF uses lexical means for expressing what are grammatical functions in other languages. For example, the word for ‘want/like’ is used to express deontic modality:

- (14) PF: *sa via kauakaua*
 PM want/like strong
 ‘It should be strong.’

Also, the word for ‘perhaps’ is used to introduce what would be conditional or counterfactual clauses in SF:

- (15) PF: *beka sega tiko lewa koau sa lako qadeqade makawa*
 perhaps NEG COP girl 1SG PM go travel long.ago
 ‘If it weren’t for my daughter, I would have gone travelling long ago.’

Complex sentences:

Juxtaposition rather than subordination is used in PF in what would be complex sentences in SF; thus there are virtually no subordinators or complementizers:

- (16) PF: *sa tiko takataka / sa takataka*
 PM exist work PM work
 ‘(If) there was work, we worked.’
- (17) PF: *sega na kakana / kitou sa moku so na toa /*
 NEG ART food 1PL PM kill some ART chicken
kana qo ga / sa oti ga / sa lakomai
 eat this FOC PM finish FOC PM come
 ‘There was no food so we killed some chickens and ate them.
 After eating, we came home.’

2.1.2.5 *Lexicon*

The lexicon of PF is small compared to SF. For example, in SF, there are eighty-one separate lexical items and twelve compounds for different kinds of cutting, but in PF there are only two items. While the lexicon of PF is mainly made up of items found in SF, it also has some words from Fiji Hindi (H) and English (E)—for example:

- (18) *piala* ‘small bowl’ (H)
daru ‘liquor’ (H)
kira ‘cucumber’ (H)
taim ‘time’ (E)
femli ‘family’ (E)

2.2 Defining simplicity

With regard to pidgin and creole languages, Hymes wrote over thirty-five years ago (1971: 69): ‘Agreed upon measures for complexity, simplicity, functional load of languages hardly exist. Part of the challenge of pidgins to linguistic theory is to show the need for such measures if the defining criteria of reduction in form and use are to have any power.’ Similarly, Ferguson pointed out (1971: 144–5): ‘The notion of simplicity in language and language description has been a perennial issue in linguistics as in other disciplines, and there is little agreement on what constitutes simplicity.’ These quotations were given by Mühlhäusler (1974) in his analysis of the concept of simplicity. But not much has changed since then, and the continued lack of agreement on this issue has been noted by many scholars—for example: Traugott (1973), Corder (1977), and Mühlhäusler again (1997).

2.2.1 Assumptions about simplicity

The differing views regarding simplicity in pidgin and creole (P/C) studies are a reflection of the different assumptions scholars have about the notion. These are concerned with four different dimensions: (1) quantitative vs qualitative bases; (2) absolute vs comparative indicators; (3) holistic vs modular analyses; and (4) reduction of complexity vs lack of expansion. I will talk about each of these separately, showing where different perspectives exist and where some scholars have made their perspective clear.

2.2.1.1 *Quantitative vs qualitative bases*

The first area of disagreement concerns the very basis for determining what makes a language, or one particular aspect of a language, simple rather than complex. In P/C studies, the evidence given for simplicity in a pidgin or creole most commonly includes characteristics such as the absence of inflectional morphology, a low number of marked grammatical categories, and a small lexicon, all of which we have seen in Pidgin Fijian.

The reference to such characteristics by creolists indicates that they are focussing on the surface structure and use of language, and that they seem to be measuring simplicity quantitatively—that is, on the basis of the amount of morphology, the number of marked categories and the size of the lexicon. In contrast, other creolists give evidence such as regularity in rules, semantic transparency, and ease of perception and production—for example, the overgeneralization of *sa* as a predicate marker in Pidgin Fijian. These scholars are referring to the psycholinguistic aspects of language, and therefore measuring simplicity qualitatively—that is on the basis of factors such as facility of processing or ease of acquisition.¹

Still other creolists give evidence of both structural simplicity (as defined quantitatively) and psycholinguistic simplicity (as defined qualitatively) in pidgins or creoles. But as many scholars have pointed out, the relationship between these two bases of simplicity is not straightforward, and they should be distinguished. Mühlhäusler (1974, 1980, 1997) makes a terminological distinction, referring to quantitative simplicity as ‘impoverishment’ (which he defines as the loss of the referential or non-referential potential, or expressive power, of a language), while restricting the term ‘simplification’ to qualitative simplicity (increased regularity and optimalization of rules). While this distinction is followed by some scholars, such as Trudgill (2002: 66), it is not in wide use perhaps because of two reasons. First, the absence of inflectional morphology and grammatical markers in general does not necessarily affect the expressive power of a language (e.g. Labov 1990 [1971]). Second, according to Mühlhäusler’s definitions (e.g. 1997: 235), pidgins become more simple as they expand and develop into creoles. This runs counter (and seems counter-intuitive) to the accepted view that pidgins become more complex with expansion—for example, in developing more grammatical markers and inflections (see Dahl 2004: 44). Despite this lack of agreement on terminology, only some creolists actually spell out the

¹ See Dahl’s (2004) distinction between structural complexity and system complexity.

basis they use for determining simplicity, or lack of complexity (e.g. Sebba 1997: 54). In the rest of this book, I concentrate on structural simplicity as determined quantitatively.

2.2.1.2 *Absolute vs comparative indicators*

Another area where assumptions may differ revolves around the question of whether the determination of simplicity is based on absolute or comparative indicators. In other words, is a variety (or an aspect of a variety) judged to be simple by some independent measure or only by comparison to another variety? While it would be useful to have some absolute, independent criteria, it appears that in P/C studies, simplicity is usually judged comparatively. This is evident in commonly used expressions in the literature such as ‘fewer grammatical categories’, ‘a smaller lexicon’, and ‘less allomorphy’.

If comparative indicators are being used, the next question is: compared to what? Although the comparison is most often with the lexifier language, as with PF compared to SF, this is rarely made explicit—for example, in Hymes’s famous definition (1971: 84): ‘Pidginization is usually associated with simplification in outer form.’ However, Bakker (1995: 26) does make the comparison explicit: ‘Pidgins are always simplified compared to the lexifier language, as is apparent in their loss of morphology and more analytic structure.’ On the other hand, Lefebvre (1998: 6) points out that comparisons regarding simplicity should be made not only with the lexifier but also with the substrate languages. Decades ago, Jespersen (1922: 227) described pidgins making such a comparison: ‘... the grammatical structure [of pidgins] has been simplified very much beyond what we find in any of the languages involved in their making.’ More recently, Rickford (1992: 224) notes that pidgins are simple in comparison with all native languages of their users. Other authors compare pidgins to other kinds of languages in general—e.g. ‘Pidgins are... not as linguistically complex as other languages’ (Singh 2000: 6). McWhorter (2001, 2003) makes a similar claim (discussed in Chapter 3). Section 2.2.2 describes an absolute indicator of formal simplicity that I use for the remainder of this work, but I also continue to make comparisons with the lexifier, as I have done with Pidgin Fijian.

2.2.1.3 *Holistic vs modular analyses*

This brings us to another dimension where there is no agreement—whether such determinations of simplicity are based on the language as a whole or

on particular aspects of a language. In an early article, Ferguson (1971: 145) made quite clear the kind of analysis he used (and that it was comparative): ‘In the present paper we are concerned with the concept of simplicity in language, i.e. the possibility of rating some part of a language (e.g. a paradigm, a construction, an utterance, a clause type, a phonological sequence) as in some sense simpler than another comparable part in the same language or another language.’

In contrast, McWhorter (2001) explicitly attempts to compare whole grammars of creole languages with what he calls ‘older’ languages in terms of simplicity, using a ‘metric of complexity’ based on quantitative criteria. The controversy here is about whether or not language-wide notions of simplicity are possible. Most linguists agree that one language can be simpler than another with regard to a particular area of grammar. However, McWhorter (2001: 129) argues that there is no *a priori* reason to assume languages are similar in overall complexity, and that therefore they can be compared as a whole.² But other creolists have pointed out problems with this language-wide notion of complexity/simplicity. Most importantly, different areas of grammar interact with each other, and it is difficult to compare them all. For example, Arends (2001) points out that McWhorter has not covered some aspects of language that are more complex in creoles, such as the TMA system. Thus, scholars such as Kusters and Muysken (2001) assert that comparisons of simplicity between languages should be modular. And it is a modular analysis that I adopt here.

2.2.1.4 *Reduction of complexity vs lack of expansion*

Finally, there is the question of whether simplicity reflects a decrease of complexity or a lack of development of complexity (i.e. a lack of expansion). The general view in P/C studies seems to be that simplicity is the result of complex forms of language having become less complex. This is implied by the commonly used terms to describe simplicity in pidgins—such as ‘decreased’, ‘reduced’, and ‘loss’, as well as by Hymes’s (1971: 84) classic definition of pidginization as ‘the complex process of sociolinguistic change comprising reduction in inner form...’. Other scholars have given the impression that a process of drastic reduction of complexity occurs; for example, Romaine (1988: 24) writes: ‘A pidgin represents a language which has been stripped

² Scholars such as Thurston (1987, 1992) and Trudgill (1992, 2001) have also argued that languages differ in overall complexity, and that the differences correspond to sociolinguistic factors within the speech community. For example, small, closed communities with tight social networks will have languages with more complexity.

of everything but the bare essentials necessary for communication.’ (Similar statements are found in McWhorter 2001: 125 and 2003: 207, quoted below.)

But the other view of the origin of simplicity is that it represents a lack of development of complexity, rather than a reduction of complexity. This view holds that one cannot simplify what is not yet complex (Traugott 1977; Corder 1981)—and therefore, the simplicity found in child language and second language acquisition is not the result of any reductive process, but rather a reflection of an early stage of linguistic development.³ As mentioned earlier, this is the view that I take.

2.2.2 Morphological simplicity and lexicality

Since there is no general agreement about what simplicity is or how to measure it, it would be useful to restrict the scope of the term and make definitions and assumptions clear before talking about it. This is what I have attempted to do in the preceding section. To recap: first, while I believe that psycholinguistic simplicity (as described earlier) is important to study, at present there are no clear or easily measured indicators of it; therefore, I will talk about structural simplicity on the basis of surface structural features. Second, I will attempt to use indicators that allow for an independent or absolute determination of simplicity as well as a comparative one. Third, because of the interaction of grammatical subsystems in a language, I believe that in most cases we cannot make overall comparisons of simplicity between languages; therefore, I will use a more modular analysis. Finally, I take the point of view that simplicity in pidgins and creoles reflects, for the most part, a lack of expansion rather than a reduction in complexity.

The particular areas of language I will concentrate on here are those that in many languages have semantic distinctions expressed by inflectional morphology. Here I follow Kusters (2003: 15–17) in distinguishing inflectional from derivational morphology, and assuming that unlike word formation rules in derivational morphology, those in inflectional morphology do not reduce complexity by introducing more regularity into the lexicon. Rather, they increase complexity in yielding a larger set of words that express morphologically what is expressed syntactically or with combinations of already existing words in other languages. Also, as Kusters (2003: 18–19)

³ This view corresponds with Dahl’s (2004) notion that structural complexity arises as a result of grammatical maturation. Non-complex features are those that have not yet matured over time.

points out, concentrating on inflectional morphology (or its absence) has certain advantages. For one thing, the amount of inflection clearly varies between languages, and can be measured quantitatively. In addition, the structure and rules of inflection are mostly independent from factors such as pragmatics, register and inter-speaker variation. Finally ‘inflection is relatively easy to define independently from theoretical considerations’ (p. 19).

However, in contrast to Kusters (2003), I do not compare degrees of simplicity or complexity within inflectional systems of different languages, but rather focus on the presence or absence of inflection as a means of expressing a particular semantic distinction. The indicators I use to evaluate simplicity are based on the scales or clines used in the study of grammaticalization, although I will be using them for synchronic rather than diachronic analysis. (Grammaticalization is discussed in Chapter 4.) Here I talk about inflectional morphology with regard to a ‘cline of grammaticality’ (Hopper and Traugott 1993: 7):

content item > grammatical word > clitic > inflectional affix

This scale goes from lexicality on the left to grammaticality on the right. Items in the leftmost category are lexical or content morphemes, while the items in categories to the right are all grammatical morphemes. As Hopper and Traugott (1993: 7) note: ‘Each item to the right is more clearly grammatical and less lexical than its partner to the left.’ The assumption adopted here is that with regard to expressing particular semantic distinctions, lexicality is an absolute indicator of morphological simplicity, while increased grammaticality corresponds to greater complexity.⁴

For example, one semantic area that can be expressed in many different ways by languages is the source and reliability of a speaker’s knowledge. In English, a speaker can say *George has a new car* without saying how he or she obtained the knowledge on which this assertion was based (Willett 1988: 55). But of course, this information can be made more explicit if necessary—e.g. as *I saw that George has a new car* or *Apparently George has a new car*. In other languages, however, this information is routinely given, not with lexical expressions like those we’ve just seen, but by certain words or affixes. In these languages, the semantic area of the source and reliability of a speaker’s knowledge has become grammaticalized, with the existence

⁴ Dahl (2004: 106) presents a similar scale: free > periphrastic > affixal > fusional. However, he considers these as developmental stages, with those on the left the least developed or immature, and therefore the least complex.

of the category of evidentiality. Grammatical morphemes (here, evidential markers) encode semantic distinctions within this category. For example, according to Willett (1988: 65), Patwin (a Native American language) marks visual evidence with the use of an auxiliary *bee*:

- (19) *behnaʔu meem khontaro bees*
 next.morning water dried EVID.DECLARATIVE
 ‘Next morning the water was dried up [I saw it].’

Maricopa (another Native American language) marks visual evidence with a suffix *-(k)ʔyuu*:

- (20) *iimaʔyuu*
 dance.EVID
 ‘He danced [I saw him].’

The use of the lexicality scale would indicate that with regard to expressing the source and reliability of a speaker’s knowledge, English is characterized by morphological simplicity in an absolute sense because there is no special grammatical construction or grammatical morpheme that must be used—in other words, it is expressed lexically rather than grammatically. In a comparative sense, English is simpler than Patwin in which a grammatical word is used, and Patwin is simpler than Maricopa in which an inflectional affix is used.

This method of determining morphological simplicity can also be quantitative and comparative in that in a particular linguistic area, one language may have more distinctions than another that is marked grammatically rather than lexically. For example, both Yimas (a language of New Guinea) and English mark past tense with an affix. However, in contrast to English, which marks only one simple past tense, Yimas has affixes that mark three different past tenses: a near past, a far past and a remote past (Foley 1991: 241–4). Therefore, with regard to the expression of past tense, English can be said to be morphologically simpler than Yimas.

An advantage of this approach is that it does not imply that a language with such simplicity is ‘structurally inadequate’, or by extension ‘expressively inadequate’ (DeGraff 2003: 392). No one would say, for example, that English is somehow deficient as a language because it does not have affixes that mark evidentiality and three different past tenses.

A final point about equating the cline of lexicality/grammaticality to simplicity/complexity has to do with second language acquisition, and is significant to discussions later in this book. Kusters (2003: 6) describes

complexity from the point of view of an outsider, defined as a second language learner. Features of a language that are relatively difficult for a second language learner to acquire are considered more complex than those that are easier to acquire. Here he disagrees with Dahl (2004: 40) who believes that second language learning difficulty should not be confused with complexity. However, there is evidence that the stages learners go through in acquiring a second language go from simple to complex according to the cline of lexicality/grammaticality proposed here. For example, van de Craats, Corver, and van Hout (2000: 228–30) describe three stages or states of knowledge for second language acquisition. The first is the ‘content-word state’, in which learners use content words for generation of what is normally a grammatical construct in the target language—for example, in Dutch:

- (21) *vriend huis*
 friend house
 ‘my friend’s house’ (van de Craats *et al.* 2000: 229)

This is followed by the ‘free functional morpheme state’, in which free morphemes are used as grammatical markers—for example:

- (22) *garage die chef*
 garage that boss
 ‘the boss of the garage’ (p. 230)

Then some learners go on to a ‘bound functional morpheme state’, although the bound morpheme used may not function the same way in the target language—for example:

- (23) *examen-van tolk*
 exam-of interpreter
 ‘the interpreter at the exam’ (p. 230)

Compare this with the standard Dutch:

- (24) *de broer van Jan*
 the brother of J.
 ‘the brother of Jan’ (p. 244)

In summary, this section has presented a restricted but explicit definition of morphological simplicity. With this definition in mind, I now take a fresh look at simplicity in pidgins (and later in creoles).

2.3 Morphological simplicity in pidgins and pre-pidgins

As noted in Chapter 1, restricted pidgins are characterized sociolinguistically as stabilized contact varieties that are used only for basic communication among people who do not share a common language. What they have in common linguistically is the morphological simplicity that we have seen in Pidgin Fijian: the absence of productive bound morphology and very few, if any, grammatical markers. Things that are expressed grammatically in other languages are either not expressed at all (for example, no complementizers to indicate subordination) or they are expressed lexically (for example, adverbs rather than any kind of TMA markers to indicate temporal and aspectual relationships). In addition, in comparison to their lexifiers, they have a smaller number of pronouns and prepositions and only a single preverbal negative marker.

Other restricted pidgins according to these linguistic criteria (as well as the sociolinguistic criteria) are Chinese Pidgin English (Hall 1944; Baker 1987), Greenlandic Pidgin (van der Voort 1996), the Hiri Trading Languages (Eleman and Koriki) (Dutton 1983, 1997), Nauru Pidgin English (Siegel 1990*a*), Ndyuka-Trio Pidgin (Huttar and Velantie 1997), Pidgin Delaware (Goddard 1997), Pidgin French of Vietnam (Reinecke 1971), Pidgin Hawaiian (Roberts 1995*a*, 1995*b*), Pidgin Hindustani (Siegel 1987, 1990*b*) and Russenorsk (Jahr 1996).⁵

Except for the fact that they are not stabilized, pre-pidgins are generally similar to restricted pidgins in terms of morphological simplicity. For example, Bickerton (1999*a*: 53) refers to ‘structureless’ pre-pidgins, characterized by ‘an almost complete absence of grammatical items (including a complete absence of tense, modality, and aspect (TMA) markers’.

What is the origin of this morphological simplicity in restricted pidgins and pre-pidgins? According to one point of view, these features are the result of a process by which speakers of the lexifier simplify their language in contact situations (for example, by avoiding inflectional morphology). This results in simplified ‘foreigner talk’ registers that are used for wider communication and become the basis for a pre-pidgin or restricted pidgin. This is the ‘altered model theory’ (Siegel 1987: 18–19).

The opposing view is that the simple features reflect an early stage of language development—specifically, preliminary versions of the lexifier used

⁵ Exceptions appear to include Broken Oghibbeway (Nichols 1995) and Yimas Pidgin (Foley 1988), which are restricted in use but do not have absolute morphological simplicity. Pidgin Fijian also differs from other restricted pidgins in its use of a copula and the generalized article.

by language learners who have acquired only lexical items and not grammatical morphemes. It is these second language varieties that are used for wider communication and become the basis for a pre-pidgin or restricted pidgin. This is a view first proposed by Adolpho Coelho in the 1880s, commonly known as the ‘imperfect learning theory’ (Siegel 1987: 19–20) or the ‘imperfect second language learning theory’ (Muysken and Smith 1995: 10).

The first point of view has been advocated most recently by Baker (1990, 1994, 1997, 2000). According to his ‘constructive approach’ second language learning is not relevant in the early stages of pidgin/creole development. This is because the people of different ethnolinguistic backgrounds in contact situations are generally interested not in acquiring the language of the other groups but rather in constructing a new ‘medium for interethnic communication’. Thus, in most cases there is no existing second language target as such; instead the groups in contact unconsciously draw on the range of available resources as well as come up with innovations in order to create a solution to communication problems. This includes the participants adapting features of their own languages for easier communication (e.g. by dropping inflections) so that no one gets exposure to the normal varieties used by native speakers.

There are some pidgins, such as Hiri Motu, spoken in Papua New Guinea (Dutton 1997), that appear to be derived from ‘foreigner talk’ registers. And evidence exists that certain features of pidgins, such as the use of emphatic forms of pronouns, may come from simplified models (see, for example, Baker and Huber 2000). However, many other features appear to demonstrate misinterpretation by learners rather than any kind of adaptation by native speakers for easier communication—for example, the recutting or fusion of word boundaries, as in *lafet* ‘holiday’ (from French *la fête*) and *sora* ‘ear’ (from French *les oreilles*), both in Bislama, and as shown above, *tamana* ‘father’ in Pidgin Fijian (from Fijian *tama-na* [father-3SG] ‘his/her father’). But more importantly, there seems to be no evidence of extended and consistent use of foreigner talk (or other simplified registers) with the degree and scope of simplicity found in restricted pidgins or pre-pidgins (see Sebba 1997: 90–1).⁶

On the other hand, with regard to the second language acquisition (SLA) view (DeGraff 1999; Field 2004; Mufwene 1990, 2001; Siegel 1997*a*, 1999, 2003; Wekker 1996), there is clear evidence that adult learners in naturalistic

⁶ This is not to say that foreigner talk plays no role in the development of a pidgin—only that it is not the major factor.

contexts produce varieties of language very similar to pre-pidgins and restricted pidgins in terms of morphological simplicity. This evidence comes from detailed descriptions of the interlanguage (IL) of second language learners. First, there are studies comparing ILs and pidgins with the same language as the target or the lexifier. Schumann (1978a) reported on a longitudinal study of six native speakers of Spanish learning English outside the classroom setting. One of the learners, Alberto, remained in the early stages of development with regard to the linguistic features being studied. His IL productions resembled pidgins generally in terms of simplicity, and English-derived pidgins specifically in particular features, such as the following (Schumann 1978a: 66):

- (a) negatives formed by *no* preceding the verb
- (b) absence of inversion in questions
- (c) no auxiliaries
- (d) unmarked possessives
- (e) absence of *-ed* past tense marking

Schumann's claim was not that Alberto spoke a pidgin, but that this simplification was evidence of a process similar to that involved in pidginization. In 1979, Andersen made a detailed study (published as Andersen 1981) of the speech of Alberto (Schumann 1978a) compared to the speech of speakers of a variety of Pidgin English spoken in Hawai'i (Bickerton and Odo 1976). He found common features very similar to those listed above. On the basis of this study, Andersen (1980: 274) concluded that 'SLA and individual pidginization are really the same phenomenon viewed from different perspectives and often, although not always, occurring under different circumstances'.

More recently, Kotsinas (1996) illustrated numerous similarities between the features of the IL of Swedish immigrants where Swedish is the second language (L2), and those of Russenorsk, a pidgin which has closely related Norwegian as a lexifier—for example, extended use of the preposition *på*. A later work (Kotsinas 2001) shows similarities between the features of L2 versions of Swedish and those typical of pidgin languages.

A good indication of IL features in general came out of one of the largest studies ever done of naturalistic adult second language acquisition: the European Science Foundation (ESF) project which took place in the 1980s. This was a longitudinal study of forty adult immigrants with various first languages: Arabic, Italian, Finnish, Spanish, and Turkish. The target languages were Dutch, English, French, German, and Swedish (Perdue 1993). In an

article about the results of the study, Klein and Perdue (1997) report that all the learners went through a stage which they call the ‘Basic Variety’ (BV), and that approximately one third of the learners went no further. (This stage is similar to the content-word state described by van der Craats *et al.* [2000].) Klein and Perdue (1997: 332) summarize the structural features of the BV as follows: ‘Strikingly absent from the BV are . . . free or bound morphemes with purely grammatical function’ (p. 332). For example, instead of TMA markers, lexical items such as adverbs are used. However, they also demonstrate that the BV is characterized by a small set of organizational principles based on pragmatic constraints which govern its structure—for example ‘focus expression last’ (p. 317). In a survey of studies on the acquisition of tense and aspect, Bardovi-Harlig (2000) describes similar pragmatic and lexical means, rather than morphological means, used to express temporality in the early stages of second language learning. (See also Noyau 2002.)

There have been many criticisms of the BV as a theoretical construct (for a summary, see Vainikka and Young-Scholten 2006: 78–83), some of which are discussed in Chapter 3. However, what is important at this point is the inventory of surface features of this variety, as mentioned in the article:

- (a) no inflections
- (b) lexical items used in invariant form (multifunctionality)
- (c) invariant forms generally infinitive or nominative (but also some inflected forms)
- (d) lexical items noun-like and verb-like words with some adjectives and adverbs
- (e) most lexical items from the L2 but some from the L1 and other languages
- (f) minimal pronouns to refer to speaker, hearer and a third person
- (g) no anaphoric pronouns referring to inanimates
- (h) only a few quantifiers
- (i) a single word for negation
- (j) only a few prepositions
- (k) no complementizers
- (l) no expletive elements (e.g. *there is*)
- (m) use of temporal adverbs, rather than grammatical TMA markers, to indicate temporality, including:
 - calendar type: *Saturday, in the morning*
 - anaphoric: *after, before*
 - deictic: *yesterday, now*
 - frequency: *always, often*
 - duration (usually nouns): *two hour*

- (n) specification of temporal relations: *before*, *after*, *simultaneous*, etc.
- (o) ‘boundary markers’ to express the beginning or end of some situation, such as *work finish* ‘after work is/was/will be over’ (p. 321)
- (p) no L1 influence except occasionally for word order

The striking similarities between these features of the early interlanguage of adult second language (L2) learners and the features of Pidgin Fijian and other restricted pidgins strongly suggest a connection.

Givón (1979) links pidgins (presumably restricted pidgins) with adult L2 varieties as well as with the early stages of child language, saying they all represent what he calls the ‘pragmatic mode’ of communication, as opposed to the ‘syntactic mode’. This mode is characterized by no grammatical morphology, topic-comment structure, and word order ‘governed mostly by one pragmatic principle: old information goes first, new information follows’ (p. 223). While this pragmatic mode has significant similarities to the Basic Variety, Klein and Perdue (1997) argue that there is no need to stipulate two separate modes of language, pragmatic and syntactic, since the same organizational principles are present in both. Also, while Givón emphasizes the similarities between L2 varieties and pidgins, Klein and Perdue are reluctant to make a precise comparison. Their reasons are that: (1) they believe there is no agreement about what should count as a pidgin; (2) there is no uniform structure of pidgins in general (unlike the BV), even those based on the same language; and (3) there have been no systematic investigations of pidgins with regard to the organizational principles of the type found in the BV. While the third reason does remain an obstacle and requires further research, the first two reasons can be discounted if we consider only the class of restricted pidgins and pre-pidgins.

Thus, on the basis of the surface similarities between L2 varieties such as the BV and the features of restricted pidgins and pre-pidgins, a good case can be made that processes involved in early second language acquisition are the source of their morphological simplicity.

2.4 Explanations for formal simplicity in SLA

Explanations for the formal simplicity of early interlanguage, and, by extension, for the features of restricted pidgins, vary according to theoretical views about the ‘initial state’ in SLA—that is, the point at which L2 learners start in building a grammar of the L2. First of all, researchers on language

acquisition can, broadly speaking, be divided into two main camps—those who believe that Universal Grammar (UG) is relevant and those who do not.

2.4.1 Explanations involving UG

Universal Grammar is the set of abstract general linguistic principles that are believed to underlie the grammars of all specific languages. Humans are thought to be born with knowledge of these principles (i.e. UG is biologically determined, or innate), and UG is therefore able to guide children in the acquisition of their first language (L1). This would explain why children are able to acquire language so quickly, why they seem to know more than what they could have learned from the input they receive, why children the world over go through the same stages of acquisition, and why all languages have certain underlying similarities. (See Chomsky 1965, 1981, 1986.)

With regard to L2 acquisition, however, a big question is whether or not UG is still relevant, and if it is relevant, to what degree. According to the Fundamental Difference Hypothesis (Bley-Vroman 1989, 1990), adult L2 acquisition differs significantly from child L1 acquisition, and UG does not have a major role. Several researchers have adopted this point of view—for example, Clahsen and Muysken (1986, 1989), and Meisel (1991). In contrast, other researchers maintain that UG is relevant to SLA, and that in the initial state, learners have access to it (Epstein, Flynn and Martohardjono 1996; Schwartz and Sprouse 1996, 2000; Vainikka and Young-Scholten 1994, 1996*a*, 1996*b*). These researchers, and others in the field of SLA, follow the ‘principles and parameters’ approach (Chomsky 1981; Chomsky and Lasnik 1993), in which ‘principles’ are the basic structural properties of human language and ‘parameters’ are specifications of possible variation.

For example one principle of UG is that phrases consist of a ‘head’ category, such as noun, verb, or adposition (i.e. preposition or postposition). This head optionally has a ‘complement’. For example, in the English sentence *Miwa read the letter*, the verb head (V) *read* has a complement, the noun phrase (NP) *the letter*. Together these form a phrase which is labelled V' (V-bar). This phrase could optionally be modified by a ‘specifier’, such as the adverb *quickly*, making the complete verb phrase (VP) *quickly read the letter*. The principle of UG is that in any language, a head category X may have an optional complement. In the technical jargon of the theory, one says that the head ‘projects’ to a phrase X' (X-bar), consisting of the head and

its complement. This may be modified by an optional specifier to form a ‘maximal projection’—i.e. phrase of the type XP. This principle of phrase structure is known as X¹ (X-bar) Theory.

According to UG, one of the ways languages may vary is in the ordering of the head and complement. In English, the head precedes the complement, but in Japanese, it follows the complement:

- (25) *Miwa-ga tegami-o yonda*
Miwa-SUBJ letter-OBJ read
‘Miwa read the letter.’

This is true of all phrases in the language—so, for example, while English has prepositional phrases (P followed by an NP complement), Japanese has postpositional phrases (NP followed by P). That a language may be either ‘head-first’ or ‘head-last’ is an example of a parameter in UG (called the ‘headedness parameter’).

Thus, UG is claimed to provide learners with the possible forms a language may take and a syntactic blueprint or a structural template (Hawkins 2001: 339) for the construction of its phrases and maximal projections for different categories. An important distinction is made between lexical categories and functional categories. The lexical categories include nouns (such as *book*), verbs (such as *read*), adjectives (such as *big*), and prepositions (such as *for*). Phrases that have one of these lexical categories as the head are called lexical projections—i.e. NP, VP, AP, and PP. Outside the principles and parameters approach, words in these categories are called lexical or ‘content’ morphemes. The functional categories include what are commonly called functional or grammatical morphemes—for example, determiners (such as *the*), complementizers (such as *if*) and inflections marking agreement, tense, and aspect (such as *-s* and *-ed*). Members of functional categories can also be heads of phrases, resulting in maximal projections such as a determiner phrase (DP), complement phrase (CP), and inflection phrase (IP). These are precisely the categories that appear to be absent in early SLA, and in restricted pidgins.

A clear explanation for this absence is found in the ‘weak continuity’ or ‘structure-building’ theories of L2 (and L1) acquisition (Vainikka and Young-Scholten 2006: 87). According to these theories, learners in the initial state have access to principles of UG such as X-bar Theory, but with a blueprint of projections only for lexical categories; functional categories are successively constructed on the basis of an interaction between UG and the input. Vainikka and Young-Scholten’s (1994, 1996a, 1996b)

'Minimal Trees' Hypothesis—now incorporated into what they call 'Organic Grammar' (Vainikka and Young-Scholten 2006: 88)—postulates that learners' early grammars project only VP. Hawkins's (2001) 'Modulated Structure-Building' Hypothesis also proposes that L2 grammars initially consist of lexical, not functional, categories. These theories would predict the absence of overt morphology and other items belonging to functional categories because the associated syntactic positions are not yet in place (see White 2003: 77).

In contrast, the 'strong continuity' theories of SLA maintain that UG provides learners at the very start of L2 learning with the syntactic positions for both functional and lexical categories. According to the 'Full Access' hypothesis of Epstein, Flynn, and Martohardjono (1996), these are provided directly by UG, and according to the 'Full Transfer/Full Access' hypothesis of Schwartz and Sprouse (1996, 2000), they come via the L1. These hypotheses, of course, would not predict the absence of functional morphemes (both free and bound) in early SLA. However, their proponents attribute this absence to performance factors and insufficient exposure to the L2, and claim that learners do show evidence of syntactic properties associated with functional categories, suggesting that these categories are present despite the lack of surface inflection (see White 2003: 187–93).

A more recent approach to UG is the 'Minimalist Program' (Chomsky 1995). This differs from the principles and parameters (P & P) approach in several basic ways. First, more importance is given to the lexicon, in which each entry contains both meaning components and detailed grammatical specifications. Functional phrases along with some parameter settings are now stored in the lexicon, as well as inflections. Second, the P & P approach follows a top-down model, in which items from the lexicon are inserted into a phrase structure constructed by the syntactic module, independent of the lexicon. In contrast, the model of the Minimalist Program is a bottom-up model, in which items from the lexicon 'merge' to form a phrase structure according to the grammatical specifications that are a component of each lexical item.

While the inflections of functional categories are specified in the lexicon—for example, person, gender, and number for verbs—these formal features must be licensed in order to appear in the output (i.e. in the 'Phonetic Form'). For this to happen, these features must be moved to the specifier position of the functional head to be 'checked' whether they are compatible with the features associated with the functional node. However, the inflectional features associated with functional phrases are also specified

as being strong or weak, and only strong features can be overtly moved for feature-checking. Thus, only strong inflectional features are expressed with overt morphology; if the features are weak, there will be no overt inflectional morphology. According to Klein and Perdue (1997), the explanation for the lack of grammatical morphology in the Basic Variety is that at this stage of development all features are weak. Acquisition past the BV involves the changing of values for feature strength.

2.4.2 Constructivist explanations

In total opposition to approaches that see language acquisition in terms of UG are the constructivist views of language acquisition (Ellis 2003). These views hold that linguistic structures emerge from the communicative functions of language, and that acquiring language is constrained not by an innate language-specific cognitive module, but by general human systems of perception and cognition. Thus, these views are often considered to be under the headings of functionalism or emergentism, rather than nativism.

For example, with regard to L1 acquisition, Bates and Goodman (1997, 1999) demonstrate that the development of grammar is highly dependent on vocabulary size, and argue that grammar emerges from the lexicon. Thus they argue against the nativist notion of a modular distinction between the grammar and the lexicon. In the past, this notion has been supported by reports of what appears to be selective impairment in grammar, as separate from vocabulary, in atypical populations such as children with Williams or Down's syndrome and adults with focal brain lesions. Most well known is 'agrammatism' (Kean 1977, 1985)—the omission of inflections and function words—associated with Broca's aphasia. However, the authors demonstrate that in Williams syndrome, there is no evidence of grammar lagging behind vocabulary (Bates and Goodman 1997: 530), and in adult aphasia, grammatical impairments always co-occur with some form of anomia—i.e. deficits in the ability to retrieve and produce words (p. 551). Furthermore, the omission of inflections and function words also occurs among people with Down's syndrome and selective language impairment (SLI), and of course, as most relevant here, in children and adults in the earliest stages of both L1 and L2 development—in other words, in the least fluent populations (pp. 554–5).

An important reason for the lack of inflections and grammatical morphemes (i.e. for morphological simplicity) in these populations is related

to perceptual salience. As Bates and Goodman (1997: 542) point out, grammatical function words and bound inflections are particularly hard to perceive. A great deal of research has been done in the field of psychology on the perception of ‘open-class’ or ‘content’ words (lexical categories) versus ‘closed-class’ or ‘function’ words (functional categories). For example, Pollack and Pickett (1964) conclude that closed-class words are acoustically less salient, and according to Cutler (1993), closed-class words in English are frequently realized with only ‘weak syllables’—i.e. those containing a reduced vowel, usually a schwa. In contrast, open-class words almost all contain at least one ‘strong’ syllable—i.e. with a full vowel. Grosjean and Gee (1987) put the difference down to open-class words containing stressed syllables, with longer, higher pitch and greater amplitude. Thus, according to Herron and Bates (1997: 236), because closed-class words are less salient, their interpretation depends on the prosodic structure of the surrounding information.

This difference is recognized as well by researchers working within the UG framework. For example, van de Craats *et al.* (2000: 38) note that items with ‘perceptual saliency’ are learned first—generally content words, and then free-function morphemes and finally bound-function morphemes. (See also DeGraff 1999: 517–18.) However, the fact that morphemes from functional categories are perceptually different from those in lexical categories is not necessarily evidence that these morphemes belong to two distinct mental categories, or to different modules of language. For example, in a study involving reaction times, Cutler and Foss (1977) found no difference between content words and function words when stress was held constant, concluding that ‘form class itself is not the critical factor; it is stress on the item that is’ (pp. 149–50).

Furthermore, the differences in perceptual salience between the two classes may be more the result of the way speakers use them. According to Bates and Goodman (1997: 542) speakers exploit the frequency and predictability of function words and bound morphemes, ‘giving them short shrift, deforming their phonetic structure and blurring the boundaries between these morphemes and the words that surround them’. Thus, with regard to L1 acquisition, they conclude (pp. 542–3):

Under these circumstances, we should not be surprised that young children are unable to acquire grammatical forms until they have a critical mass of content words, providing enough top-down structure to permit perceptions and learning of those closed-class items that occur to the right or left of ‘real words’.

In other words, they are taking a perceptual ‘bootstrapping’ point of view (e.g. Pinker 1987), characterized by Hawkins (2001: 336) as follows: ‘Learners latch on to some elements of the input as a way into constructing a grammar.’ Here, the initial acquisition of content words provides the foundation for the subsequent acquisition of grammatical morphemes.

This point of view is also relevant to L2 acquisition (Clements 2003: 252–3; Ellis 2006: 170–1)—even to those working with UG. For example, Hawkins (2001: 336) echoes Bates and Goodman (1997), saying that the way learners begin to make sense of the continuum of sound to which they are exposed is to ‘first focus (unconsciously) on detecting morphemes which have most “perceptual prominence”’. He continues:

Morphemes belonging to substantive categories like N, V, A and so on are good candidates for perceptual prominence (in contrast to morphemes belonging to functional categories). They are typically free forms which are phonetically strong (having word stress) and are associated with stable conceptual meanings. By contrast, morphemes belonging to the functional categories are typically phonologically weak (they are either inflections or, if they are free forms, are usually unstressed) with variable meanings...

Thus Hawkins (2001: 336) concludes: ‘Given this account, perceptual prominence will determine that early L2 derivations consist of lexical projections.’

2.4.3 Explanations involving speech production models

Two other explanations for the lack of grammatical morphemes in early interlanguage (and thus in restricted pidgins) come from theories that focus on the processes of speech production. Both of these theories refer to one particular model: that of Levelt (1989). In this model, each lexical item is associated with a particular concept and has two parts: the lemma and the lexeme. The lemma contains semantic and syntactic information, including the meaning of the item and the specifications for its use (that is, morpho-syntactic and pragmatic information, such as grammatical category and function). The lexeme (or form) contains phonological and morphological information about the actual form of the item.

For example, the characteristics of the lemma for ‘give’ includes the following information:

conceptual specification: to cause Y (a possession of X) to go from X to Z
conceptual arguments: X, Y, Z

syntactic category: V

grammatical functions: subject, direct object, indirect object

diacritic features: tense, aspect, mood, person, number

The lexeme part includes all the different morphological forms relating to the same concept: e.g. *give, gives, giving, gave, given*. (This combination is, of course, similar to the notion of a lexical item within the Minimalist Program, described above.)

Levelt's speech production model consists of four steps and three autonomous information-processing components: the conceptualizer, the formulator, and the articulator. (The model is very complex, and only the basics are described here.) The conceptualizer conceives the communicative intention and plans the message. 'Macroplanning' consists of selecting the information to express in order to realize the communicative goals. 'Microplanning' comprises planning the form of the message. In this planning, the conceptualizer uses knowledge about the immediate environment, the world in general, and what has already been said in the conversation. The output of this component is the 'preverbal message'. The formulator converts the preverbal message into a speech plan—in other words, it 'translates conceptual structures into a linguistic structure' (Levelt 1989: 11). This is done via the lexicon.

Two processes are involved, grammatical encoding and phonological encoding. In grammatical coding, syntactic structures are formed incrementally in accordance with particular procedures stipulated by the formulator—i.e. assigning categories, building up phrases (or in UG terms, projections), and establishing the relationship of the phrase with the rest of the sentence by assigning grammatical roles, such as subject or direct object. These are also accomplished in accordance with both the information provided by each of the lexical items and that provided in the preverbal message by the conceptualizer.

To illustrate, I will use an example adapted from Levelt by Pienemann (1998: 66–8). In the sentence *A child gave the mother a cat*, let us assume that the conceptualizer first activates the lemma CHILD in the lexicon, with the diacritic feature 'singular'. The category information in the lemma is that it is a noun (N), and this stimulates the procedure of constructing a noun phrase (NP) in which the N is the head. This NP can contain a determiner, a word necessary to express the 'indefinite' meaning of the concept. The selection of the lemma A as the determiner depends on both the information provided by the conceptualizer and the diacritic feature of the NP head—i.e. singular rather than plural, in which case a different lemma SOME would have been

activated. Once the phrase is constructed, the grammatical role of subject is assigned.

After grammatical encoding, phonological encoding occurs in accordance with the information contained in the lexeme (or form) component of the lexical item. The combination of grammatical and phonological encoding produces a 'phonetic plan' (or inner speech). The next component, the articulator, transforms this phonetic plan into overt speech.

Pienemann's 'Processability Theory' (Pienemann 1998, 2003, 2005; Pienemann and Håkansson 1999) focusses on the development of language processing in L2 acquisition. According to de Bot's (1992) adaptation of Levelt's model to bilingual language production, not only are the lemmas for each language potentially different in terms of meaning, lexical category, and diacritic features, but also processing procedures are different (language-specific) so that there are basically separate formulators. Therefore, learners must acquire the specific processing procedures of the L2. The major premise of Processability Theory is that 'at any stage of development, the learner can produce and comprehend only those L2 linguistic forms which the current state of the processor can manage' (Pienemann 2003: 686). There is a universal hierarchy of processing procedures, determined by the architecture of the formulator, starting with lemma access, and moving up to procedures dealing with categories, phrasal information, and sentence-level (or interphrasal) information. (See Pienemann 1998: 54–88, 2003: 686–91 for more details.) Learners start at the bottom stage, in which only words can be processed, and this would explain the absence of grammatical morphology.

The other explanation based on language production comes from the '4-M Model' (Myers-Scotton 1997, 2002, 2006; Myers-Scotton and Jake 2000). This model postulates the existence of four different kinds of morphemes, based partially on how they are accessed in the language production process. Following Levelt (1989), the model assumes that surface morphemes have underlying lemmas in the mental lexicon which are activated at various stages in speech production. Lemmas underlying content morphemes are directly activated at the conceptual level by the speaker's intention. However, in normal language use, content morphemes alone are not sufficient to express speakers' intentions; system morphemes are also necessary. According to the 4-M model, there are three kinds of system morphemes, again depending on the nature of the lemmas that support them. Lemmas underlying early system morphemes are also activated at the conceptual level, but indirectly via the content morphemes. Examples

in English include determiners (*a, the*) and plural marking (*-s*). In contrast, lemmas underlying late system morphemes are activated at the functional level—i.e. in Levelt's model, by the formulator. They indicate grammatical rather than conceptual information, and are structurally assigned to indicate relationships between various elements that are joined to form larger constituents. There are two types of late system morphemes. Bridge system morphemes occur between elements within the same complete phrase (or maximal projection)—for example, *of* or *'s* used to form possessive constructions with an NP, as in *the dress of the girl* or *the girl's dress*. In contrast, outsider system morphemes depend on information from outside the maximal projection—for example, the third-person singular tense and agreement marker *-s* on the verb as in *gives*, which is co-indexed with the subject NP.

With regard to SLA, Myers-Scotton and Jake (2000: 1087) claim that the 4-M Model can make predictions as follows:

Under the assumption that learning a language depends on mapping conceptualizations onto an abstract lexicon and the grammar it projects, the prediction is that directly elected content morphemes are acquired accurately before system morphemes. Further, within the class of system morphemes, early system morphemes are expected to be more accurately produced (and acquired) before late ones. Finally, because bridge morphemes do not depend on relations outside their own maximal project for information about their form, they are produced more accurately before outsiders.

Thus, like other theories, the 4-M Model observes that content morphemes are acquired before system (or grammatical) morphemes, and therefore the latter are absent in early interlanguage. But unlike other theories, the explanation for this phenomenon is related not to the perceptual salience of grammatical morphemes, but to their intrinsic abstract properties. This explanation is tenuous, however, for the following reason: while speakers of a language may have knowledge of four abstract categories of morphemes as part of their linguistic competence, early learners of the language do not yet have this knowledge. Therefore, they will not be able to determine which segments of the input are content morphemes and which are system morphemes (not to mention determining which are early, bridge, or outsider system morphemes).

2.5 Mixing and levelling

The preceding sections have shown that because of significant similarities with early L2 varieties such as the BV, the morphological simplicity of

restricted pidgins and pre-pidgins is very likely the result of processes of second language acquisition. In fact, I would go so far as to say that pre-pidgins can be defined as a mixture of L2 varieties similar to the BV in which some conventions have begun to emerge, and restricted pidgins are a stabilized combination of a subset of features of these L2 varieties.⁷ How this stabilization eventuates is the next question.

In previous publications (e.g. Siegel 1997a), I have described how the processes of mixing and levelling that occur in the formation of new, mixed dialects (koinization) are relevant to the emergence of a new stable contact language. First, individuals come up with their own linguistic strategies for communicating with speakers of other languages that they do not know, and this mixture of features forms the ‘pool of variants’ (p. 136) used for communication in the language contact situation. Using notions from LePage and Tabouret-Keller (1985), this can be described as a ‘diffuse’ linguistic context, with a great deal of mixture and variability. However, under certain changed social conditions, such as more frequent contact or the emergence of a new community, the context can become more ‘focussed’, with less variability and generally accepted norms. As part of this focussing, levelling may occur, in which some features from the pool become no longer used for communication while others are retained. The choice of features is affected by a combination of environmental factors, (such as frequency) and linguistic factors (such as semantic transparency). (These factors are discussed in more detail in Chapters 6 and 7.) The remaining features make up the new stable contact variety. This is basically the view that has been adopted and expanded by Mufwene (2001), looking at it in terms of the competition of variants within a ‘feature pool’.

In the contact situation described in this chapter, the pool of variants contained mainly a mixture of individual early L2 varieties, but also perhaps some features resulting from model simplification, such as the emphatic form of pronouns. As a few conventions emerged, such as the *sa* predicate marking in Pidgin Fijian, this mixture could be called a jargon or pre-pidgin. But when the extent of contact increased—for example, among Pacific Islands plantation labourers in Fiji—a stable pidgin emerged, in this case with most features typical of early L2 varieties, such as absolute morphological simplicity, as well as some features from simplified models, such as the pronouns. Other contact situations, of course have different outcomes, as described in later chapters.

⁷ See Siegel (2004a). Field (2004) has independently come up with a similar point of view.

2.6 Social-psychological factors and ‘imperfect’ SLA

If SLA was involved in the genesis of restricted pidgins, we need to explain why acquisition did not progress further. As already mentioned, according to Klein and Perdue (1997) approximately one third of the learners in the ESF study did not progress past the Basic Variety except in vocabulary acquisition, even though they had access to the target language. It should be pointed out that there is no implication that these learners were in any way mentally deficient. Klein and Perdue describe the BV as ‘simple, versatile and highly efficient for most communicative purposes’ (1997: 303), implying that some learners felt no communicative reason to acquire a more native-like version of the target language. Another reason learners may not proceed past the BV is that they do not want to identify with (or be seen to identify with) the target language community. This is the case with regard to indigenous Fijians learning the Hindi (or Hindustani) spoken by the Indian population in Fiji (Siegel 1995), and it explains the existence of the restricted Pidgin Hindustani that is spoken by Fijians even though theoretically there is no limit to their access to Hindi. So although limited second language acquisition may result from outside limitations, such as restricted access to the target language, it may also be a consequence of limits learners impose on themselves due to factors relating to identity or resistance.

Early social-psychological models in SLA, such as Schumann’s (1978*b*) ‘acculturation model’ considered social and psychological distance to be important factors. Other models used individual factors, such as motivation and social identity as well as socio-structural factors such as relative size, status and power of the L1 and L2 groups. (For overviews, see Ellis 1994; Siegel 2003*a*.) However, more recent work has criticized these models for implying that learners are free to make choices about when they interact with L2 speakers or whether they are motivated to integrate with the L2 culture, and thus blaming the learner for lack of L2 attainment. Ethnographic studies in SLA—such as those by Norton Peirce (1995), Norton (2000) and McKay and Wong (1996)—take into account the socio-historical factors of power and domination which limit the choices available to learners, and also adopt the poststructuralist view that people have multiple and changing social identities, rather than the unitary static social identity of most social-psychological models.

Another recent perspective in the SLA literature considers that a variety which differs from that of an idealized native speaker does not necessarily represent its speakers’ failure in attaining L2 competence. As Rampton

(1997: 294) observes: ‘People are not always concerned with improving their L2 interlanguage.’ An ‘imperfect’ variety may be used to express a particular identity of the speaker, to show solidarity with a peer group or to indicate attitudes towards society in general. For example, stereotyped South Asian English is used by the adolescents in England studied by Rampton (1995) not because of any lack of proficiency in local varieties of English but for joking and ridiculing racist attitudes. As Firth and Wagner (1997: 292) observe, non-native-like structures may be ‘deployed resourcefully and strategically to accomplish social and interactional ends’. Furthermore, the decision not to use native-like L2 forms or not to use the L2 at all may represent a form of resistance, which alongside achievement and avoidance, is another kind of communication strategy (Rampton 1991: 239). It follows, then, that in many situations native-like proficiency is not the target of language learning.

Both these recent perspectives are relevant to P/C genesis in providing explanations other than ‘lack of success’ or ‘failure’ in acquiring the lexifier that have been justifiably criticized by creolists such as Baker (1994). As Sebba (1997: 79) notes: ‘A more pragmatic view would be that pidgins represent *successful* second language learning from the point of view of their learners—who learn just enough to communicate what they want to communicate and no more’ [*italics in original*]. (See also Smith 2006.) So rather than ‘imperfect SLA’, a non-negative term such as ‘strategic’ SLA would be more appropriate.⁸

In the following chapter, we will see how features resulting from earlier strategic SLA may result in the morphological simplicity found in creoles.

⁸ Thanks for help in coming up with this term go to students in my seminar ‘Pidgins, Creoles and Other Language Contact Varieties’ at the University of Hawai‘i in 2003. Dahl (2004: 110) uses the term ‘suboptimal’ acquisition.

3 Morphological Simplicity and Expansion in Creoles

Although there is no consensus on a precise definition of creole languages, most creolists would agree on the following points. First, creoles like pidgins emerge as a result of language contact. Second, as opposed to pidgins, they have communities of native speakers. And third, they are more complex grammatically than pidgins. Despite the third point, however, the assumption still exists that creoles in general are overall ‘simpler’ than other languages, as reported by Muysken and Smith (1995: 9) and DeGraff (2001*a*: 57). As already mentioned, this position has been explicitly taken up by McWhorter (2001, 2003), the title of his 2001 article saying it all: ‘The world’s simplest grammars are creole grammars.’ In opposition to McWhorter, DeGraff (2001*a*, 2001*b*) has argued vigorously that Haitian Creole is not simpler than other languages, by demonstrating, for example, the existence of extensive derivational morphology. What leads to the impression that creoles are so simple? And can creoles be said to be simpler overall than other languages? The answers to these questions are considered in the first two sections of this chapter. The third section goes on to discuss the process of morphological expansion that leads to creoles being more complex than pidgins.

3.1 Morphological simplicity in Bislama

In order to illustrate the impression of morphological simplicity in creoles (and expanded pidgins), we will have another look at Bislama—especially at its markers of tense, modality, and aspect (TMA).

Bislama has periphrastic TMA markers, some of which are shown in Table 3.1. To compare the simplicity of the Bislama TMA system to both restricted pidgins and the lexifier, English, we need to recall the cline of grammaticality, discussed in Chapter 2. This ranges from the use of a content word (lexicality) to the use of an inflectional affix (grammaticality), and the assumption is that lexicality corresponds with morphological simplicity while grammaticality corresponds with complexity. According to these criteria, Bislama is clearly more complex than a restricted pidgin because it indicates tense and aspect with grammatical morphemes rather than lexical

Table 3.1. Some TMA markers in Bislama

| morpheme | function | example |
|-------------------|----------------------|---|
| <i>finis</i> | completive | <i>Mi go finis.</i> ‘I have gone.’ (Crowley 1990a: 203) |
| <i>bin</i> | past | <i>Mi bin kaekae wan krab.</i> ‘I ate a crab.’ (206) |
| <i>jas</i> | recent past | <i>Mi jas kam naoia nomo.</i> ‘I’ve only just arrived.’ (208) |
| <i>stap</i> | habitual/progressive | <i>Hem i stap toktok.</i> ‘She talks/is talking.’ (217) |
| <i>bambae/bae</i> | future | <i>Bae hem i go.</i> ‘He will go.’ (209) |

items such as adverbs. However, in Bislama these grammatical morphemes are all grammatical words—e.g. preverbal *bin* for past tense and *stap* for progressive aspect—while in English some are inflectional affixes—e.g. *-ed* and *-ing*. Thus, the absence of inflectional verbal affixes in Bislama make it appear simpler than English.

Another thing that makes Bislama seem simpler is that it lacks certain TMA categories found in English, such as present and past perfect, and subjunctive. However, Bislama has categories not found in English, such as the completive and recent past shown in Table 3.1. Furthermore, if the two languages are compared according to non-English grammatical categories, areas emerge where Bislama appears to be more complex than English. For example, in English transitivity is not indicated grammatically, but in Bislama there is a verbal suffix *-em* (and its allomorphs) that marks transitivity.

With regard to another grammatical area, pronouns, Bislama again appears to be simpler because one form *hem* or *em* can mean ‘he, she, it, him, her’ (similar to Tok Pisin, referred to in Chapter 1). But in contrast to English, Bislama has separate forms marking the inclusive/exclusive distinction in first-person plural, as well as dual, trial, and plural number for all persons, as shown in Table 3.2. Thus, with regard to inclusive/exclusive and number marking, the Bislama pronoun system is more complex than that of English. The conclusion is then that there are problems in comparing languages as a whole with regard to simplicity/complexity, as pointed out in Chapter 2.

Nevertheless, it is clear that there are some specific linguistic areas where in comparison with their lexifiers, creoles do exhibit morphological simplicity as it is defined here, and the most well known is in the area of verbal inflection. For example, even Haitian Creole can be shown to be further to the left than French on the simplicity/complexity continuum with regard to

Table 3.2. The Bislama pronoun system

| | singular | dual | trial | plural |
|----------------------|---------------|---------------------|--------------------|---------------|
| 1st person inclusive | | <i>yumitu(fala)</i> | <i>yumitrifala</i> | <i>yumi</i> |
| 1st person exclusive | <i>mi</i> | <i>mitufala</i> | <i>mitrifala</i> | <i>mifala</i> |
| 2nd person | <i>yu</i> | <i>yutufala</i> | <i>yutrifala</i> | <i>yufala</i> |
| 3rd person | <i>hem/em</i> | <i>tufala</i> | <i>trifala</i> | <i>olgeta</i> |

the marking of person, number, tense, and aspect, notwithstanding the few instances of inflectional morphology that do exist in the language (DeGraff 2001a: 74–6). In fact, it is the comparative absence of verbal inflection in creoles lexified by European languages that have given the impression that creoles are simpler than other languages. But while creoles are not necessarily simpler overall than other languages, we cannot ignore the comparative morphological simplicity that does exist in particular linguistic areas, and we should be able to explain its cause or origins.

3.2 Accounting for simplicity in creoles

A common explanation is that second language acquisition (SLA) is responsible for the morphological simplicity found in creoles (e.g. Wekker 1996), just as it is for that found in pidgins, as described in the preceding chapter. Evidence is presented in a few studies comparing creoles with L2 varieties of their lexifiers. Véronique (1994) describes several formal similarities between features found in the early interlanguages of Moroccan Arabic-speaking learners of French as a second language and what are considered simplified features of French-lexified creoles. Similarly, in an examination of L2 varieties of West African Ewe-speaking learners of French, Mather (2000) found some features similar to those of French-lexified creoles which he concludes were the result of the process of ‘simplification’ in second language learning. (See also, Mather 2006.) In another study, Muysken (2001) uses data from several studies of learning Dutch as a second language to compare features of learners’ L2 varieties with features of the now extinct Dutch-lexifier creole, Negerhollands. He reports many similarities in formal simplicity, including the absence of inflections on verbs.

But of course, creoles are acquired as a first language. Therefore, if SLA is responsible for their morphological simplicity, it must have been involved in an earlier stage of development. There are two very different views on the

nature of this earlier stage: whether it resulted in a pidgin predecessor or whether it involved gradual restructuring. I describe each of these views in turn.

3.2.1 Inheritance from a pidgin predecessor

According to McWhorter (2000, 2001, 2002, 2005), the morphological simplicity found in creoles is a result of the fact they ‘emerged as radically reduced pidgins’ (2000: 106). Here he appears to be referring to restricted pidgins. He says further that ‘creoles are usually born as pidgins, whose emergence largely entails stripping languages of features unnecessary for basic communication’ (2003: 207). This seems to reflect the view that morphologically simple pidgins may be the result of SLA, as shown here in Chapter 2. McWhorter’s explanation follows the traditional pidgin-to-creole life cycle view of creole origins, in which a morphologically simple pidgin later expands to become a creole (e.g. Hall 1966).

Many creoles have emerged according to the conventional life cycle, and Hawai‘i Creole is a good example. Here I describe its restricted pidgin predecessor, starting with some sociohistorical background.

3.2.1.1 *Sociohistorical background*

Hawai‘i was first visited by Europeans in 1778, and it quickly became an important stopover for ships involved in whaling and trading with Asia. Various forms of pidginized English were introduced to the islands at this time, including Pacific Pidgin English and Chinese Pidgin English. The first sugarcane plantation was established in 1835. Since indigenous Hawaiians initially provided the labour, Hawaiian or Pidgin Hawaiian (Roberts 1995*a*, 1995*b*) became the language used to run the plantations. About 2,000 Chinese plantation labourers (mainly Cantonese speakers) were later imported into Hawai‘i from 1852 to 1876, and they generally learned Pidgin Hawaiian.

The sugar industry expanded rapidly in the last quarter of the nineteenth century. An additional 37,000 Chinese labourers were imported from 1877 to 1897 and more than 10,000 Portuguese were brought in from 1878 to 1887. In the early 1880s, smaller numbers of labourers also came from other Pacific islands, Norway, Germany, and Japan (see Siegel 2000: 199). In 1884, there were approximately 40,000 Hawaiians, 4,200 ‘Part-Hawaiians’, 18,200 Chinese, 10,000 Portuguese, 6,600 ‘other Caucasians’, 100 Japanese, and 1,400 others living in Hawai‘i (Reinecke 1969: 42). Pidgin Hawaiian continued to dominate on the plantations at this time, but varieties of pidginized

Table 3.3. Importation of indentured labourers in Hawai'i

| Group | Years | Approximate Numbers |
|---------------------------------------|-----------|---------------------|
| Chinese (mostly Cantonese-speaking) | 1852–76 | 2,000 |
| | 1877–97 | 37,000 |
| Other Pacific Islanders | 1877–87 | 2,450 |
| Portuguese | 1878–87 | 10,000 |
| | 1906–13 | 13,000 |
| Scandinavian (mostly Norwegian) | 1881 | 600 |
| German | 1882–5 | 1,050 |
| Japanese | 1884–1924 | 200,000 |
| Puerto Rican | 1900–1 | 5,200 |
| Korean | 1903–5 | 7,850 |
| Russian | 1906–12 | 3,000 |
| Spanish | 1907–13 | 2,000 |
| Filipino (mainly Ilocano and Visayan) | 1907–30 | 100,000 |

English were used in Honolulu and other urban areas, and a distinct Hawai'i Pidgin English (HPE) began to stabilize. However, while pidgin languages were used for plantation work, the first generation of immigrants (G1) continued to maintain their own languages (Roberts 2000, 2005). Because the different ethnic groups were segregated on the plantations, the locally born children of immigrants (G2) acquired their parents' language and did not socialize with other children until they started school. There they learned the languages of their classmates from other ethnic groups, including Hawaiian or Pidgin Hawaiian, as well as some English (Roberts 2000).

In the following decades, however, things began to change. Widespread immigration from Japan had begun in the late 1880s and by 1890 there were over 12,600 Japanese in Hawai'i. After 1900, a large number of G2 children of Japanese ethnicity entered the schools. In addition, in the first decade of the 20th century there was an influx of labourers from Korea, Puerto Rico, Spain, and the Philippines (see Table 3.3). When the immigrant population was speaking a dozen or more mutually unintelligible languages, the English-lexified pidgin, HPE, came to be used more widely as the language of interethnic communication, especially among the G2, many of whom had left the plantations.

3.2.1.2 *Linguistic features of early Hawai'i Pidgin English*

Data on early Hawai'i Pidgin English (HPE) spoken in Honolulu comes from Roberts (2005) based on a 6,430-word corpus from 1870 to 1899,

obtained mainly from newspapers, travellers' accounts and court records.¹ The salient features of early HPE were as follows:

(a) *No inflections on nouns or verbs:*

(1) *mi kamu hauki, mi papa hauki ...* 'I came home to my father's house ...'
(Roberts 2005: 168)

(b) *Adverbs used to indicate temporal relations:*

Past *before*:

(2) a. *Kiku my wife now, before Kiku and me make marry Japanese style, all same drink tea.* 'Kiku is my wife now. Kiku and I got married the Japanese way, so we drank tea (in the ceremony).'

(Roberts 2005: 153)

b. *Garnie before eat too much Wahiawa pineapple, now get sore tooth.* 'Garnie ate so much Wahiawa pineapple that his teeth now hurt.'

(Roberts 2005: 156)

Future *by and by*:

(3) *No got any, bimeby have some next steamer.* 'I don't have any but I'll have some when the next steamer comes.' (Roberts 2005: 153)

Habitual *all time*:

(4) a. *What for Miss Willis laugh all time? Before Fraulein cry all time.* 'Why does Miss Willis often laugh? Fraulein used to always cry.'

(Roberts 2005: 154)

b. *Missionary alla time work, alla time say kanaka work.* 'Missionaries usually work and they tell the Hawaiians to work.'

(Roberts 2005: 156)

(c) *No copula:*

(5) a. *Melican man he too much smart.* 'Americans are too smart.'

(Roberts 2005: 149)

b. *Ae (yes), he only boy now, no got sense. By 'n by he man, he good.* 'Yes, he is just a boy now, lacking wisdom. When he is a man, he will be good.' (Roberts 2005: 149)

(d) *No existential marker:*

(6) *Baby inside the hole, you go look, you come here.* 'There's a baby inside the hole, come look, come here.' (Roberts 2005: 151)

¹ Note that these data differ from Bickerton's data (Bickerton and Odo 1976) from immigrants he interviewed in the 1970s who had arrived in Hawai'i in the early twentieth century (see Chapter 4).

(e) *Single preverbal negative marker:*

- (7) a. *I no give you slipper, baby slipper.* ‘I didn’t give you that baby slipper.’
(Roberts 2005: 150)
b. *Mrs Thomas, you no tell me, me be good.* ‘Mrs Thomas, you didn’t tell me to be good.’ (Roberts 2005: 149)

(f) *No complementizers:*

- (8) *Today go court house buy license, go church make marry, all same haole style.* ‘Today I’m going to the court house to buy a license and going to a church to get married, just like whites do.’ (Roberts 2005: 163)

3.2.1.3 *Residual simplicity in Hawai‘i Creole*

From the data just presented, it is clear that the historical forerunner of modern Hawai‘i Creole was a restricted pidgin in terms of use and linguistic features. And as illustrated in the preceding chapter, restricted pidgins arise from a stabilization of second language varieties at an early stage of acquisition. It is likely then that some morphologically simple features found in the modern creole (although not categorically) were inherited from the preceding restricted pidgin—for example:

(a) *absence of possessive marking:*

- (9) a. *Jo haus (Joe house)* ‘Joe’s house’
b. *da wahine nu kar (da wahine new car)* ‘the woman’s new car’
(Sakoda and Siegel 2003: 53)²

(b) *absence of agreement marking on the verb for third-person singular non-past:*

- (10) *hi tawk slo. (He talk slow.)* ‘He talks slowly’
(Sakoda and Siegel 2003: 57)

(c) *absence of verbal inflection to mark past tense:*

- (11) *He went wink at me and tell, ‘Choo, choo, choo’ and laugh backward ...* [‘He winked at me and said, “Choo, choo, choo” and laughed backwards ...’] (Lum 1999: 26)

(d) *absence of copula in equational and adjectival sentences:*

² Hawai‘i Creole is most commonly written using etymological orthographies, but there is also a phonemic orthography, designed by Odo (1973). All examples in this book use the orthography as found in the original source. Sakoda and Siegel (2003) give examples first in the Odo orthography and then in an etymological orthography in brackets. This practice is followed for my own examples in the text.

- (12) a. *Mai sista wan bas jraiva.* ‘My sister is a bus driver.’
(Sakoda and Siegel 2003: 76)
- b. *Da buggah brown.* [‘The guy is brown.’] (Morales 1988: 72)

3.2.2 The result of restructuring

The opposing point of view with regard to the origin of morphological simplicity in creoles is held by a group of creolists working mainly on French-lexified creoles—especially, Chaudenson (1992, 2001, 2003), Mufwene (1996, 2000, 2001, 2004) and DeGraff (2001*a*, 2001*b*, 2003, 2005*a*, 2005*b*). These ‘superstratists’, as they are often called, believe that creoles developed gradually from their lexifiers (the superstrate languages) without any significant break in transmission—i.e. without any preceding pidgin stage. For example, Chaudenson’s view is that the lexifier language was incrementally changed or ‘restructured’ to become the creole. This restructuring occurred when newly arrived slaves learned only ‘approximations’ of the colonial language from other slaves: ‘Creolization is thus a consequence, or the ultimate result, of approximations of approximations of the lexifier’ (Chaudenson 2001: 305). Alleyne (2000) suggests that in French-lexified creoles, maximum restructuring occurred later in their historical development through cumulative divergent changes, a view that has become known as ‘gradual basilectalization’ (e.g. Mufwene 2001).

The three main lines of argument for this view are: (1) that there is no evidence of a pre-existing ‘radically reduced pidgin’ for some creoles; (2) that creole features result from normal (i.e. conventional) language change; and (3) that morphology from the lexifier does exist in some creoles.

3.2.2.1 *Lack of evidence of a pre-existing pidgin*

Chaudenson (1992, 2001) observes that in the early days of some plantation colonies, there were small farms or homesteads rather than large plantations, and often more indentured European workers than African slaves. Thus the slaves had access to the European language (the lexifier), and learned close approximations of it—with only minor reductions in morphology and overgeneralizations—rather than developing a radically reduced pidgin—i.e. a restricted pidgin.

It is clear, however, that this scenario does not apply to the early days of all creoles. For example, in Hawai‘i, there was no early period of small homesteads, and in Fiji, where there were such homesteads, the labourers learned pidginized Fijian rather than the language of the colonizers (English), and

this pidgin continued to be used on the large plantations (Siegel 1987). More importantly, a radically reduced pidgin predecessor does exist for some creoles—for example, Hawai'i Creole, as shown above.

Furthermore, in the Caribbean region, there is some indication that varieties characterized by morphological simplicity were spoken early in the homestead period of different colonies—for example, the 1691 'merman' text from Martinique and evidence from Suriname and Louisiana, described by McWhorter (1998: 800–3). On the other hand, there is still no evidence of a reduced pidgin predecessor for other creoles, such as Haitian Creole (DeGraff 2001a).

3.2.2.2 *Conventional language change*

Along with Chaudenson, Mufwene (e.g. 2000, 2001) and DeGraff (e.g. 2001a, 2003, 2005a) maintain that creoles should be treated as versions of their lexifiers that developed according to the usual processes of historical language evolution. They argue that the processes that led to the development of creoles are nothing out of the ordinary. Mufwene (2001: 9) says that with the large influx of slaves in the plantation stage, the 'approximations of approximations' of the lexifier (as it was spoken in the colonies) occurred through typical 'imperfect replication' (Lass 1997: 112) or 'transmission error' (Deacon 1997: 114). This was intensified by larger proportions of 'nonproficient speakers' and led to the process of gradual basilectalization (Mufwene 2001: 10), described in more detail as follows (p. 51):

After the creole populations [those born in the colony] became the minorities on the plantations, continually restructured varieties often became the models for some newcomers. This restructuring process led to the basilectalization of the colonial vernacular among its segregated users, i.e. the emergence of sociolects identified as basilectal.

But a closer look at the nature of this 'restructuring' reveals that the terms imperfect replication and transmission error both refer to minor changes in normal first language acquisition that may gradually lead to conventional language change. Both Lass (1997: 112) and Deacon (1997: 115) say that such innovations or errors 'creep into' the replication or transmission process. These are not on the scale or rapidity of changes normally referred to as restructuring in creole genesis.

DeGraff's view (2001a, 2003) is that the simplicity found in Haitian Creole is similar to that which results from language change in general, and falls within developmental patterns that are commonly attested in historical

linguistics. He notes (2001a: 72) that it is ‘not surprising that we find that the “erosion” of inflectional morphology and/or the regularization of morphological distinctions recur in the history of *any* language ...’, and concludes that the same mental processes are involved in the development of creoles and other situations involving language change.

However, at the same time DeGraff refers to several factors that seem to exceptionalize the kind of language change found in creoles. First is the time factor. With regard to Haitian Creole, he concludes (2005b: 562):

In fact, core aspects in the development of HC [Haitian Creole] grammar (with respect to, e.g. sound patterns, verb and object placement and inflectional morphology) fall within developmental patterns that are commonly manifested in Stammbaumtheorie-friendly instances of ‘regular’ language change (e.g. in the history of Romance and Germanic), except for the speed at which structural innovations spread within the corresponding speech communities ...

Thus, he says that structural innovations may spread at greater speed in creole formation than in normal language change (see also DeGraff 2003: 399). Although he refers to arguments by Mufwene (2001: 130) that creoles do not develop more rapidly than other languages, it is clear that morphological simplicity in particular grammatical areas, such as verbal inflection, occurred rapidly and comprehensively in the history of creoles, rather than gradually spreading as in the structural changes usually described in historical linguistics. Second, with regard to simplification in creoles, DeGraff (2005a: 257) observes that it is not absolute: ‘What we are dealing with is gradient simplification with respect to the languages in contact and their respective complexity in PARTICULAR domains of grammar’ (emphasis in the original). Third, DeGraff (2003: 399) characterizes the kind of language change evidenced in creoles as ‘language change via language contact’. Furthermore, he points out a sociohistorical difference from other situations involving language change in that a larger number of language groups were in contact in the creole situation than in other situations (p. 401). Thus, the conditions that bring about ordinary language change and those that lead to creole features have some fundamental differences, including intense language contact.

An important feature of contact-induced language change is that it involves second language acquisition, and all of the proponents of the normal language evolution scenario for creole genesis appear to agree that second language acquisition plays a significant role. Although Mufwene refers to the first language acquisition processes of imperfect replication

and transmission error, as mentioned above, he later says (2001: 60) that ‘the basilectalization process was more a by-product of imperfect acquisition of the target by second-language learners’. Chaudenson (2001, 2003) also emphasizes the importance of strategies involved in informal second language acquisition in the development of creoles. This was especially significant in the plantation stage when ‘approximations of approximations’ of the lexifier were being made. One result of these strategies he refers to is the stripped-down nature of early interlanguage—for example, indicating tense and aspect with temporal adverbs rather than verbal inflection (see Valdman 2005: 455). In this regard, Chaudenson (2003: 190–2) refers to the article by Klein and Perdue (1997) about the results of the European Science Foundation (ESF) project discussed in Chapter 2.

DeGraff (2005a: 316) also refers to the Klein and Perdue article, and in this and earlier work (1999, 2001*b*) he argues that second language acquisition (‘L2A’) in the context of language contact is a crucial factor in language change. For example, he says (2005a: 316) that ‘the output of L2A by adults—under “duress”, in many cases—has a crucial role in language change, particularly in the context of language contact’. According to DeGraff, the simplification found in creoles is a result of adult second language learning, and he states: ‘What seems particularly affected in L2A is the learning of inflectional paradigms...’ (DeGraff 2005a: 316). Later (p. 335), he mentions ‘the inflectional erosion that seem typical of language change (via L2A in contact situations)’. DeGraff (2005a: 316–7) concludes:

The important—if familiar, but often neglected—point here is that the nature of the PLD [primary linguistic data], obviously a key factor in language change and creation, is greatly influenced by the absence or presence of adult learners and by their cognitive and psychosocial limitations—for example, take the aforementioned morphological fossilization, which is a hallmark of adult learners’ early acquisition.

From the preceding discussion it is clear that those who emphasize the restructuring of the lexifier, like those who emphasize a pidgin predecessor, view the morphological simplicity that exists in creoles as ultimately as a consequence of processes of second language acquisition and exposure to second language versions of the lexifier.

The two camps are also closer than it may seem with regard to the issue of pidginization. For example, DeGraff (1999: 524) says that in gradual basilectalization, the L2 versions of the lexifier ‘became more and more

pidginized via the interlanguages created in the context of successive waves of additional slave arrivals'. He says further that these 'pidginized interlanguages' were a consequence of 'less and less successive attempts' at second language acquisition, due to increased 'social and psychological distance' between the slave population and the native speakers of the lexifier. From the discussion above, we can assume that these 'pidginized interlanguages' were characterized by morphological simplicity and a lack of lexifier morphology. And as we have seen, it is hard to find differences between the features of restricted pidgins (such as Pidgin Fijian and early Hawai'i Pidgin English) and features of early interlanguage, such as those of the Basic Variety (Klein and Perdue 1997). Thus, although DeGraff, Chaudenson, Mufwene, and others may be correct in saying that there was no stable pidgin in the history of some creoles, there were clearly 'pidginized interlanguages' (DeGraff 1999: 524) being used by the slaves. This position is not that different from that of Thomason and Kaufman (1988: 148–50) who argue that creoles can emerge from a pidginized variety or pre-pidgin rather than necessarily from a pre-existing stable pidgin. (See also Field 2004.)

3.2.2.3 *Existence in some creoles of morphology from the lexifier*

The final argument for the gradual restructuring view as opposed to the pidgin predecessor view is that many creoles have some morphology from the lexifier. For example, in arguing that Haitian Creole is actually rich in morphology—at least in derivational morphology—DeGraff (2001a, 2001b) emphasizes that this morphology is historically derived from French. He concludes that it must have been transmitted normally, rather than being acquired later through renewed contact with the lexifier (2001a: 84). In later work, DeGraff (2005b: 562) claims that 'we find ample evidence for systematic lexical and morphosyntactic correspondences between "radical" Creoles and their European lexifiers'. These issues with specific regard to Haitian Creole are debated by DeGraff (2001a, 2001b) and McWhorter (2000, 2001).

However, the waters are muddied by the fact that there is also some continuity of lexifier morphology in creoles that clearly did have a pidgin predecessor. For example, although it was preceded by the morphologically simple early Hawai'i Pidgin English, modern Hawai'i Creole also has some morphological features that are derived from English in both form and function. These include plural marking with *-s* in the NP and progressive marking with *-ing* in the VP. While these are variable features, they are not modern innovations due to contact with the lexifier, but were present from

the earliest days of the language, as shown by these examples of children's language from the *Hawaii Educational Review* (1921: 11):

(13) *Us go push weeds?* 'Shall we go and pull weeds?'

(14) *He stay playing.* 'He is playing.'

3.2.3 The role of mixing and levelling

It seems clear then that some creoles are not entirely derived directly from 'radically reduced pidgins' because, even though they have some clear areas of morphological simplicity, they also have morphological features from their lexifiers. So if we take the pidgin predecessor view, we are left with the question: How do some morphological features of the lexifier get into creoles along with those characterized by formal simplicity? One obvious answer is that no creole has evolved directly from a pre-pidgin, pidginized interlanguage, or a stable restricted pidgin. In other words, at no stage did a group of people suddenly start speaking an unexpanded pidginized variety as their first language—even in rapid nativization. Rather, the pidginized variety was one of the many sources of features for the creole in the contact environment, and another source was the lexifier. This brings us back to the role of mixing and levelling.

The view here is that before a creole emerges, the pool of variants used for communication in the language contact environment is comprised of a mixture of features ranging from the morphologically simple to complex. Those characterized by morphological simplicity are derived from an unexpanded pidginized variety while those characterized by more complexity are the result of morphological expansion of the pidginized variety, which could also have the lexifier as one source. (Morphological expansion is discussed below and in Chapter 4.) Consequently, several different means of expressing particular concepts or meanings would be in use, including lexical means—as found in basic L2 varieties, pre-pidgins, or restricted pidgins—as well as grammatical means either learned directly from the lexifier (e.g. verbal affixes to mark tense or aspect) or developed as a result of morphological expansion (e.g. preverbal grammatical words to mark TMA).

As described in Chapter 2, the process involved in stabilization of a new contact variety, here a creole, is levelling of variants, so that some are eliminated while others are retained. This levelling may occur gradually over several generations if the emerging contact language continues to be used only as a second language of wider communication (as occurred with

Melanesian Pidgin). Or it may occur rapidly in one generation, if there is community-wide language shift and children acquire only a subset of the variants as their first language.

In such levelling, the most common variants have the best chance of being retained in the creole (Siegel 1999). So if, as a result of limited second language learning or the use of a pre-pidgin or restricted pidgin, a large number of speakers in the contact situation use lexical means rather than grammatical structures to express a particular concept, then we would expect that this means of expression would end up in the creole. On the other hand, if a large number of speakers use grammatical means—either derived from the lexifier or developed in an expanded pidgin (see Chapter 4)—then we would expect these to end up in the creole. Of course it is possible that grammatically simple means end up in the creole for expressing some concepts whereas more complex means end up for other concepts, and indeed this is what we seem to find in a large number of creoles.

3.3 Morphological expansion in creoles

If a creole has a restricted pidgin or ‘pidginized interlanguage’ as its predecessor, how does this variety develop the greater complexity that we find in the creole? The answer is through a process of morphological expansion, discussed in this section, and illustrated with Hawai‘i Pidgin English.

3.3.1 Defining morphological expansion

The concept of morphological expansion is closely associated with the pidgin predecessor or ‘pidgin-to-creole’ view in which the starting point of creole development is seen as a restricted pidgin or pre-pidgin, characterized by structural and morphological simplicity. Thus, Hymes (1971: 84) defines creolization as ‘comprising expansion in inner form’, usually associated with ‘complication in outer form’. This is the mirror image of his definition of the process of pidginization: ‘comprising reduction in inner form’, usually associated with ‘simplification in outer form’. Valdman (1977: 158–9) uses the term ‘elaboration’ to refer to the various processes subsumed under expansion and complication, or ‘complexification’, as he termed it. One aspect of elaboration, then, is the development of complex syntax and grammatical morphology in a contact language where they did not previously exist—for

example, the emergence of a TMA system in a contact variety that previously used only adverbs to express temporal relationships.

According to the opposing gradual basilectalization view, however, the starting point of creolization is the lexifier language as spoken in the contact situation. The process of creolization involves not elaboration but gradual restructuring, as discussed above, and defined in this context by Neumann-Holzschuh and Schneider (2000: 6) as ‘all structural modifications that a lexifier language undergoes in the selection and evolution of new linguistic elements, influenced by other competing languages, in a contact situation’. Restructuring, then, involves processes of linguistic change in the lexifier where existing syntactic or morphological features undergo modifications—for example, the grammatical overhaul of the existing TMA system of the lexifier to become the system of the contact variety.

Mühlhäusler (1980: 21) defines structural expansion as ‘those additions to an existing linguistic system that lead to an increase in the referential or non-referential potential’—which I assume includes an increase in grammatical devices. This is differentiated from restructuring which he defines (p. 22) as ‘changes due to contact with other languages which do not affect the overall power of a linguistic system’. According to Mühlhäusler (p. 22), expansion occurs in the development of an expanded pidgin or creole; restructuring occurs in the formation of a post-pidgin or post-creole continuum.³

Syea (2002: 207) says that expansion is a reversal of the processes of simplification and reduction. He states (p. 208):

[A]n important part of elaboration and expansion involves creating new function words and inflections, recategorizing old forms, assigning new meanings to old forms, creating embedding, and developing new structures. New function words might include determiners ... TMA markers, complementizers, and certain prepositions.

The implication is again that expansion involves the development of new grammatical structures that did not exist in the preceding pidgin or pre-pidgin. In Mauritian Creole, for example, Syea (2002: 211) shows that in early texts (up to the mid 1850s), possession was indicated by an ‘analytic

³ Unsurprisingly, there is not complete agreement on the meaning and use of these terms. For example, some see pidginization as defined by Hymes (1971) as a kind of restructuring (see Valdman 1977). Romaine (1992a: 215–16) does not view the emergence of grammatical markers of tense, rather than the use of adverbs, as introducing greater complexity, and therefore considers this kind of development to be restructuring rather than elaboration. And Winford (2003: 333) avoids the terms ‘elaboration’ and ‘expansion’ and uses ‘restructuring’ instead, but in the sense that it is used in literature on language acquisition—i.e. to refer to the reorganization of a developing grammar according to new input.

genitive’—i.e. the possessed noun juxtaposed with the possessor, as in this example:

- (15) *noir madam Lissir*
‘Madam Lissir’s slave’

But later texts illustrate the development of a ‘synthetic genitive’ which Sycia shows to be a clitic, as in this example (p. 212):

- (16) *bug la so trua ser*
[man the GEN three sister]
‘the man’s three sisters’

Sycia (2002) also describes how in expansion free grammatical words may become clitics and affixes (or inflections)—in other words, how expansion may involve a shift from analytic to synthetic structures. Viewed in this way, morphological expansion can also be thought of as development along the cline of grammaticality (Hopper and Traugott 1993: 7), but not necessarily due to grammaticalization (see Chapter 5).

Again, using this cline as a continuum of simplicity/complexity, I consider that expressing semantic distinctions with grammatical or purely functional morphemes, rather than lexical items, is an indicator of greater morphological complexity. With regard to expansion, I again restrict the discussion here to morphology, concentrating on ‘outer form’, and thus define morphological expansion as the development and increased use of grammatical morphemes for expressing various meanings in a language, rather than relying on context or lexical items. Note that as with many terms in contact linguistics, the terms elaboration and expansion are used to refer both to an end result (as in Mühlhäusler’s definition of structural expansion as ‘those additions to an existing linguistic system’) and to a process (as in Sycia’s definition of elaboration as ‘creating new function words and inflections’). Here I discuss morphological expansion as a process and refer to the end result as ‘expanded morphology’. I also focus on the emergence of new grammatical morphemes in a contact variety where they previously did not exist, rather than on the shift from analytic to synthetic morphology. I assume that this expansion is not a unique process in itself, but rather the reflection of other processes that may be involved in morphological development. In addition, I assume that these are psycholinguistic processes of individuals, and that as a result of these processes, morphological innovations initially occur in individual versions of the contact language.

3.3.2 Morphological expansion in Hawai'i Pidgin English

As mentioned earlier in this chapter, Hawai'i Pidgin English (HPE, the forerunner to Hawai'i Creole) came to be used more widely as the language of interethnic communication in the mid 1890s, especially among the first generation of locally born children of immigrants (G2), many of whom had left the plantations. According to Roberts (1998, 2000, 2005), from around 1895 to the 1910s, older G2 children and adults began to shift to HPE as their primary language. At this time, HPE stabilized further and began to expand grammatically. From approximately 1905 to the 1920s, substantial numbers of children of the first locally born generation were born (G3). Their parents and peers spoke to them in HPE, and thus the G3 were the first monolingual speakers of Hawai'i Creole.

Examples of the pidgin spoken by the first locally born generation (G2) provide evidence of the expansion of HPE prior to the development of the creole. Roberts (1998, 2000, 2005) gives examples from historical texts specifically from the locally born but does not distinguish between G2 and G3. I assume an example is most likely from the G2 (rather than G3) if the speaker was born before 1905. Also, Bickerton (1977*a*) gives data from interviews of a group of male speakers that he calls the 'pre-1905 generation'—seven locally born before 1905 and one foreign born in 1904 but arriving in Hawai'i a year later. Bickerton calls these 'early creole speakers' (1977*a*: 333) but clearly states that they were 'nonmonolingual' as opposed to the 'monolingual' creole speakers who were born later. Therefore, examples from these speakers can be considered as possibly coming from the G2.⁴

The examples show that many grammatical morphemes had developed where lexical items or \emptyset were found in early HPE (as shown in Section 3.2.1.2). These features were all available (i.e. found in the data) but not all used consistently in HPE; however, each of them has become a regular feature of Hawai'i Creole.

A clear instantiation of morphological expansion that occurred prior to the development of Hawai'i Creole is described by Labov (1990 [1971]: 23) as 'the rebuilding of the tense system out of the tense-less Hawaiian Pidgin'. In the HPE of the G2, TMA markers were frequently being used where either none had previously existed, or use was extremely rare. These included the current markers *bin*, *go/gon*, *stei*, *waz*, and *yustu*.

⁴ Of course, it must be kept in mind that Bickerton's pre-1905 speakers could have been influenced by later developments in the language.

Past-tense marking with *bin* (*been*) did occur in early HPE:

- (17) *Yes, he been fight Chinaman.* ‘Yes, he fought the Chinaman.’ [1899; Japanese plantation labourer] (Roberts 2005: 158)

But in Roberts’s data for the early HPE of the G1, it occurred only six times (1.3 per cent frequency); adverbials had 10.0 per cent frequency and unmarked verbs 83.6 per cent (Roberts 2005: 158). On the other hand, the use of *bin* was much more frequent in speech of the G2—57.4 per cent frequency (p. 180):

- (18) a. *This fella bin see.* ‘This person saw it/him/her.’ [1909, children]
(Roberts 2005: 180)
- b. *You bin say go up on roof and paint him, but I no hear you say come down.* ‘You had said to go up on the roof and paint it, but I didn’t hear you say to come down.’ [1913, teenaged Part-Hawaiian] (Roberts 2005: 197)

Also future/irrealis marking with *go/gon*, while existing in early HPE, was more frequent among the G2:

- (19) a. *Negano want one cup milk; he go make cake.* ‘Negano wants a cup of milk; he going to make a cake.’ [1900, Chinese cook]
(Roberts 1998: 22)
- b. *I go ask my mother for new hat.* ‘I’ll ask my mother for a new hat.’ [1919, teenaged Portuguese girl] (Roberts 2005: 184)

Bickerton (1977a) also reports use of modern Hawai‘i Creole *gon* as future/irrealis by four out of eight of his speakers, one very frequently (forty-two times)—for example:

- (20) *lawya gon teik, e.* ‘Lawyers are going to take [money], aren’t they?’ [Japanese] (Bickerton 1977a: 113)

Progressive marking with *stei* (*ste, stay*) and/or *-in* (*-ing*), while not attested in early HPE, was also found among G2 speakers:

- (21) *Wan taim wen we go hom in da nait dis ting stei flai ap.* ‘Once when we went home at night these things were flying about.’ [Japanese]
(Bickerton 1977a: 18)

Bickerton’s (1977a) data *stei* V occurred eight times, while \emptyset Ving occurred eighty times—for example:

- (22) *maeshin shap hi teiking, si?* ‘He’s apprenticed in a machine shop, see?’ [Japanese] (Bickerton 1977a: 101)

Past progressive with *waz* (*was*) occurred in fifty-three instances in Bickerton's data:

- (23) *if dei waz kaming, aen yu tawkin tu mi o ai stei telin yu...* 'If they were coming, and you [were] talking to me or I was saying to you ...'
[Hawaiian] (Bickerton 1977a: 20)

Past habitual: *yustu* (*use to*) is also found

- (24) *ai yustu have wan studabeika chrak.* 'I used to have a Studebaker truck.'
[Hawaiian] (Bickerton 1977a: 73)

Other grammatical morphemes that developed in HPE include the following:

(a) Copula: *ste* (*stei, stay*) in locatives

- (25) a. *That time Sing Ping no stay, about 12 o'clock Sing Ping come home.*
['Sing Ping wasn't here at that time; he came home about 12 o'clock.'] [1904, Chinese store owner]. (Roberts 1998: 23)
- b. *No business stay this place. You go Iwilei.* 'There's no business at this place. Go to Iwilei.' [1913, Chinese brothel-keeper]
(Roberts 1998: 23)

(b) Existential and possessive marker: *get*

- (26) a. *I believe get all black paint.* 'I believe there was just black paint.'
[1923, 29-year-old Part-Hawaiian] (Roberts 2005: 176)
- b. *aeswai nau yu get pleni mani so nating, yu get aisbawksm yu get hita, yu get dis.* 'Because now one has plenty of money, so it's nothing. You have a refrigerator, a heater, all that kind of thing.'
[Japanese/Hawaiian] (Bickerton 1977a: 121)

(c) Complementizer: *fo* (*for*)

- (27) a. *You speak you want one good Japanese man for make cook.* 'You said you wanted a good Japanese man to cook.' [1905, Japanese at an employment office] (Roberts 1998: 29)
- b. *es wai hi no ken get chaens fo go wok nau...* 'That's why he can't get a chance to work now ...' [Japanese/Hawaiian]
(Bickerton 1977a: 105)

This also occurs with a nominative-subject complement:

- (28) a. *Sometime my father take me for I go look the horse race with him.* 'Occasionally my father took me to watch the horse races with him.' [1916, Hawaiian tenement resident] (Roberts 1998: 30)

- b. *More better for I write that answer.* ‘I should write that answer.’
[1917, Hawaiian tenement resident] (Roberts 1998: 30)

(d) Negative markers in addition to *no*: *nat* (*nat*), *neva*

- (29) *o yae, ere pipl dei no du daet nau.* ‘Yeah, nobody does that now.’
[Japanese/Hawaiian] (Bickerton 1977a: 112)

- (30) *douz deiz da fud awl gud-kain fud, nat laik tude kain.* ‘In those days the food was all good, not like the sort they have today.’ [Japanese]
(Bickerton 1977a: 90)

- (31) *da jenereishan awf todie neva si eniting.* ‘Today’s generation hasn’t seen anything.’ [Hawaiian] (Bickerton 1977a: 136)

(e) Articles: *a* and *wan* for indefinite, *da* for definite

- (32) *wan hawaiien—ol maen, ae?—rait a wait haws.* ‘[There was] a Hawaiian, an old man, eh, [who was] riding a white horse.’ [Japanese]
(Bickerton 1977a: 72)

- (33) *yu si da ti livz hia, daes hau da hawaiens fish bifo.* ‘You see the *ti* leaves here, that’s how the Hawaiians used to fish.’ [Hawaiian]
(Bickerton 1977a: 106)

(f) Plural marking: *-s* (example 13; Bickerton 1977a: 83–7)

In summary, it is clear that HPE expanded morphologically in a relatively short period (10–20 years). It adopted grammatical morphemes to express what was expressed by context or lexical items in early HPE. Most of these were grammatical words, but in some cases they were inflections such as *-in* (*-ing*) to mark progressive aspect, and *-s* to mark plural. All of these features are found in Hawai‘i Creole.

The next chapter looks at some possible sources of this kind of morphological expansion.

4 Sources of Morphological Expansion

Three kinds of sources have been proposed for morphological expansion in a contact language: (1) language-internal developments, (2) language universals, and (3) influence of other languages. (Of course, more than one of these sources may be involved.) This chapter discusses each of these sources in turn.

4.1 Language-internal developments

In conventional language change, grammatical morphemes often develop as the result of a lexical item gradually acquiring a grammatical function, and eventually losing its original lexical meaning. This, of course, is known as grammaticalization. There are many controversies about the nature of grammaticalization (summarized in Dahl 2004), and even about whether or not it is a distinct grammatical phenomenon, rather than a cover term for the results of various other recognized processes, such as reanalysis, extension, and borrowing (Campbell 2001; Newmeyer 2001).¹ I will not go into these controversies here, but rather follow the conventional use of the term grammaticalization to refer to the process or group of processes that lead to a lexical item gradually becoming a grammatical morpheme, as often occurs in language change.

Clear instances of this kind of grammaticalization exist in the development of expanded pidgins and creoles. A well-known example is the adverbial expression *by and by* which became *baimbai* in Tok Pisin and developed into the future/irrealis marker *bambai* and later *bai* (Labov 1990 [1971]; Sankoff and Laberge 1974). (The same occurred in Bislama, where these forms are spelled *baembae*, *bambae*, and *bae*.) Mihalic (1971: 30) gives the following example in Tok Pisin:

(1) *Bambai yu go*. ‘You will go.’

However, this form is now very rare, and the form *bai* is more commonly used:

¹ For example, Joseph (2001: 184) asserts: ‘Grammaticalization is not really a process. Rather it is an epiphenomenon, an effect.’

(2) *Bai mi go long taun.* ‘I’ll go to town.’ (Dutton and Thomas 1985: 88)

Furthermore, *bai* no longer requires stress, and is most commonly unstressed, often reduced to /bə/. It has also moved closer to the verb; it can occur after pronominal subjects, as in the following:

(3) a. *Mi bai i go long taun.* ‘I’ll go to town.’ (Dutton and Thomas 1985: 88)

b. *Em bai i go long taun.* ‘He’ll go to town.’

With a third-person nominal subject, its most common position is after the full subject NP:

(4) *Dispela man bai i go long town.* ‘This man will go to town.’

(Dutton and Thomas 1985: 88)

Note that *bai* does not occur directly before the verb, but rather precedes the predicate marker *i* (if there is one), as in the above examples. This is unlike other Tok Pisin TMA markers, such as *bin* ‘PAST’, which come after the predicate marker:

(5) a. *Em i bin go long taun.* ‘He went to town.’

b. *Dispela man i bin go long town.* ‘This man went to town.’

Another example in Tok Pisin is the immediate future marker *laik* which developed from the verb *laik* ‘to like’. It is now most often reduced to an unstressed *la* or even *l*, and seems to be on the way to becoming a verbal prefix (Lynch 1979; Smith 2002).²

The development of the Tok Pisin future/irrealis marker went through stages or processes typical of grammaticalization. First there was generalization of meaning or desemanticization. Initially, *bambai* meant ‘some time in the future’, like its English origin *by and by*, as in the following:

(6) *Wataim yu laik go? Bambai.* ‘When do you want to go? Later on.’

(Mihalic 1971: 63)

Then it became a general indicator of future events, as in:

(7) *Bambai mi save.* ‘I will learn.’ (Mihalic 1971: 63)

Second, phonological reduction or erosion occurred, as *bambai* became reduced to *bai*, and eventually to unstressed /bə/. At the same time, extension or generalization of grammatical function took place, as the original lexical meaning faded. *Bai* became a grammatical marker of future tense, as indicated by its co-occurrence with adverbs of futurity, such as *bihain* ‘later’ and *tumora* ‘later’:

² For a description of grammaticalization in progress in Russenorsk, see Kotsinas 1996.

- (8) a. *Bihain bai yumi yet yumi bosim kantri bilong yumi.* ‘Later we ourselves will govern our country.’ (Verhaar 1995: 315)
 b. ... *tumora bai yu go long taun?* ‘... are you going to town tomorrow?’ (Dutton and Thomas 1985: 78)

Bai is also used in other irrealis contexts—i.e. hypothetical and counterfactual:

- (9) a. *Sapos man i bosim gut bai ol inap is tap longpela taim.* ‘If a person takes good care of them, they will be able to stay in good condition a long time.’ (Verhaar 1995: 315)
 b. *Sapos mipela bin i stap na i dai long Isip, ating bai i gutpela.* ‘If we had stayed in Egypt and died there, perhaps that would have been better.’ (Verhaar 1995: 315)

Finally, there is decategorialization—the loss of morphological and/or syntactic properties that characterize a lexical item as being the member of a particular word class. In the case of *bai*, this is indicated by the fact that it cannot occur both clause initially and clause finally, as temporal adverbs can.

- (10) a. *Bihain Tom i kaikai. / Tom i kaikai bihain.* ‘Later Tom will eat. / Tom will eat later.’
 b. *Bai Tom i kaikai. / *Tom i kaikai bai.*

In addition, as mentioned above, *bai* can now occur in a position just before the predicate marker or the verb, a position in which adverbs do not normally occur:

- (11) a. *Tom bai i kaikai.*
 b. **Tom bihain i kaikai.*

There are many other examples in expanded pidgins and creoles where a lexical item has become a grammatical morpheme—for instance, English *stay* becoming the progressive marker *stei* (or *ste*) in Hawai‘i Creole. Thus, it is tempting to conclude that grammaticalization, as it is normally understood by historical linguists, is one of the most important processes involved in morphological expansion. However, there are several problems with this view (as pointed out by Plag 2002). One of these is the fact that grammaticalization is normally gradual, taking place over several generations, and certainly not within one generation, as occurred with *stei* in Hawai‘i Creole (Roberts 1998). And there is no evidence that *stei*, for example, went through the normal stages or processes found in grammaticalization, as occurred

with *bambai/bai* in Tok Pisin. A related problem is that grammaticalization is supposed to be characterized by universal pathways of development, or ‘unidirectionality’. However, some purported examples of grammaticalization in creoles contradict the order of the usual grammaticalization chains—for example, the development of prepositions into verbs, rather than vice versa, in Solomons Pijin (Keesing 1991; Plag 2002).

Another problem is that, according to Hopper and Traugott (1993: 125), ‘grammaticalization does not result in the filling of any obvious functional gap’, but rather competes with existing constructions very similar in function. However, in the case of expanded pidgins and creoles, morphological expansion is by definition filling a gap—i.e. developing grammatical morphology where none previously existed.

In addition, changes due to grammaticalization are normally considered to be strictly language-internal, and distinct from contact-induced language change. But, as pointed out by Bruyn (1996), some morphological expansion that creolists attribute to grammaticalization has resulted not from gradual change within the contact language but from ‘the transfer of the result of a process of grammaticalization that has taken place in another language’ (p. 42), which she calls ‘apparent grammaticalization’. In other words, a lexical item in the contact language has taken on grammatical properties very similar to those of a corresponding item in another language. It is clear that the conventional notion of grammaticalization needs to be expanded if it is to be applied to language contact situations, and this is exactly what some historical linguists have proposed (see Chapter 5).

4.2 Linguistic universals

In a view that dominated the field of pidgin and creole studies in the 1980s and early 1990s, Derek Bickerton (1981, 1984*a*, 1988, 1999*a*) maintained that the sources of morphological expansion in creoles are formal universals of language—more specifically, the biologically determined set of principles for the organization of language that Bickerton calls the ‘language bioprogram’. These principles are said to emerge when there is highly variable or insufficient input for children acquiring their first language.

According to Bickerton, each true creole language was created rapidly in just one generation by the children of imported plantation labourers

or slaves from many different language backgrounds. These children were exposed to the existing medium of interethnic communication on the plantations, a highly variable and undeveloped pre-pidgin or incipient pidgin. Since their parents' languages were of limited utility in the multi-lingual community, these children acquired this rudimentary pidgin as their primary language. However, as this was not a fully developed language, the children had to fall back on their innate linguistic capacity to turn it into one, and this became the creole. Thus creoles display the universal characteristics of human linguistic endowment. This is Bickerton's Language Bioprogram Hypothesis (1981, 1984*a*, 1988)—often referred to in the general linguistics literature to support the theory that humans have an innate faculty for language (for example, Pinker 1994: 33–5; Lightfoot 1999: 148–9; Jackendoff 2002: 99–100; Anderson and Lightfoot 2002: 203).

The evidence presented by Bickerton to support the LBH focusses on twelve particular linguistic features of creoles, listed below, that were supposedly not found in the preceding pidgin. The first eight are concerned with morphological expansion:

- (1) articles marking NPs with specific reference;
- (2) preverbal free morphemes marking particular categories of tense, modality, and aspect;
- (3) a complementizer, with distinctive marking for 'unrealized complements' (Bickerton 1981: 59)—i.e. those that express events that are uncertain or have not yet been accomplished;
- (4) relativization indicated with a relative pronoun and subject copying;
- (5) a single morpheme expressing both existential ('there is') and possessive ('have');
- (6) a copula having a form different from that of the existential and possessive, used with locative but not equational predicates;
- (7) stative verbs rather than predicate adjectives;
- (8) multiple marking of negation (on NPs as well as verbs);
- (9) movement rules for focussing;
- (10) questions having the same word order as statements;
- (11) bimorphemic question words;
- (12) no special passive construction.

It is also claimed that these features did not come from the lexifier language or the ancestral languages of the creole speakers (the substrate languages), or from any other languages in the contact environment. Therefore, they

must have been ‘created’ by children according to their inborn linguistic knowledge.

Several problems exist with this point of view as an explanation for morphological expansion. First of all, it does not account for the sources of expansion in the cases of features not purported to be part of the bioprogram, such as the transitive suffix in Melanesian Pidgin. Second, it does not account for the features that have clearly developed gradually in creoles, some with properties similar to putative bioprogram features, such as the *bai* future (or irrealis) marker in Tok Pisin. (See Arends 1993, 1995 regarding the ‘gradualist hypothesis.’) Third, it now seems clear that some creoles developed over more than one generation. As described in Chapter 3, the work of Roberts (1998, 2000, 2005) demonstrates that Hawai‘i Creole emerged not among the first locally born children of immigrant labourers (G2) but among their children (G3).

More importantly, three of the basic premises of the original hypothesis are not supported by the facts: the lack of models for expanded features found in creoles, the irrelevance of the substrate languages, and the universality of creole features. These are discussed in turn.

4.2.1 Lack of models

Perhaps the most crucial argument for the LBH is that in nativizing the preceding pidgin into a creole, children came up with grammatical structures that they were not exposed to. Bickerton claims (1984a: 173): ‘The innovative aspects of creole grammar are inventions on the part of the first generation of children who have a pidgin as their linguistic input’. (See also Bickerton 1999a: 49.) Thus, the assertion is that the primary linguistic data (PLD) or input available to children born on the plantations as the basis for their first language acquisition was that of a restricted pidgin, but the output was a morphologically expanded creole. This is reiterated by other linguists, such as Anderson and Lightfoot (2002: 203):

[E]arly creole speakers are not matching their input, which typically consists to a large degree of pidgin data. Pidgins are primitive communication systems, cobbled together from fragments of two or more languages, and they tend not to last long, before giving way to a creole with all the hallmarks of a natural grammar. The first speakers of creoles go far beyond their input in some ways, and in other ways fail to reproduce what they heard from their models, arriving at grammars which generate sentences and structural descriptions quite different from those of their input.

Bickerton's assertion is based on a comparison of the features of Hawai'i Creole with those of the restricted pidgin spoken by foreign-born Japanese and Filipino immigrants who came to Hawai'i before 1935 (Bickerton and Odo 1976; Bickerton 1981: 9–42). However, according to Roberts (2005: 147–8), this pidgin was typical of that spoken on the plantations in the 1920s and 1930s; it was not this restricted pidgin but the more expanded Hawai'i Pidgin English (HPE) spoken in Honolulu in the late 1890s/early 1900s that was the forerunner of Hawai'i Creole.

A close look at the expanded HPE as described in Section 3.3.2 reveals that it already contained several of the features that Bickerton says came into Hawai'i Creole as the result of the bioprogram. These include three features, pointed out by Roberts (1999: 50–8, 2000: 287): in the TMA system, the use of *bin* as a preverbal tense marker and *go* as a preverbal modality marker; and in complements, the use of *for* as a VP complementizer. In addition, Bickerton himself (1977a) describes five other features from the list above as having emerged before the first monolingual creole speakers. Two of these were 'innovated by pidgin speakers' (p. 333): a single morpheme, *get*, used to express both existential and possessive and a different form for the copula, *stei* (*ste*, *stay*), used with locatives but not equational sentences. Three others were innovated by speakers bilingual in their ancestral languages and HPE (whom Bickerton calls the earliest creole speakers): the system of articles, movement rules, and relativization (p. 333). Roberts (2005: 167) concludes that 'the HPE of the late 19th century was not a rudimentary, chaotic mess but had certain grammatical structures and a degree of stability'. Thus, children did have a model in their PLD for a significant number of the purported bioprogram features because these features were already found in the existing expanded pidgin. (The possible origins of some of these features are discussed below in Section 4.4.2.)

4.2.2 Irrelevance of the substrate languages

In Bickerton's original formulations of the LBH (1981, 1984a, 1984b), the first generation of plantation-born children (G2) did not acquire their parents' ancestral languages (the substrate languages); rather, all the input for their first language acquisition came from the supposedly rudimentary plantation pidgin. This view is illustrated by the following quotations:

[Creoles] have arisen in colonies with a largely or exclusively immigrant population speaking a dozen or more mutually unintelligible languages, where the only means of communication common to all speakers was an immature pre-pidgin

continuum. Children born under such circumstances did not acquire the set of competing languages or any subset of that set; often they did not acquire even the rudiments of their parents' language(s). (Bickerton 1984*b*: 145)

Since none of the available vernaculars would permit access to more than a tiny proportion of the community, and since the cultures and communities with which those vernaculars were associated were now receding rapidly to the past, the child born of pidgin-speaking parents would seldom have had any other option than to learn that rudimentary language, however inadequate for human purposes it might be. (Bickerton 1981: 5)

However, with regard to Hawai'i, this view is not corroborated by the historical facts. On the basis of evidence from censuses, published sources, and autobiographies of hundreds of Hawai'i students, Roberts (2000) demonstrates that the majority of the first locally born generation (G2) did acquire the languages of their parents (G1), which were in wide use until the 1920s. As described in Chapter 3, starting from around 1895, older children and adults from G2 began to shift to Hawai'i Pidgin English (HPE) as their primary language. From approximately 1905 to the 1920s substantial numbers of children of the first locally born generation were born (G3). Their parents spoke to them in HPE, and thus the G3 were the first monolingual speakers of Hawai'i Creole.

Bickerton (1999*a*: 55) has recently changed his position, accepting that most of the first locally born generation 'simultaneously acquired one or more of their ancestral languages'. However, in contrast to Roberts, and most other creolists, he says that this was 'the first creole generation' (p. 55). Most important for the arguments here and in the following chapter is the fact that it was the first locally born generation who expanded the pidgin, and this generation still spoke the substrate languages. Therefore, these languages could have been one of the sources of features that are supposed to be due to the bioprogram.

4.2.3 Universality of creole features³

Another important premise for the LBH is that widely distributed creole languages (in Hawai'i, the Caribbean, and the Atlantic and Indian Ocean regions) are also said to be virtually identical with regard to the twelve features listed above. Bickerton (1981: 42) states that 'if all creoles could be shown to exhibit an identity far beyond the scope of chance, this would

³ Some of this section is based on Siegel 2007.

constitute strong evidence that some genetic program common to all members of the species was decisively shaping the result'. Hawai'i Creole is critical in this argument because its substrate languages (Hawaiian, Cantonese, Portuguese, Japanese, etc., as indicated in Chapter 3) were so different from the mainly West African substrate languages of the Caribbean and Atlantic creoles, yet it supposedly shares these same diagnostic creole features.

According to Bickerton (1981: 72), Hawai'i Creole is 'identical with all or with a large percentage of creoles' in terms of eight of the twelve features. It also 'shows a fair degree of similarity in two' (copula constructions and relativization strategies) and 'diverges sharply in two' (multiple marking of negation and bimorphemic question words). Here I focus on recent research considering the features of the Hawai'i Creole verb phrase that Bickerton says are identical with those of other creoles: the TMA system, adjectives as a subclass of verbs, the copula, and sentential complementation.

The examples of Hawai'i Creole used here again come mostly from published sources: previous research, descriptions of school children's language, and modern literature, such as poetry and short stories. The autonomous Odo orthography, normally used by Bickerton, is also used here in the text to identify features. All examples, however, are given as in the original. Translations not given in the original are in square brackets.

4.2.3.1 TMA, copula, adjectives as verbs

According to Bickerton (1981, 1984a), creoles mark tense, modality, and aspect (TMA) with preverbal free morphemes which, when they co-occur, are placed in that order. The ranges of meaning of these particles are the same:

[T]he tense particle expresses [+Anterior] (very roughly, past before past for action verbs and past for stative verbs); the modality particle expresses [+Irrealis] (which includes futures and conditionals); while the aspect particle expresses [+Nonpunctual] (progressive-durative plus habitual-iterative). The [verb] stem form in isolation expresses the unmarked term in these three oppositions, i.e. present statives and past nonstatives. (Bickerton 1981: 58)

However, recent publications (e.g. Siegel 2000; Velupillai 2003) have pointed out that the modern Hawai'i Creole TMA system does not correspond to that described by Bickerton and therefore does not conform to the

supposedly biologically determined set of creole features. In fact, on the basis of her findings, Velupillai (2003: 160) concludes that ‘the LBH needs revision’.

For example, according to Bickerton (1977a, 1981), Hawai‘i Creole like other creoles has a marker of anterior tense—*bin* (from English *been*):

- (12) *so da guy bin laik daunpeimen bikas i dono mi.*
 so the guy ANT want downpayment because he don’t know me
 ‘So the guy wanted a downpayment because he didn’t know me.’
 (Bickerton 1977a: 156)

An alternative form *wen* (from English *went*) is now used much more commonly than *bin*—for example:

- (13) *Dass ’cause dey wen’ paint his skin.* [‘That’s because they painted his skin.’] (Morales 1988: 72)

However, Velupillai (2003) shows that the past-tense forms of common irregular (or [–weak]) verbs in English are often used in Hawai‘i Creole—for example *sed* (*said*):

- (14) *dis gai hia sed daet hi gon get mai vainil* ‘this guy here said that he was going to get my vinyl’ (Bickerton 1977a: 338)

She also demonstrates that the *wen* + V construction indicates past tense but not necessarily past before past. This is illustrated with an example from a poem by Yamanaka (1993: 41–2):

- (15) *Yeah, he get one picture of me,*
I wen’ send him the one of us by the gym.
The one us made you take for the gang...
 [‘Yeah, he has a picture of me,
 I sent him the one of us by the gym.
 The one we made you take for the group...’]

As Velupillai (2003: 71) points out: ‘Here *wen’ send* refers to something that happened after *made* and not anterior to it.’

But Bickerton himself admits that the features found in his Hawai‘i data do not always match the predictions of the bioprogram. His explanation (1977a, 1981) is that these features have been contaminated by English via the process of ‘decreolization’, or influence from standard English. (The notion of decreolization is discussed in more detail in Chapter 9.) Thus, like

other non-typical creole features of Hawai'i Creole, the non-anterior use of *wen* is described as the result of decreolization: '*bin*, as it mutates to *wen*, grows to be less and less confined to the anterior category, and is eventually no more than a morphological variant for English simple past.' (Bickerton 1977a: 154).

In other words, Bickerton appears to assume that Hawai'i Creole originally did conform to the bioprogram, but it has been changed as a consequence of decreolization. For example, he says (Bickerton 1977a: 148): 'It is not, in a system such as Hawaii's, possible to screen out all "decreolized" speech, simply because no-one in Hawaii lies outside the reach of standard English.' The implication is that if we went back to the earliest days of the creole—when it first emerged—we would find the prototypical bioprogram features, because the creole would not yet have been contaminated by English influence.

I tested this proposition using historical evidence. Most scholars agree that Hawai'i Creole began to emerge as a distinct language around 1910 and continued to develop for the next two to three decades (Reinecke 1969 [1935]; Bickerton 1981; Roberts 1998). Thus information about the language in the 1920s and 1930s would be early enough in its history to give some indication about what it was originally like.

Several sources of data from this period are available. The first is the *Hawaii Educational Review* (HER) (September 1921), already referred to in Chapter 3, which included 'The New Course of Study' for elementary grades. This provided teachers with drills and activities for helping their students learn standard English, as opposed to 'Pidgin English' (actually early Hawai'i Creole). The magazine gives many examples of Hawai'i Creole which are described as 'mangled English sentences'.

The next source of data is another pedagogical text: *Everyday English for Hawaii's Children* by John A. Ferreiro (1937), intended for the fourth through ninth grades. The text contains various headings with grammatical points contrasting Hawai'i Creole with standard English—for example:

- (16) BEEN STAY for WAS or WERE
 GET for HAS or HAVE
 NO LIKE for DON'T WANT or DOESN'T WANT

These are followed by exercises. There is also a list of 'Common errors to guard against' with 443 examples of 'poor form' alongside 'better form'. It is

clear that the ‘poor form’ examples are from Hawai‘i Creole, since the author of the book himself was almost certainly a speaker of the language.⁴

A final source is Smith (1939), another study concentrating on ‘errors’ in English which are actually features of Hawai‘i Creole. It includes samples from conversations with 4-year-olds, and ‘Sentences to illustrate the special list of errors’ (pp. 281–2).

Back to the non-anterior use of *wen*, the historical evidence shows that *bin* (*been*) was used as a simple tense marker from the earliest days of the creole, as this quotation indicates:

The Simple Past Form...is the tense form that is used more than all others combined...It is also the form most abused here in Hawai‘i, for it is the form for which the eternal *been* is most often substituted. (HER 1921: 3)

Some examples given are:

- (17) a. *Us been go post office.* ‘We went to the post office.’ (HER 1921: 14)
 b. *You been go store?* ‘Did you go to the store?’ (HER 1921: 14)

Ferreiro (1937: 7) also notes: ‘When speaking of the past tense our boys and girls always say: (1) “I been play.” (2) “I been sing.” (3) “I been run.” (4) “I been plant.”’—for example:

- (18) a. *I been see the fella.* ‘I saw the person.’ (Ferreiro 1937: 61)
 b. *Who been win?* ‘Who won?’ (Ferreiro 1937: 63)

Smith (1939: 281) as well gives examples with *bin* (*been*):

- (19) a. *Who been take that?*
 b. *You been see the towel?*

In addition, Smith gives an example with *wen* (*went*) (p. 276) that from the context is clearly simple past, not anterior. A mother asks her daughter where she got a marble from, and she replies:

- (20) *I went find ’um.* ‘I found it.’

With regard to nonpunctual aspect, Bickerton (1981: 27–8) says that in Hawai‘i Creole *stei* (*stay*) marks both progressive and habitual. But Velupillai (2003) found very few examples of the *stei* + V construction in her database. This is not surprising as Bickerton had observed earlier (1977a: 168):

⁴ An article about the book in the *Maui Times* (20 January 1937: 1–2) describes the author as ‘an Island born and educated man who has “gone through the mill” of pidgin English’. It also says that the book ‘contains an accurate reproduction of the pidgin English forms used in the Islands’. (Thanks go to Sarah Roberts for providing this reference.)

There can surely be little doubt that *stei* + V represented a genuine and early development in the creole grammar, but that (probably because of the salience of *stei*) decreolization affected the form relatively early, with the result that it has almost disappeared from Oahu, and is in the process of disappearing from the outer islands also.

He also noted (1977a: 164):

Loss of a nonpunctual marker means that there is no distinction between timeless iteratives of the *he works every day* kind, and nonanterior punctuals such as *he worked last Friday*: from *i stei wok* and *i wok*, these fall together as *i wok*.

The use of *stei* (*stay*) to mark habitual is especially rare in modern Hawai'i Creole (see Siegel 2000: 228), and this also appears to be true of earlier forms of the language. In Ferreiro's examples of 'poor form' alongside 'better form', there are only nine instances of *stei* + V, and none of these are habitual. Five are progressive, as shown in the following examples, and four are perfect (see below).

- (21) a. *The dog stay eat rice.* 'The dog is eating rice.' (Ferreiro 1937: 64)
 b. *He stay laugh.* 'He is laughing.' (Ferreiro 1937: 68)

No examples of *stei* + V as habitual can be found in the rest of the text, or in the other historical sources.

For marking progressive aspect, *stei* + *Ving* occurs much more frequently in current Hawai'i Creole than *stei* + V—for example:

- (22) *We stay waiting fo you.* ['We're waiting for you.'] (Kearns 2000: 4)

This, of course, differs greatly from the typical bioprogram features, which do not include any TMA affixes. In this regard, Bickerton (1977a: 168) says: 'It is hard to refrain from the assumption that, whatever it may nowadays represent, *stei* + *Ving* began life as a partial decreolization.' However, there are many historical examples that show the existence of *-ing* in the earliest days of the language:

- (23) a. *This time he stay coming.* 'He is coming right now.'
 (HER 1921: 11)
 b. *I stay working my house.* 'I was working at home.' (HER 1921: 19)
 c. *He stay talking.* 'He is talking.' (Ferreiro 1937: 62)
 d. *I no stay copying.* 'I am not copying.' (Ferreiro 1937: 64)

Further with regard to *stei*, according to Bickerton (1981) one of the basic semantic distinctions of the language bioprogram is between non-stative and stative verbs. He says that non-stative verbs and adjectival stative verbs have different semantic interpretations with regard to TMA marking. When they occur with a [+Nonpunctual] marker (*stei* in Hawai'i Creole), nonstative verbs are interpreted as being progressive-durative or habitual-iterative, whereas adjectival stative verbs are interpreted as being 'inchoative' (1981: 69). Bickerton gives only one example of a [+Nonpunctual] stative in Hawai'i Creole:

- (24) *ho, ai stei wail wid da meksikan gai.* 'Wow, I was getting mad at the Mexican guy.' (Bickerton 1981: 69)

However, no other such examples can be found, and adjective-type words preceded by *stei* in current Hawai'i Creole do not necessarily have an inchoative meaning—for example:

- (25) a. *hi stey free eswy.* ['he's free, that's why.'] (bradajo 1998: 19)
 b. *My fahdah stay so tight, so pa-ke.* ['My father is so tight (with money), so miserly.'] (Lum 1990: 99)

In such examples, *stei* seems to be functioning as a copula, and the 'stative verbs' as adjectives, both contrary to bioprogram specifications. This was also true in the past—for example:

- (26) a. *He stay sick.* 'He is sick.' (Ferreiro 1937: 61)
 b. *My nails stay clean.* 'My nails are clean.' (Ferreiro 1937: 68)
 c. *I stay all wet.* ['I'm all wet.'] (Smith 1939: 276)

A final use of the 'nonpunctual' marker *stei* in current Hawai'i Creole is not mentioned by Bickerton nor found in other creoles. It can be used with non-stative verbs to indicate a perfect or completive rather than progressive or habitual meaning (Siegel 2000: 227–8)⁵—for example:

- (27) a. *Ai ste kuk da stu awredi.* 'I already cooked the stew.'
 (Sakoda and Siegel 2003: 61)
 b. *When I stay come one old man...* ['When I've become an old man...'] (Kearns 2000: 26)

⁵ Here, following Comrie (1976, 1985) and Dahl (1985), I use 'perfect' aspect to refer to the completion of an event or the attainment of a state, as opposed to 'perfective' aspect, referring to situations presented as a whole, with no internal structure (as distinct from imperfective). However, in Chinese linguistics and some studies of language contact, the term perfective is often used in place of perfect (see Youssef 2003).

This is also not a new development, as illustrated in historical examples:

- (28) a. *He stay come already.* ‘He has come already.’ (Ferreiro 1937: 30)
 b. *The bell stay ring.* ‘The bell has rung.’ (Ferreiro 1937: 62)

It is also clear that this feature could not be a result of decreolization because it is unlike anything in English. Velupillai (2003: 155) also notes that of the twenty-five TMA features of Hawai‘i Creole that she discusses, only seven have direct equivalents in English. The rest have either no equivalents at all (ten), or only partial overlap (eight). She concludes (p. 160) that ‘neither decreolization, nor internally motivated change serve as adequate explanations for the discrepancy between HCE [Hawai‘i Creole English] and the predictions of the LBH’.

4.2.3.2 *Complementation*

Another feature of the bioprogram has to do with VP and sentential (IP) complements of the verb, such as infinitival or *for...to* complements in English—for example:

- (29) a. Gladys promised *to return the book.*
 b. It’s not easy for him to find a job.

Bickerton (1981, 1984a) points out that in most creoles, such complements are introduced by a complementizer with the phonetic form derived from the word meaning ‘for’ in the superstrate (lexifier language): *fo*, *fi*, *fu*, or *u* from English *for*, *pu* from French *pour*, or *pa* from Portuguese *para*. However, in contrast to those of the superstrate languages, these complementizers generally introduce only ‘unrealized complements’ (Bickerton 1981: 59)—i.e. those that express events that are uncertain or have not yet been accomplished.⁶ Bickerton (1981: 32–3) says that in Hawai‘i Creole, verbal complements describing hypothetical or unrealized events are marked by *fo*.

However in modern Hawai‘i Creole, complements introduced by *fo* do not always refer to unrealized events. Here are some examples in which it is clear from the context that the event in the complement occurs habitually or has already been accomplished:

- (30) a. *Everybody come fo see dat house.* [‘Everybody comes to see that house.’] (Lum 1990: 92)
 b. *Took one hour for look normal again.* [‘(It) took one hour to look normal again.’] (Yamanaka 1993: 33)

⁶ For example, as noted by Jacobs (1981), infinitival complements in English are in the hypothetical mood, and only from the context can one tell whether or not the proposition was actually realized.

- c. *Remembah your Uncle Richard, look he marry Chinee and look she take all his money and go leave him fo' marry haole man.* ['Remember your Uncle Richard, look, he married a Chinese and she took all his money and left him to marry a white man.']

(Tonouchi 1998: 246)

Historical examples, however, again demonstrate that this is not a recent phenomenon:

- (31) a. *Sometime my father take me for I go look the horse race with him.*
(1916, cited by Roberts 1998: 30)
- b. *He only take little money for buy car. He buy plenty good car, have nice rides.* (Bond 1937: 102)

4.2.3.3 Summary

Thus, it seems clear that with regard to features of the VP, Hawai'i Creole does not conform to the bioprogram prototype now and most likely never did. This is not really surprising when one considers the large number of studies that have pointed out the lack of conformity in other creoles to the supposedly universal features of the creole verb phrase as described by Bickerton (for example, Muysken 1981; various chapters in Singler 1990; and Winford 1993; for a more detailed list, see Veenstra forthcoming).

Since the LBH cannot be supported, we must look for other sources for the morphological expansion found in expanded pidgins and creoles.

4.3 Influence of other languages

Other languages in the contact environment can also be the ultimate sources of expanded morphology in a pidgin or creole, providing:

- (a) the form of the grammatical morpheme
- (b) the grammatical function of the morpheme
- (c) the surface syntactic relations (i.e. order of elements)
- (d) any combination of (a) through (c)

These languages include the lexifier, other pre-existing pidgins or creoles, and the substrate languages. I will discuss each of these here, first concentrating on cases where the language provides both the form and the function of the morpheme.

4.3.1 Morphology from the lexifier language

Klein and Perdue (1997) report that two thirds of the adult learners in the ESF study (described in Chapter 2) eventually did go past the BV to the 'Post-Basic Variety' and acquired various grammatical features of the target language. Similarly, there are many pidgins other than restricted ones which do have some of the grammatical morphology of their lexifier. For example, in Zulu-lexified Fanakalo (spoken in South Africa), the past tense is indicated by the suffix *-ile*, as it is in Zulu. However, other aspects of the Fanakalo TMA system show greater morphological simplicity in that many of the complex tenses and modalities of Zulu are not marked grammatically, and must therefore be expressed lexically (Sebba 1997: 59). Bardovi-Harlig (2000: 89) demonstrates that L2 learners go through a stage in which they use both lexical and morphological means simultaneously for expressing temporality. So it seems that the morphology from the lexifier found in some pidgins results from a mixture of features from post-basic L2 varieties.

On the other hand, the future in Fanakalo is indicated by the preverbal periphrastic marker *zo*, derived from the bound verbal affix with the same function in Zulu (Sebba 1997: 59). So with regard to this particular structure, the pidgin is less complex than the lexifier because it uses a grammatical word rather than an inflectional affix. The question remains of whether such pidgin grammatical features, which are derived from the lexifier but comparatively simpler, are a result of processes of second language acquisition or of processes of expansion in contact languages (or perhaps both).

Nevertheless, the grammatical features of some pidgins and creoles do provide clear evidence of targeted acquisition of the lexifier, and demonstrate typical SLA phenomena such as regularization or overgeneralization. One such example is found in a restricted pidgin, Pidgin Fijian. This is the predicate marker *sa* which derives from the misinterpretation and overgeneralization of the preverbal aspect marker *sā* in standard Fijian. Other examples come from Hawai'i Creole. The pronoun system is primarily modelled on English; however, the first-person singular independent possessive pronoun is *mainz* (*mines*), indicating overgeneralization of the final *-s* in other persons (i.e. *yours, his, hers, ours, theirs*). And the reflexive forms show overgeneralization of the singular suffix *-self*, as shown in Table 4.1 on the following page (from Sakoda and Siegel 2003: 34).

The difficulty in discussing the lexifier as a possible origin of other grammatical morphology in a creole is that the creole may have come under the influence of its lexifier long after its development. In other words, features

Table 4.1. Hawai'i Creole reflexive pronouns

| | reflexive |
|---------------------|--|
| 1st person singular | <i>maiself</i> (<i>myself</i>) |
| 2nd person singular | <i>yoself/yuself</i> (<i>yourself</i>) |
| 3rd person singular | <i>himsel, hrsel</i> (<i>herself</i>) |
| 1st person plural | <i>awaself</i> (<i>ourself</i>) |
| 2nd person plural | <i>yoself/yuself</i> (<i>yourself</i>) |
| 3rd person plural | <i>demsel</i> (<i>themself</i>) |

from the lexifier may have entered the creole later as the result of decreolization, as Bickerton claims occurred for some features of modern Hawai'i Creole. Here I will attempt to discuss only examples where the lexifier clearly influenced morphological expansion early in the creole's development.

One example of the lexifier language providing form, function, and syntactic position has already been mentioned: the English *-ing* (or *-in*) suffix entering Hawai'i Creole as one of the ways of indicating progressive aspect, along with or without the aspect marker *stei* or *ste* (*stay*):

- (32) a. *Wi ste mekin da plaen.* 'We're making the plan.'
 (Sakoda and Siegel 2003: 60)
- b. *He helping me.* ['He's helping me.'] (Ching 1998: 187)

However, it is clear that all the functions of the morpheme in the lexifier may not be fully duplicated in the creole. For example, the use of *-ing* to indicate future action, as in *I'm leaving tomorrow*, is not found in Hawai'i Creole.

Furthermore, certain grammatical morphology may come from the lexifier but not be used consistently in the creole. For example, the English plural marker *-s* (with its various allomorphs) is used in Hawai'i Creole, as mentioned in the preceding chapter, but it is not categorical. So one might hear *tu pig* or *tu pigz* 'two pigs'. In current Hawai'i Creole, the use of the *-s* plural is more frequent when a word ends in a vowel, as in *mai toiz* (*my toys*), and less frequent when a word is preceded by a quantifier, as in *tri dola* (three dollar). Hawai'i Creole also differs from English in the overgeneralization of plural marking with mass nouns—for example (using English orthography): *junks, mails, stuffs, furnitures, underwears, baggages, and slangs*. Again, this may be an example of the kind of overgeneralization that occurs in SLA.

Hawai'i Creole also provides an example of a form of a grammatical morpheme from the lexifier in the same syntactic position, but with a grammatical function differing from that of the lexifier. This is in the use

of *bin* (*been*) as a simple past-tense marker rather than as part of the perfect construction with *have*:

- (33) *You say you bin sell 'im.*
 'You say you sold it.' (Reinecke 1969: 215)

An example where both the form and function are similar is the use of *go* (or *goin* or *goin*) as a future marker, based on English *going to*:

- (34) a. *I no go marry you then.* 'I won't marry you then.'
 (Reinecke 1969: 214)
 b. *A gon get wan difren wan.* 'I'm going to get a different one.'
 (Bickerton 1977a: 181)

Finally, there are other cases where the form of a morpheme and at least part of its function appear to come from the lexifier, but not its syntactic behaviour. An example is the use of the French possessive pronoun *son* as a possessive clitic *son/so* in Mauritian Creole, as shown in example (16) in Chapter 3 and repeated here:

- (35) *bug la so trua ser*
 [man the GEN three sister]
 'the man's three sisters'

The point must be stressed, however, that most of the expanded morphology in a pidgin or creole is not derived from the lexifier in terms of both form and function. As will be shown in Section 4.4, the form generally comes from a lexical item in the lexifier, but not the function. So it seems that the lexicon of the lexifier is still being targeted in morphological expansion, but not the grammar. This may explain why a creole may acquire a great deal of derivational morphology from the lexifier, as in Haitian Creole (DeGraff 2001a), but it is far more difficult to find evidence of inflectional morphology or other grammatical morphemes that come directly from the lexifier.

4.3.2 Morphology from other pidgins and creoles

In addition to the lexifier, other pidgins or creoles may be the source of new morphemes. For example, Hawai'i Creole has a preverbal completive marker *pau* as in:

- (36) *Jesus pau teach all dis kine story.* ['Jesus finished teaching all these kinds of stories.'] (Da Jesus Book 2000: 43)

Pidgin Hawaiian is thought to be the source of the form and function of *pau*—although whether it was grammaticalized in the language is debatable. Here is an example from Pidgin Hawaiian (Roberts 1998: 25):

- (37) *Henry kokoe pau paina, wau hele no*
 Henry quickly finish dine 1SG go INT
 ‘After Henry had eaten dinner, I went.’

The use of *bin* (*been*) as a past-tense marker and *go* as a future marker could also have come from the Pacific Pidgin English (PPE) that was brought to Hawai‘i, instead of directly from the lexifier language. As mentioned in Section 3.3.2, few isolated examples of these are found in early HPE. Here are two further examples:

- (38) a. *I been pay four dollars to head luna* [‘boss’]. (1890)
 (Roberts 1998: 19)
 b. *Me frightened you go die.* (1881) (Roberts 1998: 22)

With regard to Melanesia Pidgin, according to Baker (1993), the form, function, and syntactic position of the Melanesian Pidgin transitive suffix *-im/-em* were derived from varieties of pidginized English in Australia.⁷

Chapter 7 describes expanded features from other pidgins in more detail.

4.3.3 Morphology from the substrate languages

There are a few cases where one or more of the substrate languages may have provided the form, function, and syntactic position of a new grammatical morpheme in expansion. For example, Saramaccan has a contrastive focus marker *wè* that follows the focussed element. Fon has the exact same marker in the same position (Smith 1996). An example in the Pacific is found in Nauru Pidgin, where /*yaʊ*/, based on the Cantonese form *yáuh* is used in possessive and existential constructions—for example:

- (39) /*yaʊ siʊsiʊ go əmɛlika*/ ‘There are a few who go to America.’
 (Siegel 1990a: 171).

I have a lot more to say about the influence of substrate languages in Section 4.4 below.

⁷ But, of course, the original development of the transitive suffixes from English *V + 'im/em* in Australia still would need to be accounted for (see Koch 2000).

4.3.4 Mixing and levelling again

The question now, however, is how did these grammatical morphemes get into the developing pidgin or creole during morphological expansion? Again, I take the mixing and levelling approach which starts with individuals contributing to a pool of variants and ends with the community adopting a subset of these variants. Here I would assume that these grammatical morphemes must have first been used by individuals in the contact situation to express particular concepts or meanings that were formerly expressed by lexical means, or not expressed at all. If a significant number of individuals used a particular grammatical morpheme, then its frequency would have been great enough for it to be retained in the expanding contact variety while other less frequent variants were levelled out. Other factors such as the power or prestige of particular individuals could also have been relevant.

So how did individuals come to start using these morphemes? There would seem to be two possibilities. In the case of grammatical morphemes from the lexifier, it appears that language acquisition was involved. This would assume that speakers are still targeting the lexifier, and consider the emerging contact variety to be a version of it. The existence of the overgeneralized use of the plural suffix in Hawai'i Creole, for example, would seem to be evidence of this. Alternatively, code-switching or nonce borrowing (see Chapter 9) could account for the use of morphemes from other languages. This assumes that speakers used the developing contact variety alongside other languages, including their first languages and others in the contact environment. This view, for example, could account for *pau* in Hawai'i Creole since both its pidgin predecessor and Pidgin Hawaiian were in use concurrently (Roberts 1995*a*, 2005).

4.4 Substrate influence: Lexifier forms, substrate functions

Neither targeting lexifier morphemes nor code-switching, however, can explain the much more frequent way in which other languages have an influence in morphological expansion. Most often the form of a new grammatical morpheme originates in the lexifier, while its function or meaning appears to be derived from a grammatical morpheme or morphemes in one or more of the substrate languages.

To illustrate this, I look at the substrate languages and potential substrate influence first in Melanesian Pidgin and then in Hawai'i Creole.

4.4.1 Substrate influence in Melanesian Pidgin⁸

4.4.1.1 *Sociohistorical background*

Although the history of Melanesian Pidgin was briefly referred to in Chapter 1, it is presented here in more detail.

The first stage of the development of Melanesian Pidgin dates from the early 1800s when Melanesians began to have frequent contact with Europeans (including Australians and Americans). This was the result of whaling in the region, followed by trading in sandalwood and *bêche-de-mer* (sea cucumbers, widely believed to be an aphrodisiac). Since Melanesia is one of the most linguistically diverse areas of the world, it was impossible for Europeans to learn the local languages for trading (as they did in other areas of the Pacific). So in order to communicate, they used simplified English or existing contact languages such as South Seas Jargon and various forms of Aboriginal Pidgin English from Australia. As a result of these limited encounters, many Melanesians picked up some vocabulary and phrases from English and the existing contact languages.

The second stage came with the beginning of the Pacific labour trade in 1863, when Melanesians started to be recruited (and in some cases kidnapped) to become labourers for plantations in Queensland (Australia), Samoa and Fiji. Melanesians from diverse areas found themselves literally in the same boat, and their only common language was what they had acquired from earlier contacts with Europeans. So they used this to communicate with each other on the ships and later on the plantations in Queensland and Samoa.⁹ With continued use, new features were added, norms began to emerge and a stable pidgin language began to develop—early Melanesian Pidgin.

Most of the Queensland labourers were from the New Hebrides (now Vanuatu) and the Southeast Solomon Islands. Others were from the Loyalty Islands of New Caledonia and from the Gilbert Islands (now Kiribati). Some labourers from German New Guinea also went to Queensland in 1883 and 1884, but many more from this area went to plantations in German-controlled Samoa, from 1879 to 1912. Labourers from the other countries as well started going to Samoa in 1878, and since many of them had already worked in Queensland, they brought early Melanesian Pidgin with them. However, after 1885, recruiting from the New Hebrides and Solomons for

⁸ Some of the data in this section come from Siegel 1999.

⁹ As described in Chapter 2, Fijian (or Pidgin Fijian), rather than any form of English, was used on plantations in Fiji.

Samoa ended, and early Melanesian Pidgin began to diverge into two slightly different varieties—one spoken in Queensland and one in Samoa.

The sparse records of early Melanesian Pidgin appear to show it as a restricted pidgin. Here is an example from the testimony of a labourer to a Queensland inquiry in 1885:

Me know Umba. He make him hand long a neck. Me think him sick. He no go work yesterday. He stop long a house. When bell ring me come home and find Umba sitting up. He dead. Me say: Umba Umba. He no move, him dead. (Mühlhäusler, Dutton, and Romaine 2003: 37)

The third stage of development began when labourers returned to their home islands after their contracts had finished and brought the developing pidgin with them. Previously, these islands had no language of wider communication; since the pidgin served this function well, it spread rapidly. It was also used by the large-scale internal labour force which worked on the plantations of German New Guinea, the New Hebrides, and Solomon Islands after the external labour trade had ended at the turn of the century (see Chapter 7). In each of these countries, early Melanesian Pidgin further stabilized and changed under the influence of the local indigenous languages to form the three current dialects: Tok Pisin in Papua New Guinea, Bislama in Vanuatu, and Pijin in the Solomon Islands.

4.4.1.2 *Substrate languages*

As indicated above, the vast majority of the labourers during the first twenty years of the Pacific labour trade were from what are now Vanuatu, the Southeast Solomon Islands and the Loyalty Islands of New Caledonia, all in Eastern Melanesia, and from Kiribati in Micronesia.¹⁰ Nearly all the languages spoken in these areas belong to several closely related groups of Austronesian languages, together referred to as Central Eastern Oceanic (Keesing 1988; Lynch, Ross, and Crowley 2002).

On the basis of figures showing the islands of origin of the labourers (taken from Price and Baker 1976: 110–11 and Moses 1973: 102), one can determine the approximate number of those who spoke Central Eastern Oceanic (CEO) languages. Figures from 1863 to 1882, given in Table 4.2 on the following page, show that in the years that a stable Melanesian Pidgin first emerged more than 98 per cent of the labourers spoke CEO languages.

¹⁰ Significant numbers of labourers from the New Guinea Islands were not recruited before 1883.

Table 4.2. Origins of Pacific Islands labourers in Queensland and Samoa

| Islands of origin | Queensland (1863–82) | Samoa (1867–82) | Total |
|-------------------------------|-------------------------|--------------------|--------|
| Loyalty Islands | 1,123 | — | 1,123 |
| Vanuatu | 21,717 | 985 | 22,702 |
| Southeast Solomons | 2,599 | (395) | 2,994 |
| Kiribati | 17 | 2,095 | 2,112 |
| Others | 76 | 95 | 171 |
| Total CEO | 25,532 | 3,570 | 29,102 |
| Northwest Solomons (and Savo) | 200 | (30) | 230 |
| New Guinea Islands | 22 | 145 | 167 |
| Total non-CEO | 222 | 175 | 397 |
| TOTAL | 25,754 | 3,745 | 29,499 |

4.4.1.3 Substrate features

Keesing (1988: 96) identifies seven ‘core syntactic structures’ of CEO languages, and illustrates that they are all found in Melanesian Pidgin (MP), expressed with forms from the lexifier, English. These are:

- (a) subject-referencing pronoun in the verb phrase
- (b) transitive suffix on the verb
- (c) adjectives functioning as stative verbs
- (d) preverbal causative marker
- (e) post-nominal possessive marker
- (f) third-person plural pronoun used as a plural marker
- (g) exclusiveness and dual number marked in the pronoun system

The examples Keesing gives are mainly from Pijin, the Solomon Islands dialect of MP, and Kwaio, a Southeast Solomons language. Here I describe each of these seven features in more detail, giving examples in Bislama, the Vanuatu dialect of MP, and then in various CEO languages.¹¹

¹¹ Examples are given here from languages which were clearly part of the substrate of MP during the early years of the plantation era and for which grammatical information is available. These are Kiribati (Micronesia); Arosi, Kwaio, and Lau (Southeast Solomon Islands); Anejom, Nguna, Raga, Tangoa (Vanuatu); and Iaai (Loyalty Islands). Keesing’s (1988) proposed Pacific Pidgin would have had Polynesian as well as Micronesian and Melanesian languages as the substrate. However, since Polynesian languages are also in the CEO group, data from them would not significantly alter the present analysis.

(a) *Subject-referencing pronoun in the verb phrase, marking the person and/or number of the subject:*¹²

- (40) a. Bislama: *Man ya i stil-im mane.*
 man DET 3SG steal-TR money
 ‘This man stole the money.’
 b. Bislama: *Ol woman oli kat-em taro.*
 PL woman 3PL cut-TR taro
 ‘The women cut the taro.’

The origin of the more common Bislama subject-referencing marker *i* appears to be the English word *he* (Keesing 1988: 143). The plural marker *oli*, mostly used for human subjects, is a more recent development (Crowley 1990: 249), derived from *ol* ‘they’ (>*all*) plus the already existing marker *i*. (*Ol* is now obsolete as the third-person plural pronoun, having been replaced by *olgeta*.)

Here are examples of subject-referencing pronouns in CEO languages:

- (41) a. Arosi: *E noni a ome-sia i ruma.*
 ART man 3SG see-TR.3SG ART house
 ‘The man saw the house.’ (Lynch 1993: 143)
 b. Kwaio: *Ta’a geni la a’ari-a go’u.*
 people female 3PL carry-TR taro
 ‘The women carried taro.’ (Keesing 1988: 220)

(b) *Transitive suffix on the verb, marking either transitivity or the object or both:*

Transitive marking occurs in MP in the form of the transitive suffix *-em* or *-im*, illustrated for Bislama in (40a) and (40b) above. This morpheme is derived from English *him* or *them* (Keesing 1988: 119). Transitive marking in CEO languages is shown in (41a) and (41b), and in these further examples:

- (42) a. Kiribati: *E ata-a tama-u.*
 3SG know-TR father-1SG
 ‘He knows my father.’ (Lynch 1993: 130)
 b. Anejom: *Et awod-yic aen.*
 3SG:AOR hit-TR.2SG he
 ‘He hit you.’ (Lynch 1993: 151)

(c) *Adjectives functioning as stative verbs, preceded by subject-referencing pronouns and taking other verbal morphology:*

¹² These are also referred to as verbal pronoun markers (Schütz 1969), predicate markers (Camden 1979) or subject indexes (Corne 1994). See Crowley (2000a) for an overview, and Myerhoff (2000) for further discussion relating to Bislama.

- (43) a. Bislama: *Haos ya i big-fala.*
house DET 3SG big-ADJ
‘This house is big.’
- b. Bislama: *Ol gel blong Malo oli bin naes tumas.*
PL girl from Malo 3PL PST nice very
‘The girls from Malo were very nice.’
- (44) a. Kwaio: *Fou lo’oo e gelo.*
stone DEM 3SG heavy
‘This stone is heavy.’ (Keesing 1988: 74)
- b. Tango: *Tamioci sei mo paru mo malokoloko.*
man DEM 3SG fat 3SG tired-tired
‘This man is fat and lazy.’ (Camden 1979: 107)
- c. Kiribati: *Kam baba ngkamii taan akawa.*
2PL stupid 2PL.EM the.ones fishing
‘You fishermen are stupid.’
(Groves, Groves, and Jacobs 1985: 107)

(d) *Preverbal causative marker, which has a causative function or converts a stative or intransitive verb into a transitive one:*

The Bislama causative marker is preverbal but in contrast to most CEO languages, it is in a periphrastic construction using *mekem*, from English *make*, rather than a prefix.¹³

- (45) a. Bislama: *slip* ‘sleep’ *mekem i slip* ‘put to sleep’
b. Bislama: *foldaon* ‘fall’ *mekem i foldaon* ‘cause to fall’
- (46) a. Nguna: *loaloo* ‘dirty’ *vaka-loaloo* ‘make dirty’
b. Kiribati: *kukurei* ‘happy’ *ka-kukurei-a* ‘make happy’
c. Iaa: *mæk* ‘awake’ *o-mæk-ɔ* ‘wake someone’

(e) *Postnominal possessive marker followed by the possessed NP:*¹⁴

The MP possessive marker *blong* (or *bilong* in PNG Tok Pisin) is derived from the English verb *belong*:

¹³ Keesing comments that ‘some constructional patterns extremely widespread in Oceanic, rather than being directly incorporated into pidgin, might be achieved periphrastically...’ (1988: 116), and he clearly includes causative constructions as ‘fundamental Oceanic structures’ in MP (p. 177).

¹⁴ CEO languages generally have a common pattern of possession when the possessor is a non-pronominal NP: the possessed NP is followed by a possessive morpheme followed by the possessor NP. In Micronesian languages, the possessive morpheme may be suffixed to the possessed noun, but in other languages it is a free morpheme. Some languages in the Southeast Solomons and Vanuatu have a similar pattern when the possessor is a pronoun: the possessed noun is followed by a possessive morpheme with a pronominal suffix.

- (47) a. Bislama: *haos blong jif* b. *haos blong mi*
 house POSS chief house POSS 1SG
 ‘the chief’s house’ ‘my house’
- (48) a. Kwaio: *fanua naa ta’a geni*
 place POSS people female
 ‘the women’s village’ (Keesing 1988: 220)
- b. Kiribati: *m’ane-n te kirabu*
 money-POSS ART club
 ‘the club’s money’
 (Groves, Groves, and Jacobs 1985: 48)

(f) *Third-person plural pronoun used as plural marker:*

As shown in examples (40b) *ol woman* ‘the women’ and (43b) *ol gel* ‘the girls’, the MP plural marker is *ol*, derived from English *all*. This is the third-person plural pronoun formerly used in Bislama, as mentioned above, and still used in Tok Pisin. Examples from CEO languages are:

- (49) a. Lau: *gera i’agi* ‘the fish (PL)’ (Fox 1974: 75)
 3PL fish
- b. Raga: *ira vavine* ‘the women’ (Crowley 2002c: 629)
 3PL woman

(g) *Exclusiveness and dual (and trial) number marked in the pronoun system, with pronouns often incorporating morphemes referring to numbers:*

As shown in Chapter 3, the pronoun system of Bislama follows this pattern, with forms derived from English pronouns as well as numerals, *tu* ‘two’ or *tri* ‘three’, and *-fala*, a pronominal plural marker, derived from *fellow*.

| | | | | | |
|------|----------------------|---------------|---------------------|--------------------|---------------|
| (50) | | singular | dual | trial | plural |
| | 1st person inclusive | | <i>yumitu(fala)</i> | <i>yumitrifala</i> | <i>yumi</i> |
| | 1st person exclusive | <i>mi</i> | <i>mitufala</i> | <i>mitrifala</i> | <i>mifala</i> |
| | 2nd person | <i>yu</i> | <i>yutufala</i> | <i>yutrifala</i> | <i>yufala</i> |
| | 3rd person | <i>hem/em</i> | <i>tufala</i> | <i>trifala</i> | <i>olgeta</i> |

This pattern in CEO languages is illustrated by Tangoa (Camden 1979: 88), shown below.¹⁵ (The forms *rua* and *tolu* can also be free morphemes, meaning ‘two’ and ‘three’.)

¹⁵ *m* represents an apico-labial; *̄r* is a voiced retroflex trill.

| | | | | |
|----------------------|-------------|-----------------|------------------|-------------------|
| (51) | singular | dual | trial | plural |
| 1st person inclusive | | <i>en̄raru</i> | <i>en̄ratolu</i> | <i>en̄ra</i> |
| 1st person exclusive | <i>enau</i> | <i>kamamrua</i> | <i>kamamtolu</i> | <i>kamam</i> |
| 2nd person | <i>egko</i> | <i>kamimrua</i> | <i>kamimtolu</i> | <i>kamim</i> |
| 3rd person | <i>enia</i> | <i>enrarua</i> | <i>enratolu</i> | <i>enra/enira</i> |

In summary, as Keesing (1988) has demonstrated, Melanesian Pidgin has developed seven morphosyntactic features (at least six of which are morphological) that are found in the majority of the substrate CEO languages, but not in the lexifier, English.

4.4.1.4 *Contraction of distinctions*

One important fact, however, is that these seven features in MP are not all complete duplications of the substrate features. For most of them, the MP feature has only a subset of the properties of the corresponding CEO feature. For example, MP has a much smaller set of subject-referencing pronouns than most of the substrate languages. As shown in example (40), Bislama has two subject-referencing pronouns distinguishing between singular and plural. But one of its major substrate languages, South Efate (Thieberger 2006: 150), has more than twenty subject-referencing pronoun clitics, indicating person, number (singular, dual, plural), and inclusiveness, as well as aspect/mood distinctions. Thus, the number of semantic distinctions marked by subject-referencing pronouns in the substrate language is reduced in Bislama, and one grammatical morpheme has the functions of several different morphemes in the substrate. For example, *oli* indicates third-person dual and plural, and can be used for realis, irrealis, and perfect, corresponding to six different pronouns in South Efate.

This contraction of marked semantic distinctions also occurs with other features. The transitive suffix in MP marks only transitivity, whereas the corresponding suffix in a large proportion of CEO languages marks the person and number of the object as well. MP has only one possessive marker compared to the substrate languages which have many—for example, different markers to distinguish between general possessed items, those meant for eating, and those meant for drinking (as we saw for standard Fijian in Chapter 2). And while MP has developed a complex pronoun system based on that of the substrate languages (i.e. marking inclusive/exclusive distinctions and dual, trial, and plural), it has only one set of pronouns for each of these categories, in contrast to the substrate languages which generally have different sets for subject, object, possession, etc. Thus, although

the core substrate features are found in MP, their properties are reduced or contracted in comparison with the CEO languages. This contraction is significant, and will be referred to later in this work.

4.4.2 Substrate influence in Hawai'i Creole¹⁶

The preceding demonstration of substrate influence in morphological expansion would count as evidence for Bickerton, however, since he does not consider Melanesian Pidgin to be relevant to the Language Bioprogram Hypothesis. This is because it existed as a stable pidgin over more than one generation—and therefore expanded gradually rather than rapidly (Bickerton 1981: 4–5). Furthermore, the substrate influence described is not in the twelve diagnostic features he says are shared by 'true creoles'. So let us now examine the possibility of substrate influence in the development of the diagnostic features in a 'true creole'—and in one that is pivotal to the LBH: Hawai'i Creole.

4.4.2.1 *Substrate languages*

Bickerton (1981) argues against any possible substrate influence with regard to the bioprogram features purportedly found in Hawai'i Creole, and he states (1984a: 183) that 'we find only a handful of trivial cases of substratum influence'. From Table 3.3 in Chapter 3, it appears that Japanese and the Filipino languages had the most speakers among the immigrant population in Hawai'i, and therefore would have had the greatest potential influence on the developing creole. Indeed, these are the languages that Bickerton (1981, 1984a) compared Hawai'i Creole to, but found no evidence of substrate influence. However, it is more logical to examine the substrate languages that were dominant when Hawai'i Pidgin English was expanding (after 1895) and when Hawai'i Creole was first emerging (from approximately 1910). Of the immigrant languages, these were Portuguese and Cantonese, not Japanese or any Filipino language.

As the work of Roberts (1998, 2000, 2005) demonstrates, the locally born population (G2) was most significant in the expansion of HPE. Of the eleven key grammatical innovations that Roberts (2000) examined in historical texts, seven occurred in the speech of locally born speakers (including Hawaiians) but not foreign-born speakers. Among the immigrant population and their children at this time, the Portuguese and Chinese were clearly dominant, as shown in Table 4.3 on the following page (from Roberts 2000: 265).

¹⁶ This section is based on Siegel 2000, 2007.

Table 4.3. Locally born population whose parents were immigrants (G2)

| | 1890 | 1896 | 1900 |
|------------|-------|-------|--------|
| Chinese | 1,451 | 2,234 | 4,026 |
| Portuguese | 4,117 | 6,959 | 10,604 |
| Japanese | 250 | 2,078 | 4,877 |

Additional evidence has to do with language maintenance and shift. Sociolinguistic information presented by Kaapu (1937) and Roberts (2000) illustrates that, by the late 1920s, the Portuguese had the lowest level of traditional language maintenance and the greatest dominance of English (including ‘Pidgin’ English) in the homes, followed by the Hawaiians and then the Chinese. Thus, most of the first monolingual Hawai‘i Creole speakers had parents who spoke Portuguese, Hawaiian, or Cantonese, rather than Japanese or a Filipino language. (See Siegel 2000: 204–6 for further details about the importance of the Portuguese.)

In summary, it seems clear that Portuguese, Cantonese, and Hawaiian were the dominant languages when HPE was expanding, and therefore these languages are examined here as potential sources of the morphological expansion found in Hawai‘i Creole.

4.4.2.2 *Substrate features*

The features examined here are all found on Bickerton’s list of twelve typical creole features, described in Section 4.2. They are concerned with the following aspects:

- (a) existential and possessive, and copula
- (b) articles
- (c) TMA system
- (d) complementation

Examples of Hawai‘i Creole used here once more come mostly from published sources. Examples of Cantonese and Portuguese also come from published sources, mainly pedagogical grammars.¹⁷ Again, for all examples,

¹⁷ For Cantonese, the only comprehensive and accessible grammar available is a fairly recent one (Matthews and Yip 1994), so I have had to assume that the language has not changed significantly since the beginning of the century. For Portuguese, I consulted a variety of grammars, at least one going back to the period when Hawai‘i Creole was still stabilizing (Dunn 1928). Most of the Portuguese who came to Hawai‘i were from the Madeira and Azores islands, but according to Rogers (1979: 337), the dialects spoken on these islands differ from Standard European Portuguese only in some aspects of phonology

translations in square brackets are my own; others are given as in the source.

(a) *Existential and possessive, and copula:*

Bickerton (1981, 1984a) says that Hawai'i Creole is similar to other creoles in using the same lexical item to express existential ('there is') and possessive ('have'), as in this example:

- (52) *get wan wahine shi get wan data* 'there is a woman who has a daughter'
(Bickerton 1981: 67)

But it has a different lexical form *stei* (*stay*) as a copula to introduce locatives:

- (53) *Everyting stay on top one doily.* ['Everything was on a doily.']
(Lum 1990: 93)

Equational sentences generally lack a copula, but if there is one, it is most commonly yet another lexical form—the English copula *iz* (*is*) in the case of Hawai'i Creole:

- (54) a. *nau yu da hed maen* ... 'now you're the head man ...'
(Bickerton 1977a: 342)
b. *He da old bolohead guy.* ['He's the old bald guy.']
(Morales 1988: 73)
c. *hu go daun frs iz luza* 'The one who goes down first is the loser'
(Bickerton 1981: 24)

Bickerton (1977a: 311–12) asserts: 'This distribution of semantic elements in the lexicon does not correspond directly with the distribution of those elements in any of the contributing languages ...'. But this is not true; Cantonese has the same distribution. First, Matthews and Yip (1994: 279) note that in Cantonese: '*yáuh* translates either as "have" or as "there is/are". There is no clear distinction between the "possessive" and "existential" functions of *yáuh* ...'. This is illustrated in the following examples (pp. 89, 279).¹⁸

- (55) a. *Yáuh* (*yāt*) *ga chē jó-jyuh go chēut-háu.*
have (one) CLF car block-CONT CLF exit-mouth
'There's a car blocking the exit.'

and lexicon. Thus, I have assumed that the varieties spoken by the Hawai'i immigrants did not differ from Standard Portuguese in the aspects of grammar considered here.

¹⁸ This feature is also found in two other contact varieties with a significant southern Chinese substrate: Singapore English, in which *get* is used for both existential and possessive as in Hawai'i Creole (Platt and Weber 1980) and in Pidgin English in Nauru (see Section 4.3.3).

- b. *Kéuihdeih yáuh sāam go jái.*
 they have three CLF son
 ‘They have three sons.’

Second, a different lexical item, the verb *hái* ‘be at/in’, is used ‘as the general-purpose marker of location’ (Matthews and Yip 1994: 116).

- (56) *Héuih yìhgā ình hái Hēunggóng.*
 s/he now not be.at Hong Kong
 ‘She’s not in Hong Kong at the moment.’

Third, equational sentences generally do not have a copula, but a different verb *haih* ‘to be’ may be used, most often as a focus marker (Matthews and Yip 1994: 128–9).

Another significant substrate language, Portuguese, also has a similar distribution of elements, at least in some varieties. First, the Portuguese verb *ter* or *haver* ‘to have’ can be used with both existential and possessive meanings:¹⁹

- (57) a. *Ele tem nem dinheiro nem trabalho.* ‘He has neither money nor job.’ (Hutchinson and Lloyd 1996: 86)
 b. *Não tem muita gente no teatro.* ‘There aren’t many people in the theater.’ (Prista 1966: 74)

Second, a different verb *estar* ‘to be’ is used with locatives:

- (58) *O livro está sobre a mesa.* ‘The book is on the table.’ (Prista 1966: 75)

And third, equational sentences in Portuguese generally take a different copular verb *ser*.

In addition, there is general agreement that the Hawai‘i Creole locative marker *stei* was inspired by the Portuguese verb *estar* ‘to be’ (Reinecke and Tokimasa 1934: 57, 123; Smith 1939: 185; Carr 1972: 150). Even Bickerton (1981: 73) concedes that ‘there is nothing in the grammar of HCE except perhaps *stei* as locative that one can point to as having stemmed from Portuguese influence’.

Further evidence of the influence of Portuguese comes from alternative forms for the existential/possessive used by some speakers. Although Bickerton (1977a: 312) comments that no English-lexifier pidgin or creole since Sranan has adopted *have* for this purpose, we do find both *have* and *had* being used in this way in Hawai‘i Creole:

¹⁹ This is more common in Brazilian than European Portuguese.

- (59) a. *By this tree have some golds buried.* [‘By this tree, there’s some gold buried.’] (Perlman 1973: 69)
 b. *Had dis old green house...* [‘There was this old green house...’]
 (Lum 1990: 60)

A possible explanation is that these are direct translations of the equivalent form in Portuguese *ter* or *haver*.

It might be argued that the Hawai’i Creole use of *stei* and *have/had* are not really modelled on the Portuguese *estar*, *ter*, or *haver* because these verbs have complex conjugations for person, number, and tense, while in Hawai’i Creole there is only one or two forms of each. However, this is another example of the contraction of properties of substrate features, as we saw earlier in this chapter with Melanesian Pidgin. In other words, one grammatical morpheme in the expanded pidgin or creole may have the functions of several corresponding morphemes in the substrate language.

(b) *Articles:*

Another common creole feature discussed by Bickerton (1981, 1984a) has to do with the semantic distinctions which are marked in the noun phrase. As mentioned earlier, NPs with specific reference tend to be marked with an article in creoles, but those with non-specific reference are unmarked. Bickerton (1981: 28) gives the following description for Hawai’i Creole:

The definite article *da* is used for all and only specific-reference NPs that can be assumed known to the listener... The indefinite article *wan* is used for all and only specific reference NPs that can be assumed unknown to the listener (typically, first mention use)... All other NPs have no article and no marker of plurality...²⁰

Another way of phrasing this is to say that in Hawai’i Creole the article *da* marks presupposed specific NPs while *wan* marks asserted specific NPs; non-specific NPs are unmarked (Romaine 1988: 61). Here are some examples:

- (60) Spkr 1: *Hu stei upsteaz?* ‘Who lives upstairs?’
 Spkr 2: *Wan wahine*, [asserted specific]
shi wrk ap in da nrs ples. [presupposed specific]
 ‘A woman, she works up in the nursing home.’

(Bickerton 1977a: 227)

²⁰ It should be pointed out that the use of this and other typical creole features is not categorical in Hawai’i Creole. There is a great deal of variation, as illustrated in Bickerton (1977a), which is attributed to decreolization.

- (61) *Bat nobadi gon get jab.* [non-specific—unmarked]
 ‘But nobody will get a job.’ (Bickerton 1981: 24)
- (62) *As tu bin get had taim reizing dag.* [non-specific—unmarked]
 ‘The two of us used to have a hard time raising dogs.’
 (Bickerton 1981: 24)

Bickerton asks ‘where the specific-nonspecific, marked-unmarked, distinction came from’ in Hawai’i (1981: 27). He says that it was not found in the preceding pidgin, it is not found in English and ‘it is not a feature of any of the languages which were in contact there’ (1977a: 245). But in considering possible substrate models, Bickerton considers only languages that have articles (1981: 25). It is possible, however, that a language may have such a distinction encoded in another way.

Cantonese optionally uses the word *yāt* ‘one’ to refer to asserted specific NPs, especially those preceding the main verb, as in example (55a) above, repeated here:

- (63) *Yáuh (yāt) ga chē jó-jyuh go chēut-háu.*
 have (one) CLF car block-CONT CLF exit-mouth
 ‘There’s a car blocking the exit.’ [asserted specific]

Matthews and Pacioni (1997) also illustrate that Cantonese commonly allows NPs consisting of only *classifier* + N, as opposed to Mandarin which requires a numeral or demonstrative before the classifier. In Cantonese, this classifier acts as a marker of specificity, at least for NPs preceding the verb; unmarked NPs are interpreted as non-specific. Matthews and Pacioni (1997: 49) state: ‘Specific reference in Cantonese typically requires a classifier; consequently, bare NPs may be interpreted as specific in Mandarin but generally not in Cantonese, where they are generic.’ This is shown in the following examples from Matthews and Yip (1994: 76–7):

- (64) *Māau hóu jūngyi síhk yú ge.*
 cat much like eat fish PRT
 ‘Cats like to eat fish.’ [non-specific—unmarked]
- (65) *Jek māau jáu-jó yahp-làih.*
 CLF cat walk-PFV enter-come
 ‘The cat came in.’ [presupposed specific—marked by classifier]

Pacioni (1996) discusses the role of classifiers in indicating specificity in several Asian languages, and points out parallels between Cantonese, Hakka,

Thai, and Vietnamese. This may be an areal feature of the southern part of East and Southeast Asia (see Bisang 1996). It is possible, then, that the specific/non-specific distinction in Hawai'i Creole is the result of the influence of Cantonese, with English *one* being reanalysed as a marker of an asserted referentially specific NP, *the* reanalysed as a marker of a presupposed specific NP, parallel to the classifier, and the lack of an article interpreted as indicating a non-specific NP.²¹

Hawaiian may also have had some influence on the article system of Hawai'i Creole. Schütz, Kanada, and Cook (2005: 96) note that the Hawaiian article *ka/ke* 'can also be a marker of specificity'. And, although not referred to by Bickerton, Hawai'i Creole has another use of the definite article *da* that is clearly based on Hawaiian: its occurrence before adjectives in exclamations—for example:

- (66) *Oh, da pretty!*
 'Oh, how pretty!'

In Hawaiian, this would be:

- (67) *Auwē, ka nani!*
 oh DET pretty
 'Oh, how pretty!'

(c) *TMA system:*

The typical creole TMA system according to the bioprogram was described in Section 4.2.3.1. As also mentioned, two of the Hawai'i Creole features that supposedly conform to this system, the preverbal markers *bin* (tense) and *go* (modality), already existed in the pidgin that preceded the creole, and under pressure from English have become more commonly *wen* and *gon* or *goin*.

However, three other TMA features are usually described as occurring in the creole but not in the preceding pidgin (Bickerton 1981; Roberts 1998). These examples of morphological expansion are claimed to be innovations of children, and are often cited as evidence of the language bioprogram in action. The first of these is the 'nonpunctual' *stei* (*stay*), discussed above, and also shown in Chapter 3 to have occurred in the speech of the first locally born generation. Here are two other examples:

²¹ One compelling piece of supporting evidence for this hypothesis is the existence of the same specific/non-specific distinction, marked in the same way, in Singapore English (Platt, Weber, and Ho 1984: 55–7), which, as mentioned before, has a significant southern Chinese substrate. (See also Bao 2005.)

- (68) a. *What you stay eat?* ‘What are you eating?’ (Carr 1972: 150)
 b. *wail wi stei paedl, jawn stei put wata insai da kanu* ‘while we were paddling, John was letting water into the canoe’
 (Bickerton 1981: 28)

Bickerton asks (1981: 29): ‘How could HCE speakers have invented the *stei* + V form?’ He observes that locative expressions are commonly grammaticalized to become nonpunctual markers, but notes that this may take centuries, while Hawai‘i Creole produced a similar result ‘almost instantly’ (p. 30). Bickerton goes on to say (p. 30):

Again, we will look in vain for any substratum language which unites all the ingredients which make up the HCE nonpunctual: preverbal free morpheme, semantic range inclusive of both progressive and habitual, indifference to the past-nonpast distinction.

He mentions several unsuitable substrate languages—Hawaiian, Chinese, Japanese, and Filipino languages—but he omits Portuguese, the language that was most dominant (in terms of numbers of locally born) precisely at the time when the stable TMA system was emerging in the creole. As Reinecke and Tokimasa (1934), Knowlton (1967), and others had already pointed out, the Hawai‘i Creole use of *stei* + V is parallel to the Portuguese use of *estar* + V. Bickerton notes that by 1910, *stei* had already come into Hawai‘i Creole as a locative marker (1981: 29), and, as mentioned above, he admits that this was possibly due to the influence of Portuguese (p. 73). But he ignores the possibility that the Portuguese substrate also influenced the development of *stei* as the Hawai‘i Creole nonpunctual marker.

In fact, the Portuguese *estar* + V construction does have all the ‘ingredients’ necessary for it to have been the model. First of all, *estar* is a preverbal free morpheme:

- (69) *O combo está chegando.* ‘The train is arriving.’ (Prista 1966: 52)²²

Second, even though *estar* + V is most commonly used for progressive-durative aspect as in the sentences above, it can occasionally be used in sentences which are semantically habitual or iterative as in the following:

²² Note that in this sentence, the progressive is formed by *estar* plus the gerund of the verb. An alternative construction is *estar* plus *a* plus the infinitive of the verb—e.g. *Estou a escrever.* ‘I am writing a letter.’ Although both constructions are grammatical, the former is generally used in Brazil and the latter in Portugal (Prista 1966: 52; Willis 1965: 94).

- (70) a. *Está a receber do pai uma mescada de dois contos.* ‘(He) is receiving an allowance of two *contos* a month from his father.’
(Costa 1976: 209)
- b. *Está sempre cantando.* ‘(She) is always singing.’ (Willis 1965: 94)

Third, *estar* + V is used for both present and past events, as in these examples:

- (71) a. *estou espalhando* ‘(I) am scattering.’
b. *estava espalhando* ‘(I) was scattering’ (Camara 1972: 146)

However, as I have just shown in Section 4.2.3.1, *stei* in Hawai’i Creole differs from the nonpunctual marker that is supposedly typical of other creoles in that it functions as a copula rather than an inceptive marker with adjectives, marks perfect as well as nonpunctual aspect, and is generally not used to mark the habitual. A likely explanation for this behaviour of *stei* is once again the influence of the Portuguese substrate.

First, the Portuguese copula *estar* is used not only for locatives, as shown in example (27) above, but also for some adjectives, as in these examples:

- (72) a. *A água está fria.* ‘The water is cold.’ (Prista 1966: 75)
b. *João está alegre.* ‘John is happy.’ (Dunn 1928: 370)

Further evidence is that the adjectives that occur with *stei* in Hawai’i Creole denote only non-permanent or non-intrinsic characteristics, just like those that occur with *estar* in Portuguese (Prista 1966: 75). Thus, compare the following:

- (73) a. *Shi stei sik.* ‘She’s sick.’
b. **Shi stei shawt.* ‘She’s short.’

Second, the use of *stei* for perfect aspect in Hawai’i Creole also has parallels with another use of *estar* in Portuguese. When *estar* occurs with the past participle of the verb, the construction denotes ‘the resultant state or condition of the subject’ (Dunn 1928: 371). (See also Azevedo 1980.) Here are some examples:

- (74) a. *A casa está construída.* ‘The house is finished [lit. constructed].’
(Dunn 1928: 371)
- b. *As árvores estão cortadas.* ‘The trees are (= have been) cut.’
(Willis 1965: 362)

Finally, the semantic range of *stei* as a nonpunctual marker in Hawai’i Creole matches that of *estar* in Portuguese. Similar to the English *be* + V-*ing*

Table 4.4. Functions of Hawai'i Creole *stei* compared to Portuguese *estar* and non-punctual markers according to the LBH

| | Hawai'i Creole <i>stei</i> | Portuguese <i>estar</i> | LBH nonpunctual |
|--------------------------|-------------------------------|----------------------------|--------------------|
| progressive marker | + | + | + |
| habitual marker | — | — | + |
| inchoative with statives | — | — | + |
| copula with adjectives | + | + | — |
| copula with locatives | + | + | — |
| perfect marker | + | + | — |

construction, both can be used to mark progressive and iterative aspect, past and non-past, but generally not habitual. However, in contrast to English, neither *stei* + V nor *estar* + V is generally used to refer to future events outside a stated time frame, as in *He is leaving tomorrow*.

In summary, the functions of the Hawai'i Creole non-punctual marker *stei* are more similar to Portuguese than to those proposed by the language LBH, as shown in Table 4.4.

The other two TMA features that are described as occurring only in the creole are periphrastic combinations of TMA markers: *bin/wen stei*, indicating past progressive/habitual, and *go(n) stei*, future progressive/habitual:²³

(75) *They been stay walk feet*. 'They were walking.' (Ferreiro 1937: 63)

(76) *awl as gaiz wen stei go jrink laik lolo*. 'All us guys used to go drinking like crazy!' (Bickerton 1977a: 191)

(77) *We going stay ahgue unteel da road gud fo nuttin*. ['We'll be arguing until the road's good for nothing.'] (Roberts 1998: 24)

Portuguese also has widely used periphrastic structures for indicating tense and modality. First there is what is traditionally called the perfect tense (present perfect, past perfect or pluperfect, and future perfect) using a form of *ter* 'have' plus the verb (past participle). These tenses mark an action which began prior to another action in focus—for example:

(78) a. *Esta semana tenho visto a minha mãe todos os dias*. 'This week I've seen my mother every day.' (Willis 1965: 210)

b. *(Elas) tinham partido*. 'They had left.' (Willis 1965: 202)

²³ Various other combinations of TMA markers are purported to have existed in earlier Hawai'i Creole (Bickerton 1981: 59) and indeed there are some isolated examples in earlier texts (e.g. Reinecke 1969: 214) and in more recent 'translations' such as those found in Perlman (1973). The combination *bin/wen go* used for counterfactual is also attested but rare and not accepted by many speakers (Bickerton 1977a: 184).

Second, as a common alternative to using inflections to indicate the future, there is a periphrastic construction with *ir* ‘to go’ plus the verb (infinitive):

- (79) a. *O mundo vai acabar dentro de três bilhões de anos.* ‘The world will end in three billion years.’ (Perini 2002: 157)
 b. *Vou ver João esta tarde.* ‘I am going to see John this afternoon.’ (OR ‘I shall see John this afternoon.’) (Prista 1966: 61)

Some of these periphrastic constructions can also be combined, and significantly they correspond exactly to the *bin/wen stei* and *go(n) stei* combinations found in Hawai‘i Creole:

- (80) *tenho estado espalhando* ‘(I) have been scattering’ (Camara 1972: 147)
 (81) *Este verão vou estar escrevendo a minha tese de doutorado.* ‘This summer I am going to be writing my Ph.D. thesis.’
 (A. Baxter, p.c., July 2004)

(d) *Complementation:*

Another ‘universal’ creole feature that is said to be found in Hawai‘i Creole but not in the preceding pidgin is VP and sentential (IP) complementation. Section 4.2.3.2 showed that like other creoles, verbal complements in Hawai‘i Creole are introduced by *fo* (*for*), but unlike other creoles, these complements are not necessarily semantically unrealized. Roberts (1998, 2000) shows that while VP complements were used by both the foreign and locally born, IP complements appear to be an innovation of the locally born. Again, this feature has been referred to as evidence of the work of the bioprogram. Examples of VP complementation can be seen in (30) and (31) above, and the following other modern examples:

- (82) a. *He ask me for cheer you up.* [‘He asked me to cheer you up.’]
 (Kearns 2000: 13)
 b. *I neva have money for buy some more.* [‘I didn’t have money to buy some more.’] (Yamanaka 1998: 155)

IP complementation is rare in current Hawai‘i Creole. However, Roberts (1998: 31) gives several historical examples, such as (32a) above and the following:

- (83) a. *My mother tell for I stop home.* [‘My mother told me to stay home.’]
 b. *I been tell for she let me go Honolulu.* [‘I asked her to let me go to Honolulu.’]

Bickerton (1984a: 181) notes that the use of a variant of *for* to introduce finite complement clauses is restricted in creoles, and does not mention Hawai'i Creole as an example. However, Roberts (1998: 27) argues that *fo* does introduce finite complements in the language. The evidence is that overt subjects in some complements are in the nominative case which is assigned by tensed INFL, as opposed to the objective case which is found in non-finite complements.²⁴ This can be seen in examples (83a) and (83b) above and in the following other examples from published texts provided by Roberts (1998: 27, 30), in which the nominative forms *she*, *dey* (*they*), and *I* occur in the complements:

- (84) a. *One keiki been tell da udder one fo go buy ice cream for dey eat up on top da bus.* ['One kid told another one to buy ice cream for them to eat on the bus.']
 b. *I think more better for I write that answer.* ['I think it's better for me to write that answer.']

Since this feature is not typical of English, its origin needs to be explained, and again substrate influence from Portuguese provides an explanation.²⁵ The Portuguese word *para* 'for' (which, as noted above, is used to introduce complements in Portuguese-lexified creoles) is functionally and syntactically very similar to Hawai'i Creole *fo*. First, like *fo*, *para* means 'with a view to', 'for the purpose of', 'in order to', or 'intended for' (Barker and Atkinson 1969: 108):

- (85) a. *Carlos é homem para fazer isso.* 'Charles is the man to do that.'
 (Dunn 1928: 589)
 b. *Estão-se a preparar para sair.* 'They're getting ready to go out.'
 (Willis 1965: 375)
 c. *Não tenho bastante tempo para estudar.* '(I) don't have enough time to study.' (Prista 1966: 47)

Second, like Hawai'i Creole *fo*, Portuguese *para* can introduce sentential complements with an overt subject in the nominative case, as in the following examples, where the nominative first-person singular pronoun *eu* occurs rather than the objective *me*:

- (86) a. *Eles pediram para eu voltar.* 'They asked me to return.' [lit. 'They asked for I to-return.] (Holm 1988: 169)

²⁴ Roberts (1998: 27) gives the structure of such complements as *pp* [*for* *IP* [*NP*_{NOM} *INFL* *VP* [...]]].

²⁵ According to Jane Simpson (p.c., October 2005), some British dialects of English do have this feature, but there is no evidence that these were spoken in Hawai'i.

- b. *Emprestou-me dinheiro para eu comprar un casaco.* ‘He lent me money to buy a coat.’ [lit. (He) lent me money for I to-buy a coat.]
(Dunn 1928: 496)

Holm (1988: 169) refers to Boretzky’s (1983) observation that this ‘personal infinitive’ construction is similar to the *for* + finite complement construction of some Caribbean creoles, and that it might be evidence of a Portuguese substrate. However, Holm goes on to say that (p. 170):

the Portuguese personal infinitive construction is only partially parallel to the creole ‘for’ constructions: while the Portuguese infinitive can take a [nominative] subject and even an inflectional ending indicating agreement in person and number ... it is still an infinitive and thus—unlike the corresponding creole verbs—untensed.

As an illustration, in the following sentence from a creole from the Caribbean region, Ndyuka (Huttar and Huttar 1994: 115), the ‘for’ complement contains not only a nominative subject but also a TMA marker (of irrealis modality):

- (87) *Mi o soi en wan moi sani fu a sa fika mi.*
1SG FUT show 3SG(OBJ) a nice thing for 3SG IRR leave 1SG
‘I will show her a fine thing so that she will leave me alone.’

In contrast, Portuguese complements of this type may contain a nominative subject but never a TMA marker. An important point here is that in corresponding Hawai‘i Creole complements as well, a nominative subject may occur but not a TMA marker.²⁶ Thus again, the Hawai‘i Creole pattern seems to be closer to that of the Portuguese substrate than to that of other creoles.

4.4.3 Discussion

The pidgin and creole literature is full of similar examples of expanded morphology consisting of a form from the lexifier language having the functions of a grammatical morpheme or morphemes in one or more of the substrate languages (see, for example, Corne 1999; Lefebvre 1998; Migge 1998, 2003). Despite such examples, however, Bickerton does not accept a major role for the substrate languages in grammatical expansion, and presents four lines of attack against the substratist point of view in general. The first two have

²⁶ This statement is based on grammaticality judgements of native speakers of Hawai‘i Creole, plus the fact that no such examples are found in any published texts.

been recently countered in the literature, and are briefly discussed below. The second two are covered in the following two chapters.

His first point is that those who believe in substrate influence, or ‘substratomanics’, as he calls them, are satisfied with showing superficial similarities between selected structures in creoles and corresponding structures in the substrate languages (Bickerton 1981: 48). In other words, creole rules often do not correspond exactly to the substrate rules or do not have the same distribution. For example, as mentioned earlier, the transitive suffix in Melanesian Pidgin differs from that in Arosi (example (41a)) and other CEO substrate languages in that it does not indicate the person and number of the object along with transitivity. However, Thomason and Kaufman (1988: 161) argue that ‘point-by-point identity’ with substrate features is not necessarily expected, and scholars such as Boretzky (1993) have clearly shown that in many cases of language contact, speakers carry over only some aspects of complex rules from one language to another. (See also Johanson 2002.)

Second, Bickerton ridicules the idea that a language could be made up of a mixture of features from other languages (e.g. 1981: 22). He claims that ‘the implicit supposition that all languages are like erector sets which can be dismantled, cannibalized, and put back together again in new combinations lies at the heart of all substratum arguments’ (p. 31). But as Mufwene (2001: 78) points out, ‘there is no empirical evidence for the tacit assumption that a language is transmitted wholesale from one group to another’ and there is no reason why linguistic features ‘cannot have been selected from different sources initially for the purposes of establishing successful communication with the unplanned result of producing a new language variety’. And indeed, it has been clearly demonstrated that the mixing of linguistic features from several sources occurs in other language contact varieties, such as Michif (Bakker 1994, 1997) and Overseas Hindi (Siegel 1997a). Even in his own recent work, Bickerton (1999b) discusses ‘language mixture’.

But we are left with the question of how, in morphological expansion of a pidgin, did forms from the lexifier acquire grammatical functions from the substrate. This is the topic of the next chapter.

5 Transfer

Another of Bickerton's arguments against the influence of the substrate languages in morphological expansion is that no explanation has been given as to how substrate features are actually incorporated into creoles. He states: 'In order to make a case, they [the substratists] have to describe *exactly and explicitly* how, in creolization, syntactic structures got from substratum languages into creole languages' (1992: 314, italics in the original). Granted, this is difficult to explain if one accepts Bickerton's earlier view that creoles were created by the first generation of plantation-born children whose input for first language acquisition came from a rudimentary plantation pidgin, rather than their parents' ancestral languages (Bickerton 1981, 1984a, 1984b). However, as shown in the preceding chapter, research by Roberts (1998, 2000, 2005) demonstrates that in the crucial case of Hawai'i, the first locally born generation knew their parents' language, and Bickerton (1999a: 55) has now changed his position, accepting that most of this generation 'simultaneously acquired one or more of their ancestral languages'. Thus, the majority were bilingual in one of the substrate languages and the expanding pidgin (or according to Bickerton, the incipient creole). As Roberts (2000: 290) points out, this fact raises 'the possibility of substratal influence in creole formation' in Hawai'i. It is then relatively easy to accept explanations such as that of Wekker (1996: 140): 'Creolization is best described as a gradual process of language formation, involving a period of bilingualism in which substrate features will be transmitted.'

That leaves the question of how the substrate forms get transmitted. More specifically, in morphological expansion how did forms from the lexifier acquire grammatical functions from the substrate? While 'structural borrowing' or 'substratum interference' (Thomason and Kaufman 1988) have been evoked as explanations, these are normally descriptive terms that refer to an end result in language change, not to a psycholinguistic process—a process that can occur widely enough in individuals to result in such a change. One such process that has been proposed is 'language transfer' or simply 'transfer', a type of cross-linguistic influence that takes place in the minds of individuals. This is the topic of this chapter.

5.1 Introducing transfer

The term transfer is used in both historical linguistics and second language acquisition (SLA) with a variety of interpretations (see Odlin 1989, 2003; Winford 2003). First, it sometimes refers to a process and sometimes to the outcome of such a process, and sometimes ambiguously to both. For example, Heine and Kuteva (2003) use transfer to refer to the adaptation of linguistic material from another language—that is, to cross-linguistic influence in general. Similarly, van Coetsem (2000: 51) defines transfer as ‘transmission of material or elements from one language to another’. But here I am using transfer to refer to a particular psycholinguistic process in which the linguistic features of one language are used in learning or using another language (Færch and Kasper 1987: 112). The transferred features may be phonemes, grammatical rules, or meanings or functions of particular words. Here, however, I focus on the transfer of morphosyntactic and semantic properties or structures.

Furthermore, I focus on one particular type of transfer. Van Coetsem (1988, 2000) distinguishes between two types or patterns of transfer: ‘imposition’ versus ‘borrowing’. In imposition, materials are transferred from a source language (SL) into a recipient language (RL) via the agency of speakers who are fluent in the SL (their dominant language) and less proficient in the RL. This is called ‘source language (SL) agentivity’. In borrowing, the transfer is again from the SL to the RL, but it is via the agentivity of speakers of the RL who are more fluent in that language. This is called ‘recipient language (RL) agentivity’. (See Winford 2003, 2005.) It is imposition, or transfer via SL agentivity, that is relevant to the morphological expansion in pidgin/creole development. This kind of transfer is also referred to in historical linguistics by various other terms, such as substratum influence and interference.

Johanson (e.g. 2000, 2002) also uses the term ‘imposition’, which he distinguishes from ‘adoption’ (rather than borrowing). This takes place when one code dominates another (e.g. adoption from French into Breton). Here dominance is social (e.g. in terms of power or prestige) rather than psycholinguistic (in terms of proficiency). Johanson conceptualizes the process as one of ‘code-copying’ rather than transfer. Similarly, Sharwood Smith and Truscott (2006) argue that while the term transfer implies moving something from one location to another, elements imported from language A into language B actually remain in language A. Therefore, they also prefer to think of the process as ‘copying’ or ‘cloning’ a feature from language A

for use in the language B system, leaving the language A element in place (pp. 202–3). However, a crucial aspect of Johanson’s notion of copying is that the original and the copies are not identical (2002: 288). Van Coetsem (2000: 76) also notes that a feature of the SL does not have to be transferred to the RL as a whole; rather, ‘individual elements or aspects of it’ may be transferred. This aspect is important in distinguishing transfer via SL agentivity from other processes that have been put forward to explain substrate influence in creoles.

When transfer is discussed in the fields of second language acquisition and bilingual first language acquisition it almost always refers to what van Coetsem and Johanson call imposition, even though this is not made explicit. However, since the term imposition is not widely used, and since transfer via SL agentivity is too much of a mouthful, I will continue to use the term transfer—but with the understanding that, unless stated otherwise, it refers to this one particular transfer type—i.e. imposition or transfer via SL agentivity.

This kind of transfer is hypothesized to have led to two kinds of substrate influence found in pidgins and creoles. The first kind is concerned with word order. An example is found in the pidginized English spoken by Japanese immigrants in Hawai‘i, which uses Japanese OV word order:

- (1) *da pua pipl awl poteito it.* (Bickerton 1981: 11)
 the poor people all potato eat
 [‘The poor people just eat potatoes.’]

The influence of substrate word order can be seen most commonly in pre-pidgins or restricted pidgins, but it is occasionally found in creoles. For instance, Sranan, a creole spoken in Suriname, uses some postpositions, similar to its West African substrate languages, as with *ondro* ‘under’ in this example:

- (2) *a buku de na tafra ondro.* (McWhorter 1996: 485)
 the book is LOC table under
 ‘The book is under the table.’

The second kind of substrate influence is more relevant to morphological expansion: the use of forms from the lexifier with grammatical functions from the substrate languages—as illustrated in Chapter 4 with Melanesian Pidgin and Hawai‘i Creole.

In this chapter, I further differentiate transfer into two different types, corresponding to these two kinds of substrate influence: (1) syntactic or

‘word order’ transfer, and (2) what I call ‘functional transfer’—the use of L2 forms with L1 grammatical properties. I examine these types of transfer in three different contexts: (1) second language acquisition, (2) bilingual acquisition, and (3) second language use and bilingualism. I also look at the question of why such transfer would occur in language contact situations.

5.2 Transfer in second language acquisition

One possible way that substrate features were transmitted to expanded pidgins and creoles was through transfer in second language acquisition. This assumes that speakers of the substrate languages subconsciously transferred features of their first languages (L1) in attempting to acquire the lexifier (L2). This is the most common position in pidgin and creole studies regarding transfer.

In the field of second language acquisition (SLA), transfer refers to the form of cross-linguistic influence that involves ‘carrying over of mother tongue patterns into the target language’ (Sharwood Smith 1996: 71), or more accurately, into the interlanguage. In other words, learners use linguistic features of their first language (L1)—phonemes, grammatical rules, or meanings or functions of particular words—when learning the second language (L2) (or third language, fourth language, etc.; see Cenoz, Hufeisen, and Jessner 2001). The L1 is used either to provide a basis for constructing the grammar of the L2, or because the learner has not yet recognized differences between the L2 and the L1.

Transfer may be positive (when features of L1 match those of the L2) or negative (when features do not match). The evidence of positive transfer is when learners who have a particular structure in their L1 are able to acquire a similar structure in the L2 more quickly than learners who do not have that structure in their L1. This has been shown, for example, with the acquisition of articles in various languages (Odlin 1989: 34). The evidence of negative transfer is when a learner uses rules of the L1 in speaking the L2—for example, in the transfer of English word order to French and German interlanguage, as in these examples:

- (3) L1 English, L2 French: **Louise toujours mange du pain.*
English: ‘Louise always eats bread.’
French: *Louis mange toujours du pain.*

(Odlin 2003: 460)

- (4) L1 English, L2 German: *Ich bin glücklich sein hier.*
 English: 'I am happy to be here.'
 German: *Ich bin glücklich hier zu sein.*

(Krashen 2002 [1981]: 65)

Many other terms are used to refer to transfer in the context of SLA—for example, interference and L1 influence. Yet another term used by some scholars is 'retention' (e.g. Jarvis and Odlin 2000; Migge 1998, 2003; Winford 2002), as learners can be thought of as retaining some features from their L1 when acquiring the L2. Nevertheless, since transfer continues to be the most widely used term for the phenomenon in the SLA literature, I also use it here.

5.2.1 Background¹

The suggestion that substrate influence in pidgins and creoles may be due to language learning has a long history. One of the first scholars to suggest this idea was Hesseling in 1933:

[The African slaves] learn the surface structure of the European languages, although they make them suitable for their own manner of thinking... The masters hear their own words, however truncated or misshapen, while the slaves employ the foreign material in a way which is not in complete conflict with their inherited manner of expressing themselves. (Hesseling 1979 [1933]: 69)

Nearly forty years later, Alleyne (1971: 182) wrote along the same lines, that 'in attempting to speak English or French, Africans in Africa, as well as in the New World, interpreted English or French structural patterns in terms of native patterns'.

Bickerton was one of the first scholars to refer to the role of transfer in pidgin and creole (P/C) genesis. On the basis of his work in Hawai'i, Bickerton (1977b: 54) saw pidginization as a process of 'relexification'—where the substrate grammar is maintained but L1 lexicon is gradually replaced by superstrate words, which are 'rephonologized to accord with the substrate sound system and phonotactics'. More superstrate lexicon is later acquired and for the most part 'slotted into syntactic structures drawn from the substrate'. Bickerton made a clear connection between this process and early SLA, saying that 'second languages are naturally acquired via piecemeal relexification, productive calquing, and the utilization of mother tongue surface structure... in the early stages at least' (pp. 54–5). The difference

¹ Parts of this section appeared in Siegel 2003b and 2006.

between pidginization and normal SLA lies in ‘the availability of target models and the amount of interaction with speakers of the target language’ (p. 55).

While Bickerton said that relexification may be ‘complete down to grammatical items’ (p. 54), the examples in Bickerton (1977*b*) and in Bickerton and Odo (1976) show mainly use of L1 phonology and word order in speaking the L2—what would be described as phonological and syntactic transfer in the SLA literature—for example, the use of Japanese SOV word order by Japanese speakers as in example (1) above and the following:

(5) *as kerosin plaenteishan wan mans fo gaelan giv.*

us kerosene plantation one month four gallon give

‘The plantation gave us four gallons of kerosene a month.’

(Bickerton 1977*b*: 53)

Later, Bickerton (1984*b*: 152) refers explicitly to the process as learners ‘transferring rules of grammar from the grammar they already know to the grammar they are seeking to acquire’.

In contrast to Bickerton, however, Naro (1978) claimed there was no substrate influence in Pidgin Portuguese, and therefore presumably no transfer in the pidginization process. Similarly, Manessy (1977) reported no substrate influence in African pidgins. Furthermore, in a work that had great influence on the field of P/C studies, Meisel (1983*a*) argued that universal cognitive strategies of simplification rather than transfer are the most significant determinants of the features in interlanguage, and therefore transfer is not a significant factor in P/C genesis. This work reflected the prevailing attitudes in the field of SLA regarding the role of transfer in interlanguage development. Research in the 1970s (e.g. Dulay and Burt 1973) had shown that negative transfer accounted for only a small proportion of non-target forms in interlanguage, and that there were natural sequences of morphological and syntactic development that were unconnected with the L1. As a result of these findings and others, SLA research had begun to pay very little attention to transfer and concentrate instead on the role of universal processes of language acquisition. The same occurred in P/C studies, and the focus shifted from pidgins to creoles.

With regard to creoles, Andersen (1983*a*) believed that the substrate languages could be a possible source for the expansion and complication involved in creole genesis. However, as we have already seen, this possibility was discounted by Bickerton (1977*a*, 1981, 1984*a*) who argued that the first

generation of creole speakers did not know their ancestral languages and therefore only first language acquisition was involved in creole genesis.

The first clear statement about the connection between the process of transfer in SLA and substrate influence in pidgins and creoles was made in 1990 by Mufwene (1990: 2):

Transfers apply putatively in the speech of multilingual speakers and/or at the stage of SLA; substrate influence is observed in a language as a relatively crystallized system. Once transfers have been replicated by different speakers, repeated by most of them, and established in the contact situation's new linguistic system (even as variable features), they may be characterized genetically as substrate influence. The latter need not be associated synchronically with multilingual speakers and/or SLA.

By the mid 1990s, more creolists were convinced that transfer plays an important role in P/C genesis. For example, Wekker (1996: 144) describes the process of creolization as 'one of imperfect second-language acquisition, predominantly by adults, involving the usual language transfer from the learners' L1'. Winford (2000: 216) describes the parallels between the formation of P/Cs and the processes of SLA, which include 'L1 strategies', such as 'L1 retention', the term he uses rather than transfer. (See also Winford 2002, 2003.) Migge (1998, 2000, 2003) similarly concludes that the reinterpretation of L2 forms according to L1 properties was the key process in the expansion of the grammar of the plantation creole in Suriname. Although she most often uses the term retention, she also mentions 'transfer features' (Migge 2003: 122) as being significant.

Writing about Haitian Creole, Lefebvre (e.g. 1986, 1996, 1997, 1998, 2004) and Lumsden (e.g. 1996) refer to the process of 'relexification' to explain substrate influence. This is a process, discussed in detail in Section 5.6.2 below, that results in lexical items of the creole having semantic and syntactic properties from the substrate but phonological forms from the lexifier. This appears to be very similar to what I have been calling functional transfer, and indeed, relexification is described as being closely related to L1 transfer. Lefebvre (1998: 34) asserts that 'the type of data claimed to be associated with the notion of transfer in creole genesis corresponds to the result of the process of relexification... That is, it is claimed that substratal features are transferred into the creole by means of relexification'. Lumsden (1999: 226) uses the term 'negative transfer error' to refer to an example of the process of relexification. More recently, Lefebvre, White, and Jourdan (2006: 5) state, following Naro (1978: 337): 'Relexification is a particular type of transfer.'

Tense-modality-aspect (TMA) marking in expanded pidgins and creoles is one important grammatical area where functional transfer is thought to have played a role in development. For example, Haitian Creole has a definite future marker *ap*. Its form is derived from French *après*, but it has the semantic and syntactic properties of the definite future marker *ná* in the substrate language Fongbe, as illustrated below (Lefebvre 1998: 124–5):

- (6) Haitian Creole: *Mari ap prepare pat.*
Fongbe: *Mari ná dâ wǒ*
Mary DEF-FUT prepare dough
'Mary will prepare dough.'

And in Chapter 4, we saw that the Hawai'i Creole locative copula and progressive marker *stei* (or *ste*) is derived from English *stay* but has the semantic and syntactic properties of Portuguese *estar*.

But can transfer in SLA really account for such features in pidgins and creoles? In order to answer this question, we need to see whether there is evidence of this kind of transfer actually occurring in SLA. I look first at word order transfer and then at functional transfer.

5.2.2 Word order transfer in SLA

In second language acquisition in general, there are many reported instances of word order transfer in the interlanguage of second language learners, as shown in examples (3) and (4) above. But whether or not the transfer of basic word order occurs has been a controversial topic in the field of SLA. Rutherford (1983, 1986) and Zobl (1983, 1986) claimed that there is usually no transfer of basic word order. But Odlin (1990) presented eleven counter-examples, such as transfer of Japanese and Korean OV word order into English. And in the European Science Foundation (ESF) study discussed in Chapter 2, there was evidence of transfer of word order in the earliest stages, although it was downplayed in the description of the Basic Variety (Klein and Perdue 1997). For example, OV rather than VO order occurred in the interlanguage of Punjabi learners of English and Turkish learners of Dutch (reported in Kellerman 1995: 137).

In recent years, this topic has been revived in debates about the initial state of L2 acquisition, discussed in Chapter 2. In addition to the question of whether the principles of universal grammar (UG) are available to second language learners, there is the question of the role of the L1 and transfer. Epstein, Flynn, and Martohardjono's (1996) Full Access Hypothesis

plays down the role of transfer—in this context viewed as the use of prior linguistic knowledge in the construction of the L2 grammar. However, other hypotheses or models accept continuing access to UG but still allow for the role of transfer of word order (which clearly seems to occur in SLA data). One of these was discussed in Chapter 2: the Minimal Trees and Structure-Building Hypothesis of Vainikka and Young-Scholten (1996*a*, 1996*b*, 2006). According to this hypothesis, there is partial transfer in SLA in that the lowest projection (the VP) is transferred from the learner's L1. This explains the initial occurrence of L1 basic word order; however, when there is enough input, the learner quickly shifts the headedness of the NP to the target language value (2006: 90). The Modulated Structure-Building Hypothesis (Hawkins 2001) is another partial transfer model that similarly allows for the initial transfer of the bare VP, and therefore basic word order.

The 'Weak Transfer/Valueless Features' hypothesis (Eubank 1993–4, 1996) also accounts for word order transfer. It maintains that both lexical and functional projections transfer, along with the headedness parameter, but not the values [\pm strong] of inflectional features, which are determined by the morphology.

However, according to the Full Transfer/Full Access Hypothesis (Schwartz and Sprouse 1996; Schwartz 1996, 1998), the L2 initial state comprises the entirety of the L1 grammar along with UG, both constraining interlanguage development. Thus, all the abstract syntactic properties of the L1 are initially transferred, including the setting for the headedness parameter. To support this position, Schwartz (1998) presents an array of examples of word order transfer, including OV order into English by Turkish learners and N-Adj order into German by Italian and Spanish learners. This model has also received a great deal of independent support in the literature (e.g. Bhatt and Hancin-Bhatt 1996; Camacho 1999; Slabakova 2000). A similar point of view is the 'Conservation Hypothesis' of van de Craats, Corver, and van Hout (2000).

Another model, from an entirely different theoretical orientation (the constructivist approach) comes to a similar conclusion about transfer being widespread, although it does not support full transfer. This is the Competition Model (Bates and MacWhinney 1981, 1987; MacWhinney 1997, 2005). For example, MacWhinney (1997: 119) states that 'all aspects of the first language that can possibly transfer to L2 will transfer'. This implies that transfer is frequent, but that some constraints exist on what can be transferred. (See Chapter 6.)

But if learners' initial state is the L1 grammar, the question remains as to how learners move from the L1 to the L2 grammar. Referring to White (1991), Sharwood Smith (1996: 75) notes that UG is relevant to SLA, but that 'learners assume that L1 parameter settings will work for L2 unless *evidence turns up to disconfirm this assumption*' [italics in original]. According to Schwartz (1998: 147), the way that progress towards the L2 takes place is that input from the L2 that cannot be accommodated to the L1 grammar causes the system to restructure. She observes: 'In some cases, this revision may occur rapidly; in others, much more time may be needed.'

For basic word order, the revision (or restructuring) occurs very rapidly. This explains the relative rarity of word order transfer reported in the earlier SLA literature that led some scholars to claim that it does not occur (see above). This rapid adoption of L2 word order is most probably because basic word order is quite a salient structural characteristic (Odlin 1990: 110; Comrie 1997: 369). In other words, learners normally have metalinguistic awareness of rules for the ordering of verb and object, unless there are a large number of rules involving structural detail (as in German and Dutch).

If we assume that transfer in SLA is relevant to P/C genesis, then this would explain why the word order of the substrate languages is most often not maintained in the resultant contact language if it differs from that of the lexifier.² Minimal exposure to the lexifier language would have caused rapid restructuring. But then the question is: Why would other features of L1 or substrate word order remain? The answer may be that other L2 features are not so accessible to consciousness. For example, Lightbown and Spada (2000) report that because L1 English learners of French have no metalinguistic awareness of the rules they use for adverb placement, they do not notice how their English sentences differ from those of French. Thus, these learners use English patterns of adverb placement when speaking French. Lightbown and Spada conclude, therefore, that positive evidence is not always sufficient to lead to acquisition. Similarly, White (1991) argues that L2 learners, unlike L1 learners, need negative evidence to reset some parameters. In more general terms, Schwartz (1998: 148) writes:

[C]onvergence on the TL grammar is not guaranteed; this is because unlike L1 acquisition, the L2 starting point is not simply open or set to 'defaults', and so the data needed to force L2 restructuring could be either nonexistent or obscure.

² One exception is Korlai Portuguese, a creole spoken in Western India, which has predominantly SOV word order like its Indo-Aryan substrate languages, such as Marathi. However, this is a recent phenomenon, and the creole was originally SVO (Clements 1990, 1996, 2001).

If input from the lexifier language was extremely restricted in development of a pidgin or creole, then these insights from SLA theory would explain the retention of substrate word order.³ In the case of creoles, such as Sranan in Suriname (mentioned above), which have preserved aspects of basic word order from their substrate languages, we would have to assume that there was very little input from the lexifier. And this indeed was the case in Suriname: the lexifier, English, was the language of the colonial power only from 1651 to 1667, after which it was replaced by Dutch.

One theoretical perspective, however, does not accept the inevitability of initial word order transfer. This is the Processability Theory of Pienemann (1998, 2003, 2005), described in Chapter 2. According to this theory, learners must acquire the specific processing procedures of the L2 to build up the formulator for that language; the structure of the L1 formulator is not transferred to the L2. Recall also that there is a universal hierarchy of processing procedures, determined by the architecture of the formulator, starting with word/lemma access, and moving up to procedures dealing with categories, phrasal information and sentence-level (or interphrasal) information. L1 transfer is possible, but it is constrained by the processability of the given structure (Pienemann, Di Biase, Kawaguchi, and Håkansson 2005a: 132).⁴ For example, learners would need to have acquired the category procedure—i.e. be able to process lexical categories—before they can deal with the projections of the categories, and therefore canonical word order. Thus, for learners at a lower stage of the hierarchy, the word/lemma stage, word order would not be transferred. This is backed up by a study by Kawaguchi (2005) showing that Australian learners of Japanese did not transfer their English SVO order in the initial stages of acquisition, but rather started with an SOV hypothesis after the word/lemma stage.

5.2.3 Functional transfer in SLA

According to both the Minimal Trees and Structure-Building Hypothesis (Vainikka and Young-Scholten 1996a, 1996b, 2006) and Processability Theory (Pienemann 1998, 2003, 2005), functional transfer would not be expected. However, the Modulated Structure-Building Hypothesis (Hawkins 2001) allows for the transfer of some functional projections and the influence of the L1 in structure building. And functional transfer would clearly

³ This point of view has been expressed in different terms by DeGraff (1996: 723).

⁴ See also Håkansson, Pienemann, and Sayehli 2002; Pienemann, Di Biase, Kawaguchi and Håkansson 2005b.

be expected according to both the Full Transfer/Full Access Hypothesis (Schwartz and Sprouse 1996; Schwartz 1996, 1998) and the Competition Model (Bates and MacWhinney 1981, 1987; MacWhinney 1997, 2005). However, in contrast to word order transfer, evidence of functional transfer in the interlanguage of second language learners is rare. Some possible examples are as follows.

Pfaff (1992) shows that in the interlanguage of Turkish children learning German, some independent lexical items come to be used as grammatical markers—for example, *mach* + Verb, as in the following example (p. 292):

- (7) *Elefant komm die mach hauen*
[elephant come 3SG make beat]
'(the) elephant comes, he is fighting'

Pfaff first says that this provides 'some, though rather slight evidence for a possible structural transfer' from Turkish (p. 292), but then concludes (p. 293) that 'in periphrastic verbal constructions, used only by the Turkish bilinguals, there are striking parallels to Turkish structures (compound verb constructions), which does suggest that the L1 plays some role ...'. However, this is not a clear example of functional transfer.

Van de Craats, Corver, and van Hout (2000: 304) describe the use of Dutch *van*—as in *de romp van de boot* 'the hull of the boat' (p. 244)—by Turkish learners as a genitive suffix, as in *examen-van tolk* 'the exam's interpreter' (see Chapter 2). They say this is modelled on the Turkish genitive suffix *-in* (pp. 243–4). However, no other similar examples are mentioned.

Clements (2003) describes the study of a Mandarin-speaking learner of Spanish who used the adverb *ya* as a preverbal periphrastic perfect marker. Mandarin also has a perfect marker but it is a postverbal suffix. Examining the learner's TMA system as a whole, Clements concludes that while transfer from Mandarin may be a factor, it is better explained by reference to more universal hypotheses, such as the Primacy of Aspect (Andersen and Shirai 1996). In addition, as a long-term resident of Spain, the subject would probably be better described as a second language user (see below).

Furthermore, in the studies of the interlanguage of learners of French, Dutch, and Swedish mentioned in Chapters 2 and 3, there is no evidence of transfer of grammatical features of the kind found in pidgins or creoles with the same lexifier. Other creolists who have specifically looked at learners' L2 versions of the lexifier of a creole (e.g. Véronique 1994; Mather 2000, 2006) have found some similarities, but none that could be

unambiguously attributed to functional transfer from the substrate.⁵ This includes TMA marking. Thus, although it has been claimed that this kind of functional transfer is responsible for the TMA systems of expanded pidgins and creoles, there is no evidence that it occurs in the interlanguage of L2 learners. On this point, Mather (2000: 258) refers to ‘the mystery’ of TMA markers in French creoles appearing to be similar to those of the substrate languages while ‘there is very little evidence of TMA markers in any French or other European interlanguage variety’. In fact, Bardovi-Harlig (2000: 411) observes: ‘No significant L1 effect has been identified in the longitudinal studies of the acquisition of temporal expression.’

Thus, the rarity of evidence of functional transfer in the interlanguage of L2 learners would seem to argue against transfer in SLA as the prime explanation for the morphological expansion in pidgins and creoles.

5.3 Transfer in bilingual first language acquisition

As mentioned above, Bickerton (1999a: 55) says: ‘Most of the first creole generation simultaneously acquired one or more of their ancestral languages.’ This leaves open the possibility of bilingual first language acquisition. In this regard, Becker and Veenstra (2003a: 237) argue for ‘a three generational scenario of language shift’ for creolization, as suggested by other scholars such as Corne (1999) and as we have seen for Hawai‘i (Roberts 2000). In the first generation, there is untutored second language acquisition by adults (slaves or indentured plantation labourers), resulting in the Basic Variety (see Chapter 2). In the second generation, however, they say there is bilingual first language acquisition by children (the first locally born generation). The third generation are the first monolingual speakers of the creole.

One of the two first languages to be acquired by each member of the G2 is a substrate language. The other, according to Becker and Veenstra (2003a, 2003b), is not the lexifier, but rather the Basic Variety that arose in the G1. In other words, they propose that for the G2, a ‘target shift’ (Baker 1990, 1996)

⁵ In a possible exception to this statement, Mather (2000) found the postposed determiner *la* modelled on the French postposed deictic *là* (as in French creoles) used in the interlanguage of Ewe-speaking learners of French. Significantly, postposed determiners are found in Ewe. However, while this may be an example of L1 influence, it may not be the result of transfer so much as substrate reinforcement of one stage of the normal developmental sequence in the acquisition of French by speakers of languages which have postnominal deictic markers (see Zobl 1982). Of course, it may also be word order transfer.

has occurred, from the lexifier to the Basic Variety. However, as a stabilized restricted pidgin emerges from individual versions of the BV (Chapter 2), I would say that it is the restricted pidgin rather than the BV that is one of the two targets for the G2, and that later this target eventually becomes an expanded pidgin. Since the G2 is responsible for morphological expansion, and the functions of the grammatical morphemes that develop in the pidgin target appear to be derived from substrate features, the implication is that this expanded morphology may be the result of transfer to the pidgin in bilingual first language acquisition.

In the relatively new field of bilingual first language acquisition (BFLA) (for an overview, see Genesee and Nicoladis 2006), there is ample evidence of cross-linguistic transfer from one language into the other (e.g. Müller 1998; Döpke 1999, 2000; Yip and Matthews 2000; Müller and Hulk 2001; Nicoladis 2003; Paradis and Navarro 2003). Paradis and Genesee (1996: 3) say that transfer in the BFLA context ‘consists of the incorporation of a grammatical property into one language from the other’, and it is most likely to take place ‘if the child has reached a more advanced level of syntactic complexity in one language than in the other’. Such a discrepancy can occur either because a particular feature normally develops more quickly in one language than the other (i.e. in monolingual development) or because the child is more dominant in one language than the other. In the case of bilingual acquisition of a substrate language and the developing pidgin, the substrate language is intrinsically more complex in morphosyntax than the pidgin, and therefore transfer would be expected.

Also, Döpke (2000) and Hulk and Müller (2000) argue that transfer in BFLA occurs when morphosyntactic structures of the two languages frequently overlap at the surface level. For example, children acquiring both English and German simultaneously use VO order in subordinate clauses in German where the order should be OV. This is attributed to transfer from English to German that occurs because of the use of SVO order in main clauses in both languages. Similarly, Müller and Hulk (2001: 19) maintain that transfer from language B to language A occurs when a morphosyntactic construction in language A ‘allows for more than one grammatical analysis from the child’s perspective and language B contains positive evidence for one of those possible analyses’. In morphological expansion in a pidgin, there is generally some semantic and superficial syntactic overlap between the form from the lexifier that has become a lexical item in the pidgin, and the corresponding grammatical morpheme in the substrate language. For example, there is a clear semantic connection between the English expression

belong to and the possessive markers of the Oceanic substrate languages for Melanesian Pidgin, and both occur between the possessed NP and the possessor NP. It is not surprising then that the grammatical function of the possessive markers of the Oceanic substrate languages could have been transferred to the English lexical item, resulting in the possessive marker *bilong* (or *blong*) in Melanesian Pidgin.

While there are many reports of word order transfer (e.g. Döpke 2000) and transfer of syntactic properties such as object omission (Müller and Hulk 2001), reports of functional transfer are rare in BFLA, as they are in SLA. An example, however, is found in a study of infinitival complement clauses in French-German BFLA described by Müller (2006). French introduces such clauses with the preposition *pour* ‘for’, as in:

- (8) *Jean est allé à la fête pour danser une valse.*
 ‘John went to the party to dance a waltz.’ (Müller 2006: 149)

In Standard German, subordinate clauses are verb final and infinitival clauses are introduced with *um* ‘around, at, for’ preceding the object and *zu* ‘to’ preceding the verb:

- (9) *Hans ist auf die Party gegangen um [einem Walser]_{Obj} zu*
[tanzen]_{Vinfinitive}.
 [lit. Hans has to the party gone for a waltz to dance]
 (Müller 2006: 150)

Müller reports one child’s use of the German preposition *für* ‘for’ (or the innovative variants *fü*, *fum* or *fo*) to introduce complement clauses, apparently modelled on the use of *pour* ‘for’ in French—for example:

- (10) *das für k[j]emmen deine haare (=klemmen)*
 this for (to) press your hair (Müller 2006: 151)

As Müller points out (p. 155), this is similar to the use of English *fo* in Hawai’i Creole (described in Section 4.4.2.2), which is modelled on *para* ‘for’ in Portuguese, a Romance language closely related to French.

Another example of functional transfer in BFLA is found in a study of children’s bilingual acquisition of English and Cantonese. Matthews and Yip (2003) report that prenominal relative clauses emerge in the English of one of the children (Timmy) at age 2 years 7 months—for example (p. 52):

- (11) a. Where’s you buy that one the motorbike?
 [‘Where’s the motorbike that you bought?’]

- b. I want Pet-Pet buy that one videotape.
 ['I want the videotape that Pet-Pet bought.']

The authors clearly demonstrate that these are relative clauses, and attribute them to transfer from Cantonese, which has prenominal relative clauses of a similar structure as in this example (Matthews and Yip 2003: 53):

- (12) *Lei5 maai5 go2 beng2 daai2 hai6 Jing1man2 ge3.*
 you buy that CLF tape is English PRT
 'The tape [that] you bought is English.'

Matthews and Yip note (p. 53) that this example is typical of Cantonese prenominal relative clauses in having a classifier *beng2* at the end, preceding the head noun. They conclude that in the child's English *one* serves as a 'generic classifier', modelled on the grammatical function and syntactic position of *beng2*. This appears to be a good example of functional transfer as I am defining it here.

Significantly, prenominal relative clauses are found in Hawai'i Creole, but with *kain* (*kine*) rather than *one* acting as the generic classifier before the head noun (examples from Kent Sakoda):

- (13) a. *Das wan ai gatta tel mai frenz about kain muvi.*
 (*Dass one I gotta tell my friends about kain movie.*)
 'That's a movie (that) I've got to tell my friends about.'
 b. *De wen bai enikain no nid kain stafs.*
 (*Dey wen buy anykine no need kain stuffs.*)
 'They bought many kinds of things (that) they don't need.'

It could very well be that this construction in Hawai'i Creole originated as the result of transfer in the bilingual acquisition of Cantonese, one of the most important substrate languages, and the developing Hawai'i Pidgin English.

These two examples illustrate that functional transfer does occur in BFLA, but again, the rarity of such examples argues against BFLA being the most important source of morphological expansion.

5.4 Transfer in second language use

Another context in pidgin development in which transfer could occur is in second language use. The overall field of SLA can be divided into two main

areas of research: second language acquisition and second language use—a distinction emphasized by many scholars (e.g. Ellis 1994: 13; Kasper 1997: 310). In pointing out the distinction, Gass (1998: 84) says that the two areas actually come under a broader heading of ‘second language studies’ (SLS).⁶ L2 acquisition as opposed to L2 use is concerned with the gradual attainment of linguistic competence in the L2—in other words, with the learning of the L2 grammar. L2 use as opposed to L2 acquisition examines how learners utilize their existing L2 knowledge, and other knowledge as well, when trying to communicate in the language.

Some researchers in the wider field of SLA think of transfer from the L1 primarily as a strategy of L2 use rather than acquisition. For example, Kellerman (1995: 130) notes that ‘what can be seen ... is not so much the role of the first language in second language development, but its role in second language use’. Meisel (1983*b*: 44) refers to transfer as ‘a strategy of second language use’. To other researchers, however, the notion of transfer is relevant to both L2 acquisition and L2 use. For example, Færch and Kasper (1987: 112) define transfer as ‘a psycholinguistic procedure by means of which L2 learners activate their L1/Lⁿ knowledge in developing or using their interlanguage’. In the study of L2 acquisition, there are two ways of conceiving of this L1 knowledge. First, it can be thought of as the starting point or the initial state, as in the Full Transfer/Full Access hypothesis. In this view, the L1 grammar is gradually restructured to become more like the L2 grammar. Alternatively, the L1 can be thought of as a resource that can be called on (or activated) as a basis for establishing hypotheses about L2 rules and items (Færch and Kasper 1987: 114).

In the study of L2 use, however, L1 knowledge is considered only as a resource in communication, used unconsciously to compensate for insufficient L2 knowledge. Transfer is thought to occur as learners (or former learners) fall back on their L1 knowledge when their knowledge of the L2 is inadequate to express what they want to say or to interpret what is being said to them. Sharwood Smith (1986: 15) says that cross-linguistic influence (i.e. transfer) typically occurs in two contexts: (1) ‘overload’ situations or ‘moments of stress’ when the existing L2 system cannot cope with immediate communicative demands, and (2) ‘through a desire to express messages of greater complexity than the developing control mechanisms can cope with’.

⁶ On the other hand, some scholars, such as Firth and Wagner (1997, 1998), question the separation of acquisition and use in the field of SLA (or SLS), and in their work (e.g. Firth 1996; Wagner 1996) and that of Rampton (1995), it is clear that SLA research is thought to encompass second language use as well as acquisition.

Jarvis and Odlin (2000: 537) also describe transfer in second language use as a strategy for coping with the ‘challenges of using or understanding a second language’. According to these views, transfer is considered to be a communication strategy, or a means for overcoming communication problems.

Various communication strategies have been described in the SLA literature (e.g. Tarone 1981; Poulisse 1996). One of these is ‘transfer from the native language’ (Tarone, Cohen, and Dumas 1983: 5, 11). Blum-Kulka and Levenston (1983: 132) characterize this strategy as ‘attributing to a lexical item of the second language all the functions—referential and conceptual meaning, connotation, collocability, register restriction—of its assumed first-language equivalent’. This, of course, is similar to what I have been calling functional transfer. It appears then that this kind of transfer is common in L2 use, whereas word order transfer is more common in L2 acquisition.⁷

Another important difference between acquisition and use concerns the relationship between the L1 and the target language. In acquisition, the goal is obviously to acquire the grammar of the target language (the L2). Therefore in transfer in L2 acquisition, L1 structures may be retained or utilized in an attempt to approximate the perceived norms of the L2. They are quickly abandoned when they do not match input from the L2. In use, however, the goal is to communicate in the L2. In transfer in L2 use, L1 structures are called upon to compensate for a perceived shortage of the linguistic resources needed for successful communication. If they lead to successful communication, they do not have to be abandoned. Therefore, in L2 use, at least in my conception of it here, there is not really a target language as such because the goal is not grammatical acquisition but communication.

In the context of morphological expansion of a pidgin, which language is the L2? The answer is the developing pidgin, not the lexifier. With regard to bilingual acquisition in the P/C context, I referred to Becker and Veenstra’s (2003a, 2003b) idea that target shift occurs among the G2 of plantation labourers—that the target for the G1 is the lexifier but the target for the G2 is the variety that emerged as the result of SLA among the G1—the BV or, in my terms, a restricted pidgin based on it. Thus, it can be assumed that the G2 use the pidgin as their L2, and from what I have just said about L2 use, they would not be targeting the grammar of the lexifier. However, if the lexifier continues to be available in the contact environment, its lexicon can

⁷ This might explain the inconsistent research findings regarding the relationship between L1 influence and L2 proficiency (Jarvis 2000: 247–8).

still be used as a lexical source for the expanding pidgin, as it was in the development of the restricted pidgin.

This is not as contradictory as it may seem if one focusses on lexical forms and not grammatical rules. People generally identify different languages according to vocabulary rather than grammar, and by definition a pidgin shares the majority of its lexical forms with those of the lexifier. Thus, even speakers of an expanded pidgin or creole may consider that they are speaking a version of the lexifier. For example, speakers of Melanesian Pidgin in New Guinea once thought they were speaking ‘the language of the whites’ (Mühlhäusler 1979: 118), which explains its earlier name, *tok waitman*. Also, Shnukal (1988: 6), referring to speakers of Torres Strait Creole in the past, mentions ‘the widespread belief that it was English’. The names for many creoles, as used by their speakers, also demonstrate a belief that these languages are non-standard versions of the lexifier—for example: ‘Broken’ (from broken English) for Torres Strait Creole; ‘Pidgin’ or ‘Pidgin English’ for Hawai‘i Creole, and ‘Patwa’ for Jamaican Creole and other Caribbean creoles.

Even if the lexifier is considered to be a separate language, it can serve as a source of lexical items through linguistic borrowing. Lexical borrowing, as opposed to structural borrowing, requires only low intensity contact, and no bilingualism. Furthermore, the lexifier would be a likely source of lexical items because of its position of power and overt prestige in most situations where the expansion of a pidgin occurs.

To sum up, here we are concerned with how the G2 uses the pidgin for communication. The assumption is that at times communication problems occur because of a shortage of linguistic resources. To compensate, speakers employ one of the communication strategies characteristic of L2 use—using a lexical form—either from the pidgin or from the lexifier—with the grammatical function of a corresponding morpheme in their L1—i.e. functional transfer.

But are there actual examples of this kind of functional transfer in studies of second language use? To answer this question, I examine data from three areas of research: (1) SLA; (2) indigenized and language shift varieties; and (3) bilingualism.

5.4.1 SLA studies

In a study in the field of SLA, Helms-Park (2003) shows that causative serial verb constructions occur in the English of Vietnamese-speaking

learners, but not in the English of Hindi-Urdu-speaking learners. Since Vietnamese has such serial verb constructions but Hindi-Urdu does not, their occurrence in the English spoken by Vietnamese speakers is attributed to language transfer. The author considers this transfer to be the result of a communication strategy, or

a compensatory L1-based strategy used by learners to manage a situation in which they are compelled to produce TL constructions before adequate information about the grammatical behavior of the targeted verbs has been noted in the input... (Helms-Park 2003: 230)

This is the result of the ‘communication stress’ caused by ‘the elicitation of data through a tightly constrained test’ (p. 230) in the study. (These findings are significant because similar serial verb constructions occur in creoles, such as Haitian Creole and Saramaccan, that have serializing substrate languages.)

Andersen (1980) presents several examples of functional transfer from Spanish-speaking ‘learners/users of English’. Interestingly, these are the same as some of the features found in Hawai‘i Creole thought to have been modelled on features from Portuguese (Chapter 4), and Spanish and Portuguese share these particular features. Some examples are as follows:

(a) *for* as a complementizer modelled on Spanish *para*:

(14) *Jennifer, put your clothes on for decorate the Christmas tree.* (p. 277)

(b) *have* as an existential marker modelled on Spanish *hay, había*:

(15) *And then have another one in back they used to rent, too.*

‘And there was another one...’ (p. 282)

Andersen (1980) also gives similar examples from Spanish-speaking users of English studied by Schumann:

(16) *He need to self [i.e. sell] one house for pay this tax?*

(Schumann 1978a: 154)

(17) *In Massachusetts have a man is bad...*

‘In Massachusetts, there is a man who is bad...’

(Schumann 1980: 122)

5.4.2 Indigenized and language shift varieties

Since studies that focus specifically on L2 language use are rare, more evidence for functional transfer in L2 use comes indirectly from features of

indigenized varieties of English and language shift varieties, which emerged from individuals' use of English as an L2.

First, in Singapore English, *already* is used as a completive or perfect aspect marker, as in the following examples:

- (18) a. *I only went there once or twice already.* (Platt and Weber 1980: 66)
 b. *I work about four months already.* (Bao 1995: 182)

These and other aspectual categories in Singapore English have striking parallels with the Sinitic substrate (Ansaldo 2004: 136). For example, Platt and Weber (1980: 66) show that the use of *already* is analogous to the use of the particle *liaú* in Hokkien:

- (19) *Gún tháu'ke tíg chhù liaú.*
 our boss return home already [PFT]
 'Our boss has returned home.' (Platt and Weber 1980: 66)

Bao (1995: 185) does the same with the particle *le* in Mandarin:

- (20) *ta qu niuyue le.*
 3SG go New York LE [PFT]
 'He went to New York.' (Bao 1995: 185)

In Fiji English, the word *full* is used as a preverbal marker indicating an extreme or excess quality or action (Siegel 1989):

- (21) a. *The boy just full shouted.*
 'The boy shouted really loudly.'
 b. *The fella full sleeping over there.*
 'The guy's sound asleep over there.'

This closely parallels the Fijian use of *rui* as a preverbal marker with the same function, as in this example (from Schütz 1985: 272):

- (22) *au sã rui loma-ni koya vaka-levu.*
 I ASP EXT care.for-TR her MANNER-big
 'I care for her very much.'

Another source of indirect evidence is substratum influence in language shift varieties, which are thought to be a consequence of second language use—e.g. South African Indian English (Mesthrie 1992) and Irish English (Winford 2003: 240–1). A well known example is the recent past construction using *after* in Irish English (Harris 1984: 319):

- (23) Irish English: *She is after selling the boat.*
 ‘She has (just) sold the boat.’
Irish: *Tá sí tréis an bád a dhíol.*
 be.NONPAST she after the boat selling

5.4.3 Bilingualism

Since most of the G2 were bilingual in one of the substrate languages and the developing pidgin, another potential source of evidence is studies of language change resulting from bilingualism, such as those mentioned by Weinreich (1970 [1953]). Functional transfer is close to what Weinreich (1970 [1953]: 39) refers to as ‘replica functions for equivalent morphemes’, a type of what he calls grammatical interference that occurs among bilinguals: ‘If the bilingual identifies a morpheme or grammatical category of language *A* with one in language *B*, he may apply the *B* form in grammatical functions which he derives from the system of *A*.’ For this to occur, as in transfer, there must be some formal and/or functional similarity between the morphemes in the two languages. Weinreich gives many examples from European and Asian languages that could be interpreted as the results of functional transfer—for example, the future tense in Swiss Romansh formed with *vegnir* ‘come’ modelled on Swiss German, and ‘the new Breton perfect with *am euz* based on the French indefinite past with *avoir*’ (p. 41).

Other examples are found in South America. Aikhenvald (2002) gives many instances of language change in northwestern Amazonia that most probably originated from functional transfer among bilinguals. For example, in Tariana (an Arawak language), a nominal modifier *-sini* ‘also’ became a plural marker and the verb *-sita* ‘finish’ became a perfect aspect marker, both based on models in the East Tucanoan languages (pp. 98–9, 139–40). Aikhenvald (2002: 315–16) also describes how the Portuguese spoken by indigenous people in this region includes four lexical expressions of evidentiality—for example, *eu vi* ‘I saw’ and *diz que* ‘it is said’. These reflect the obligatory grammatical marking of evidentiality in both Tariana and East Tucanoan languages.

Similarly, Klee and Ocampo (1995) describe how the Spanish of Quechua-Spanish bilinguals in Peru expresses evidentiality (also an obligatory category in Quechua) with forms from Spanish. For example, the Spanish past perfect is used to indicate that the speaker has not witnessed or was not aware of the action or state described by the verb (p. 62). Another

method is to use the Spanish word *dice* ‘it is said’ with the present perfect or preterite (p. 63). (See also Escobar 1997.) Sánchez (2003: 99–100) shows that in the Quechua of Quechua-Spanish bilinguals (also in Peru), pronominal demonstrative adjectives such as *kay* ‘this’ and *huk/suk* ‘one’ have developed into indefinite determiners, presumably on the model of Spanish. In later work, Sánchez (2006) notes the similarities between what she calls ‘functional convergence’ in bilingual grammars and morphological expansion in the development of creole grammars. She says (p. 277):

Their common characteristic is that they involve the mapping of functional features from one language onto morphological units not previously associated with those features in another language.

5.4.4 Summary

In contrast to studies of second language acquisition and bilingual first language acquisition, studies of second language use and its results (including bilingualism) provide many examples of functional transfer. Therefore, transfer in L2 use, as opposed to acquisition, appears to be an important source of morphological expansion. This point of view, then, sees functional transfer not as reflecting retention of the L1, but rather as using the L1 for compensation. In other words, with regard to functional transfer, the L1 is not the initial state in learning the L2, but rather a resource that can be called upon when necessary when using the L2.

5.5 Motivation for transfer and connections with creole development

Since I have concluded that functional transfer is usually not the result of L2 acquisition or of the L1 being the initial state, but rather a compensatory strategy of L2 use, then it is necessary to provide some motivation for the employment of this strategy. With regard to pidgin and creole development, it is increased L2 use in wider contexts that provides the motivation or rationale for the occurrence of functional transfer, and therefore morphological expansion. The key is in Sharwood Smith’s (1986: 15) characterization of transfer, quoted above, where he says that it occurs when the existing L2 system cannot cope with immediate communicative demands, and when there is a need to express messages of greater complexity than the developing system can cope with. In the case of a

restricted pidgin that is being used in wider contexts, it is not just the learners' knowledge of the language that cannot cope, but the language itself. Thus, the prime motivation for morphological expansion in a pidgin is to meet the needs of the language when it starts being used for widening functions.

Similarly, Andersen (1983a: 30) observes that one of the 'sources of expansion and complication' in pidgins and creoles is the 'need for a language of wider communication'. While a 'pidginized interlanguage' may be adequate for limited purposes, if it has to 'serve all the functions of language', then it 'must somehow develop the linguistic machinery to do so'. Another source of expansion that Andersen (1983a: 30) refers to is 'immediate pressure to communicate without acquired competence'—that is, 'the need to communicate some meaning in a second language when they [second language users] do not have the linguistic means to do so'. He writes: 'When language learners/users are under such a pressure to communicate, they must often extend the limited linguistic devices they control to fill in the gaps in their competence.' According to Andersen (1983a: 31) one of the ways of doing so is by what I have been calling functional transfer, which he describes as follows:

In the absence of clear models in the input for a linguistic form needed to consistently convey a meaning the learner wants to communicate, the learner can (probably far below the level of consciousness) use a form (or forms) available in the input to convey the meaning and/or fulfill the function of an equivalent form in his native language... with the distribution that form has in his native language.

In the same vein, Heine and Kuteva (2005: 124) observe that one of the effects of functional transfer, which they call contact-induced grammaticalization (see below), is 'gap-filling', in which a new category develops where there was previously no equivalent category. Winford (2003: 96–7) considers the absence of a category in a language to be one 'functional constraint' that would encourage structural borrowing. He states: 'The existence of gaps in the morphemic inventory of a recipient language facilitates the importation of new morphemes and functional categories from a source language.' According to Heine and Kuteva (2005: 125), gap-filling is 'particularly common in cases where there is a lingua franca, sometimes pidginized, that is widely used as an L2 (second language)'.

If we conceive of functional transfer being motivated in this way, then we can answer a question that has led to support for the bioprogram hypothesis

rather than substrate explanations: Why do some creoles have more substrate features than their pidgin predecessors even though, unlike pidgin speakers, creole speakers (who are by definition normally monolingual in the creole) did not know the substrate languages? For example, Sankoff (1994) shows that children who speak Tok Pisin as their first language use the preverbal particle *i* with serial verbs in a pattern that is very similar to that of the Austronesian substrate languages. However, earlier generations of speakers of Tok Pisin, who were bilingual in the substrate languages, did not use this similar pattern. Sankoff believes that the substrate languages are the source of the pattern used by the children and asks (p. 312): ‘Why should such a development be realized by speakers who are clearly more distant from the Austronesian substrate than their grandparents or great-grandparents were?’

Similarly, with regard to Hawai‘i Creole, Roberts (1998, 2000) reports that three key features mentioned in Chapter 4—the nonpunctual aspect marker *stei* (*ste, stay*), combinations of TMA markers (*wen, stei, gon*), and *fo* introducing clausal complements—first appear in published texts in the early 1920s and are thus attributed to the speech of the locally born children who were monolingual speakers of the creole. This led to the conclusion that these features were innovations of the children. However, as we have seen in Chapter 4, these features have striking similarities with one of the substrate languages, Portuguese. How can this be accounted for?

The explanation is that these developments were innovations of the G2—the parents of the first monolingual creole speakers. As we have seen, in order to compensate for shortcomings in their L2, speakers transfer features from their L1 as a communication strategy in L2 use. This includes speakers of a pidgin who feel the need to expand the grammar of the language to meet the requirements of its widening functions. Of course, the ultimate extension of use of a pidgin L2 occurs when speakers shift to it as their primary language, which they then pass on to their children. Thus, Sankoff (1994: 314) concludes that ‘maximal influence is exerted from a substrate not when initial contact occurs, but just at the point of language shift’. So in the case of Tok Pisin, when the need arose (e.g. in using the L2, Tok Pisin, for new functions), its speakers fell back on their L1s—the Austronesian substrate languages—to provide absent grammatical structures, such as a particle with serial verbs.

With regard to Hawai‘i, we have seen that the first generation of locally born children of the immigrant labourers (G2) were generally bilingual in their parents’ language and Hawai‘i Pidgin English (HPE), and that it was

largely the second generation of locally born children (G3), rather than the first (G2), who became the original monolingual speakers of Hawai'i Creole. This occurred during the period from 1905 to the early 1920s, when the dominant ethnic group in terms of both prestige and numbers of the locally born second generation, were the Portuguese. The Portuguese were also the first immigrant group to shift from their ancestral language. Thus, it was adult members of the first locally born generation, bilingual in Portuguese, who adopted the existing pidgin as their primary language and passed it on to their children who acquired it as their first language. Therefore, it is likely that the grammatical innovations referred to above, such as nonpunctual *stei*, were the result of functional transfer by these adults, not the inventions of the children.

When these innovations first occurred, they were the result of individual communication strategies and not yet incorporated into the grammar of HPE. This may explain why they were not reported in published sources. Nevertheless, these innovations, and others, were added to the pool of variants which were used for communication. Other features in the pool were those that had already been adopted by HPE as it expanded. Some of these were the result of functional transfer—for example, the use of *stei* (*stay*) as a locative copula—while others were acquired from English.

When the G3 emerged—i.e. children of parents who had shifted to HPE as their primary language—the primary linguistic data (PLD) for their first language acquisition was comprised of this pool of variants. An accelerated process of levelling occurred at this time as the children acquired some of the variants but not others (see Siegel 1997a: 132). Thus, some of the newly innovated features were retained in the creole, along with other features of HPE, including some resulting from transfer and others derived from English, such as the *Ving* progressive and the overgeneralized reflexive *demself* (Section 4.3.1). At the same time, other features widely reported in the expanded HPE were levelled out and not retained—for example, such as the use of *all same* 'same as, like' and *savvy* 'know'. The retained features were also rapidly regularized by the G3 children, and thus occurred more consistently in their speech. As a result, the features were more noticeable to observers and were subsequently recorded in published texts.

This scenario would support the statement by DeGraff (1999: 488) following Slobin (1977) that 'adults are the *innovators* whereas children are the *regulators*' [*italics in the original*]. Referring to Sankoff (1994) and Newport (1999), DeGraff (1999: 507) concludes:

[I]n L1A [first language acquisition] children amplify and restructure certain (substrate-based) innovations introduced through L2A [second language acquisition, or in this case, use] by adults, and they incorporate (previously less-than-stable) innovations into permanent and stable parts of their grammars.

A recent experimental study by Hudson Kam and Newport (2005) backs up this conclusion. They investigated ‘what learners acquire when their input contains inconsistent grammatical morphemes, such as those present in pidgins and incipient creoles’ (p. 151). To do so, they carried out experiments teaching an artificial language with unpredictable variation to both adults and children (5 to 7 years old). Hudson Kam and Newport summarize their findings as follows (p. 188):

These experiments have shown that, given a particular kind of variation in input very likely to have been present in many language contact situations, adult learners do not typically regularize it. Instead they learn and reproduce this variability. In contrast, children do not learn such variability veridically; they impose systematicity on the language as they learn it. These findings suggest that adults may not form creoles alone but that children may be important contributors to the process of creole genesis. Children may serve to smooth out the erratic bumps left in pidgins by the adults who create them.

Another source of motivation for creole development according to Andersen (1983a: 31) is ‘in-group language use’, and the need to be ‘rhetorically expressive’, which ‘requires considerable grammatical complexity’. Thus, morphological expansion is ‘motivated by this need to be expressive in in-group language use, both to communicate finer shades of meaning and to express in-group solidarity’. However, the in-group that speaks the creole is a new one, distinct from both the dominant community that speaks the lexifier, and the immigrant community that spoke the preceding pidgin. Therefore, the expansion of a pidgin into creole is closely associated with the construction of a new identity, as emphasized by LePage and Tabouret Keller (1985) in their book *Acts of Identity*.

For example, Roberts (2000, 2004) argues that an important factor in the development of Hawai‘i Creole was the establishment of a new local identity. Many in the first locally born generation (G2) had already begun to shun their ethnic identities by changing the way they dressed and shifting from their ancestral language to the local language, HPE. The children of G3, who were the first creole speakers, projected their distinct identity by avoiding certain features of HPE, such as the use of *me* in subject position, as in *me go look stars* (Roberts 2004: 334), as well as the features mentioned

above as being levelled out, such as *all same* and *savvy*. This generation also wished to forge an identity distinct from that of the *haole* ‘white’ speakers of the lexifier. Thus, speaking differently from the whites had its own covert prestige, and locals talking like whites were ridiculed, as illustrated in the following quotation from the late 1920s (Roberts 2004: 342):

When I was in Central Grammar I know we were taught to speak correct English both in and outside of school but when I returned to Maui, my old friends made fun of my English which embarrassed me. They said I was ‘stuck up’ and ‘you think you Haole’ so I had to use pigeon English ...

Roberts (2004: 342) mentions other taunts aimed at those speaking standard English, such as ‘high-brow’ and ‘Black haoles’.

Closely connected with identity construction is the idea of creativity. For example, Baker (2000) talks about creoles as being created as a ‘medium for community solidarity’. In my view, creativity in creole genesis is seen in the kinds of morphological expansion discussed in this chapter. This has been attributed to language transfer as a communication strategy in expanded second language use. But in addition, transfer of L1 features is one way of indexing identity and differentiating speakers from another group. For example, Færch and Kasper (1987: 124) point out:

In certain types of IL [interlanguage] communication, ‘low-prestige language varieties’ may be interpreted as IL varieties with high transfer load. The clearest case for this phenomenon of transfer is ethnic minority groups marking their group-membership by preserving features of the L1 when using the dominant L2.

Thus, transfer in second language use is seen as a source of many of the features which are used in the construction of a new, non-native speaker identity—features which give a non-native variety its covert prestige.

5.6 Discussion of other views

The view presented so far is that morphological expansion occurs when a pidgin comes to be used for wider functions, and this leads to substrate influence in creoles—primarily forms from the lexifier with properties of grammatical morphemes from the substrate languages. The mental process responsible for this influence is a particular type of transfer, which I call functional transfer. This kind of transfer occurs mainly as a strategy in the use of a second language (here the pidgin) to compensate for perceived inadequate resources in the language. It is generally not the result of the L1

grammar being retained as the initial state for L2 acquisition or being used as a source of hypotheses in targeted L2 learning. I will refer to this as the ‘Compensatory Transfer’ view.

Unsurprisingly, there are many alternative views to the notion that language transfer in second language use is central to the morphological expansion of pidgins. Here I return to Bickerton’s views, and then discuss the relexification and contact-induced grammaticalization approaches. (The superstratist view is covered in Chapter 7.)

5.6.1 Language Bioprogram Hypothesis

Since Bickerton (1999*a*) now believes that the first locally born generation in Hawai‘i (G2) did learn their parents’ languages, he has accepted that transfer—more specifically, transfer of parameter settings—could have been possible (p. 55):

Most of the first creole generation acquired one or more of their ancestral languages, so that in principle, parameters could have been set according to those languages and the settings transferred to the nascent creole...

But he concludes nevertheless (p. 55):

However, no such explanation will account for the facts. The parameter settings of English, Hawaiian, Portuguese, Chinese, and Japanese differ radically from one another. If children had transferred settings from their ancestral languages, then we would have found variant versions of the nascent creole—Hawaiian-influenced, Chinese-influenced, and so on. In fact, what strikes one most forcibly about HCE is its homogeneity...

The only parameter Bickerton discusses, however, is the headedness parameter. In earlier work (e.g. 1981: 11-12), he observes that G1 immigrant pidgin speakers of Japanese origin used SOV ordering, reflecting Japanese, while those of Filipino origin used VS ordering, reflecting Filipino languages; in contrast, Hawai‘i Creole speakers of all language backgrounds use SVO. However, as described in Chapter 4 and again in this chapter, the most significant substrate languages when the creole emerged were Portuguese and Cantonese, which, along with the lexifier language English, are SVO.

Furthermore, as also described already, it was not the rudimentary pidgin spoken by the G1 that provided the input for the first monolingual creole-speaking generation, but rather the more developed pidgin, HPE, spoken by the G2, which expanded as a result of widespread second language use. This is what Bickerton refers to above as ‘the nascent creole’. Roberts (2005: 167)

reports that by the late nineteenth century, ‘the HPE spoken by Hawaiians, Chinese and Portuguese has strict SVO order’.

Bickerton was correct, however, in that there were differences in the ways HPE was spoken by the various ethnic groups (Roberts 2005: 174). With regard to the homogeneity in Hawai‘i Creole, he says (1999a: 55) that it ‘is not the recent result of some dialect-leveling process but extends back to the very formation of the creole’. However, as shown in Section 5.5, homogeneity did occur at ‘the very formation of the creole’, but it was the result of a process of rapid levelling and regularization of the preceding pidgin by the children of the G3.

5.6.2 Relexification

The Relexification Hypothesis of Lefebvre (e.g. 1986, 1996, 1997, 1998, 2004) and her associates is an alternative explanation for substrate influence in creoles. The aim of the hypothesis is to describe the cognitive processes that play a role in pidgin and creole genesis. The main process is relexification, defined by Lefebvre (1998: 16) as ‘a mental process that builds new lexical entries by copying the lexical entries of an already established lexicon and replacing their phonological representations with representations derived from another language’. Thus this process has two parts, copying and what is referred to as ‘relabelling’. In creole genesis, speakers of a substrate language (L1) take a lexical entry from their language (for example, a verb with all its semantic and syntactic properties) and replace its phonological representation with that of a semantically related item from the lexifier, while maintaining the meaning and grammatical behaviour of the original L1 item.

According to the hypothesis, two other processes involved in creole genesis are ‘fed by the output of relexification’ (Lefebvre 1998: 9). One is ‘reanalysis’, defined as ‘a mental process whereby a particular form which signals one lexical entry becomes the signal of another lexical entry’ (Lefebvre 2004: 26). The other is ‘dialect levelling’, based on the notion of levelling as described in this book (see Lefebvre 2004: 27–8). While relexification and reanalysis are individual psycholinguistic processes, which may lead to different individual outcomes, dialect levelling is a social process, which results in only some of the individual outcomes ending up in the creole (Lefebvre 1998: 47).

The Relexification Hypothesis takes the view that the lexicon includes both lexical category items and functional category items (see Chapter 2),

and therefore the term ‘lexical entry’ can also refer to entries with purely grammatical functions (Lefebvre 1998: 9). It is assumed that all lexical entries, including functional ones, are copied in relexification, but that only those that have some semantic content are relabelled. Those that have no semantic content are assigned a null form at relabelling (Lefebvre 1998: 37). A null form is also assigned when an appropriate form of the lexifier cannot be found to relabel a copied lexical entry (p. 44).

Since functional lexical entries can be relexified, the process provides an explanation for the development of grammatical morphology in creoles with functions similar to those of corresponding morphemes in the substrate languages. An example is the anterior marker in Haitian Creole, as discussed by Lefebvre (1998: 116–18). Fongbe, one of the substrate languages, has a preverbal marker *kò*, which indicates either past tense or pluperfect (past before past), depending on the intrinsic aspectual class of the verb. With dynamic verbs, it indicates pluperfect—for example:

- (24) *Mari kò qà wǎ.*
 Mary ANT prepare dough
 ‘Mary has prepared dough.’ (Lefebvre 1998: 117)

With resultative or stative verbs, it indicates either simple past or pluperfect, depending on the context—for example:

- (25) *Mari kò tùn Jan.*
 Mary ANT know John
 ‘Mary knew John.’ or ‘Mary had known John.’ (Lefebvre 1998: 117)

According to the Relexification Hypothesis, speakers of Fongbe in Haiti copied this lexical entry and replaced its phonological form *kò* with the French form *été*, the past participle of the auxiliary *être* ‘to be’. This has some semantic similarity to *kò* in that it is used to indicate pluperfect with non-dynamic predicates—for example:

- (26) *Marie avait été malade.*
 ‘Mary has been sick.’ (Lefebvre 1998: 117)

This form *été* became the anterior marker *te* in Haitian Creole, which has the same semantic and syntactic properties as *kò* in Fongbe—for example:

- (27) a. *Lè m’ rive, Mari te prepare pat.*
 when 1SG arrived Mary ANT prepare dough
 ‘When I arrived, Mary had prepared dough.’

b. *Mari te kònnèn Jan.*

Mary ANT know John

‘Mary knew John.’ or ‘Mary had known John.’

(Lefebvre 1998: 116)

Using explicit and rigorous methodology, Lefebvre (1998, and in earlier work) tests the Relexification Hypothesis, concentrating on comparisons between Haitian Creole and its substrate languages, especially Fongbe. These comparisons provide substantial evidence of relexification, as she defines it, in many areas of grammatical morphology in addition to TMA markers, including definite determiners, plural markers, personal pronouns, possessives, reflexives, and complementizers.

As indicated in Section 5.2.1, the process of relexification has been closely associated with transfer in second language acquisition. Lumsden (1999: 226) says that relexification ‘plays a significant role in second language acquisition in general’. Lefebvre (1998: 10) states that ‘the process of relexification is used by speakers of the substratum languages as the main tool for acquiring a second language, the superstratum language’. The hypothesis also assumes that relexification is a process that occurs in ‘ordinary cases’ of targeted second language acquisition (Lefebvre 1998: 34). As evidence, Lefebvre (1998: 34–5) discusses French reflexive verbs, and the fact that English-speaking learners of French leave out the reflexive pronouns in French whereas French-speaking learners of English incorrectly use reflexive pronouns with corresponding English verbs.

In recent literature, the Relexification Hypothesis of creole genesis is equated to the Full Transfer/Full Access hypothesis (FT/FA) of second language acquisition, discussed in Sections 5.2.3 and 5.2.4. For example, Lefebvre, White, and Jourdan (2006: 7) write: ‘Both relexification theory and FT/FA posit transfer, such that the L1 effectively *is* the interlanguage grammar or *is* the creole grammar’ (italics in original). In other words, the L1 grammar is thought to be the initial state for creole genesis as it is for L2 acquisition. Sprouse (2006: 174) notes the correspondence between all the abstract properties of the L1 that according to the FT/FA initially transfer to the L2 grammar, and all the lexical features (semantic and syntactic properties) of the L1 that according to the Relexification Hypothesis transfer to the creole grammar. He says that the difference between typical L2 acquisition and creole genesis ‘lies not in distinct underlying mechanisms, but in the quality and quantity of the input available for error-driving hypothesis revision (learning)’ (p. 175).

Schwartz (2006) concurs with Sprouse about the convergences between the relexification and FT/FA views, but emphasizes that relexification is ‘a subtype of the more general construct of transfer’ (p. 199). She notes that the Relexification Hypothesis focusses on ‘lexical items and their grammatical consequences’ (p. 199), and that while it may be able to explain some syntactic phenomena in both L2 and creole grammars, it cannot explain others, such as verb-second (V2) word order. This is a system-wide property of languages such as German in which a verb is always the second constituent of a declarative main clause. As Schwartz points out (2006: 200), since the feature [+V2] has no specific phonological shape, it ‘by definition cannot be relexified’.

In light of the discussion earlier in this chapter (Section 5.2.3), a major problem with the Relexification Hypothesis (and for the FT/FA hypothesis if it includes relexification as a subtype of full transfer) is that there is actually little if any evidence of relexification (or functional transfer) in early SLA, and thus no reason to accept that it is ‘a tool for acquiring a second language’ (Lefebvre 1998: 10). While the cases involving French reflexive verbs that Lefebvre (1998: 34) gives as evidence could possibly be a result of relexification (as opposed to simplification or direct translation), they are not the kind of relexification (or functional transfer) that we have been focussing on—e.g. the kind involved in origins of creole TMA markers, or the other creole features used to support the Relexification Hypothesis, such as plural markers, possessives, reflexives, and complementizers. As Kouwenberg (2006: 213) remarks: ‘There is simply no documented interlanguage stage that resembles a creole language.’ The fact that relexification is not widely documented in early interlanguage casts doubt on its being a subtype of the full transfer that, according to the FT/FA hypothesis, makes the entirety of the L1 grammar the initial state for SLA. (In fact, the lack of evidence of functional transfer in general in early interlanguage may controvert the notion of ‘full transfer’, and indicate that only some abstract grammatical properties, such as word order, are transferred in the initial state.)

Another serious problem with the Relexification Hypothesis as an explanation for substrate influence is that it does not sufficiently account for the data. According to my understanding of relexification, all the semantic and syntactic properties of an L1 feature would be replicated in the L2 in the copying of the L1 lexical entry (Lefebvre 1998: 16-17). But often the L2 feature has only a subset of the properties that the corresponding feature has in the L1. This means that a creole feature derived from a substrate language may have only some of the characteristics of the

equivalent substrate feature—what I referred to in Chapter 4 as contraction of substrate properties. One example mentioned in that chapter concerns the subject-referencing pronouns in Melanesian Pidgin—for example, in Bislama, which has only two subject-referencing pronouns in contrast to the Central Eastern Oceanic substrate languages which have a much larger number. Another example is the locative and progressive marker *stei* in Hawai'i Creole, which has all the functions of Portuguese *estar* but in contrast does not have different forms to mark person, number, or tense.

Lefebvre (e.g. 1998: 137–9) accounts for similar cases in her data using the notion of dialect levelling. Substrate languages are assumed to differ with regard to the specific properties of a particular feature. One language may have a full set of properties, while another only a subset. Thus, for particular features, it is argued that relexified versions of substrate languages with the full set of properties are levelled out, leaving only relexified versions of languages with a subset of the properties. This explanation may be feasible, but it leaves too many open questions. First, are there always substrate languages that can account for the subset of properties? The answer to this question is clearly no. For example, with regard to Bislama, there appears to be no relevant substrate language that has only two subject-referencing pronouns. Even if such a language were available, then the question arises as to why particular relexified features from one substrate language should be levelled out in some cases when other features from the same language are retained in other cases.

Unlike relexification, the process of transfer can account for contraction of substrate features because it allows for the partial replication of L1 properties, as noted by van Coetsem (2000) and Johanson (2002) (see Section 5.1). This is an important distinction between the notions of relexification and functional transfer.

In summary, the Compensatory Transfer view offers a better explanation for the use of lexifier forms with substrate properties than does the Relexification Hypothesis for the following reasons. First, it does not assume that the substrate language is the initial state, and therefore that it in its totality will be transferred or relexified, which is clearly not the case. Second, it does not assume that the mental process involved is a process of targeted second language learning, thus better explaining the paucity of evidence of the results of such a process in SLA. Third, it accounts for partial replication of the properties of particular substrate features.⁸

⁸ For a further critique of the Relexification Hypothesis, see Winford 2006.

5.6.3 Contact-induced grammaticalization

In all the cases of functional transfer presented in this chapter, it is clear that a lexical item in one language has become (or is becoming) a grammatical morpheme modelled on the functions of a corresponding morpheme in another language. As mentioned in Chapter 3, some creolists have used the notion of grammaticalization to explain the emergence of grammatical morphemes in an expanded pidgin or creole even when it is clear that they are the result of language contact rather than the gradual language-internal change normally associated with grammaticalization. However, Heine and Kuteva (2003, 2005) expand the notion to what they call ‘contact-induced grammaticalization’, and argue that this process accounts for all the examples of language change due to bilingual language use described above, and many others. Using terms from Weinreich (1970), they say the process ‘rests on a strategy used for transferring some grammatical concept from the model language (M) to the replica language (R)’ (2003: 533). In a simplified account of the mechanism involved in ordinary contact-induced grammaticalization, Heine and Kuteva suggest that speakers of language R notice a grammatical category Mx in language M, and then ‘develop an equivalent category Rx, using material available in their own language (R)’. To do this, speakers of language R ‘draw on universal strategies of grammaticalization, using construction Ry to develop Rx’ (p. 533). The authors include grammatical expansion in pidgins and creoles based on substrate features as a result of this process. In one example, Tayo, the French-lexifier creole of New Caledonia (see Chapter 8), is considered the replica language (R), and Drubea and Cèmuhi, two of the main substrate languages, the model (M). In these languages, there is an obligatory dual marker on pronouns (Mx). Contact-induced grammaticalization supposedly occurred as the French numeral *deux* ‘two’ (Ry) became a dual marker *-de* (Rx) on pronouns in Tayo—e.g. *u-de* ‘you (DU)’ (p. 534).

Heine and Kuteva (2005: 242) believe that ‘contact-induced grammaticalization is a major driving force in the grammatical development of pidgins and creoles’, with pidgins and creoles being the replica languages (R) and substrate languages being the model (M) (p. 38). Other examples that they give include the development of English *two* into the dual marker *-tu* in Melanesian Pidgin (parallel to *-de* in Tayo), modelled on the Austronesian substrate languages (p. 82)—e.g. Tok Pisin *yu-tu-pela* ‘you (DU)’—and the development of English *stop* as the preverbal durative marker *stap* in Bislama, modelled on Vanuatu languages (p. 81).

In addition, Heine and Kuteva (2003: 539) describe ‘replica grammaticalization’, in which ‘rather than a grammatical concept, it is a grammaticalization process that is transferred from the model (M) to the replica language (R)’. So instead of developing a category Rx equivalent to Mx, speakers of language R ‘replicate a grammaticalization process they assume to have taken place in language M, using an analogical formula of the kind [My > Mx] = [Ry > Rx]’ (p. 539). Illustrating the process in creoles, the authors give two of Bruyn’s (1996) examples from Sranan (pp. 557–8). In the first example, the grammaticalization of the Ewe body part *meɓbé* ‘back’ to become a postposition meaning ‘behind’ is paralleled in Sranan by the similar use of *baka* (from English *back*). In the second, the grammaticalization of the Ewe verb *ná* ‘give’ to become a benefactive/dative marker (‘for’/‘to’) is paralleled by a similar use of *gi* (from English *give*). In another example, this time from Tok Pisin (Heine and Kuteva 2005: 96–7), the adverbial modifier *tasol* ‘only’ is shown to have extended its functions to become an adversative conjunction ‘but’ as in these examples (p. 97):

- (28) a. *ol i pilai tasol.*
 3PL PM play only
 ‘They only playing.’
 b. *em i gat mani tasol i no givim pe long mi.*
 3SG PM have money but PM NEG give pay to 1SG
 ‘He has money, but he did not pay me.’

This extension of function is said to be modelled on that of corresponding morphemes in the substrate languages, such as *kisang* in Tigak.

Heine and Kuteva (2005) also relate contact-induced grammaticalization to L2 use. They describe two main types of settings (p. 237): L2>L1 replication and L1>L2 replication. L2>L1 replication is what we find in borrowing or adoption from dominant codes over extended periods of time. On the other hand, L1>L2 replication is found in imposition (van Coetsem 1988, 2000; Johanson 2002) or substratum interference (Thomason and Kaufman 1988). They say L1>L2 replication is a consequence of second language use, and needs less time to evolve (p. 239). As noted in Section 5.5, they also say (p. 125) that gap-filling occurs when ‘speakers draw on grammatical distinctions in their L1 (first language) and replicate them via grammaticalization in their L2’.

The important question here is why ‘via grammaticalization’? It is true that in expanded pidgins and creoles, formerly lexical morphemes have taken on grammatical functions, and therefore the term grammaticalization

can describe the end result. But it does not really describe the process. As mentioned before, grammaticalization usually refers to a gradual process of language change occurring over centuries (Heine and Kuteva 2003: 531), or a long process of grammatical maturation that adds to the complexity of a language (Dahl 2004: 2). But in second language use, the same result occurs instantaneously as a communication strategy in the performance of individual speakers, and the changes in the expanded pidgin can occur in one generation, as in Hawai'i.

Furthermore, Heine and Kuteva (2003: 558) say that the examples of replica grammaticalization in Sranan mentioned above are due to what Bruyn (1996) calls apparent grammaticalization (see Chapter 4), which they describe as 'a process whereby a grammaticalization process was transferred from a substrate language' (p. 558). However, as quoted in Chapter 4, Bruyn (1996: 42) defines apparent grammaticalization as 'the transfer of the *result* of a process of grammaticalization that has taken place in another language' [my emphasis, JS]. So it is not a replication of the process of grammaticalization, but rather merely a case of language transfer.

Heine and Kuteva (2003, 2005) give many examples from Keesing (1988, 1991) to illustrate what they call contact-induced grammaticalization in Solomon Islands Pijin. But Keesing (1991: 335) asserts that the development of grammatical morphology in Pijin was a result of calquing of patterns from the Eastern Oceanic substrate languages, not the usual chain of grammaticalization, and states that it involved 'shortcutting rather than recapitulating the grammaticalization process'. And calques are normally evidence of transfer in bilinguals (Odlin 1989: 37), not of a separate process. Thus, contact-induced grammaticalization may be a suitable term for the result, but not for the process; that process is functional transfer. Heine and Kuteva's studies do provide a substantial amount of evidence that functional transfer must have occurred first in individuals and then eventually led to community-wide language change. But with reference to pidgin and creole languages, what they call contact-induced grammaticalization is neither grammaticalization in its usual sense nor a process distinguishable from functional transfer.

5.7 The mechanics of functional transfer

I conclude this chapter by exploring two other views that provide possible explanations about how functional transfer actually occurs in the minds of

individual speakers in L2 use: functional interference and the Two Targets Hypothesis.

5.7.1 Functional interference

Using the minimalist framework, Sánchez (2003) assumes that for every language, there is a specific set of functional features associated with each particular functional category, but that the composition of the sets of features in corresponding categories differ between languages. Bilinguals may develop a distinct set of features for each of the equivalent categories in the two languages. Alternatively, however, Sánchez (2003: 13) notes that ‘there might be interference in the feature specifications of the two languages in such a way that certain features not activated in one of the languages become activated by input in the other ...’ She calls this ‘functional interference’ and proposes the following hypothesis (p. 13):

Functional interference in bilinguals, i.e. the activation of functional features in one language triggered by input in the other language, generates syntactic changes in the bilingual grammars. Interference in lexical entries (n-insertion, v-insertion) does not generate such changes.

However, this view implies that both languages have a full set of functional features. Thus, while it may apply to bilingualism in two fully developed languages, it would not seem to apply to the case where one of the languages is an expanding pidgin. Also, according to this view, functional interference leads to changes in both languages—the ‘functional convergence hypothesis’ (Sánchez 2003: 15)—but this is not the case in pidgins and creoles, or in transfer in general.

5.7.2 Two Targets Hypothesis

Another view (or rather, set of views), specifically with regard to creole formation, comes from Myers-Scotton (2001, 2002), who takes a processing-oriented approach (see Chapter 2). According to the Matrix Language Frame (MLF) model (Myers-Scotton 1997, 2002), which was developed primarily with regard to code-switching, there is always one language (the matrix language) that provides the morphosyntactic frame for a clause containing morphemes from two or more languages. However, in some language contact phenomena, the frame is ‘a composite of abstract features from more than one source’ (Myers-Scotton 2002: 277). Myers-Scotton’s view is that in the case of creoles, the frame is normally a composite of two or more

substrate languages. The superstrate language (i.e. the lexifier) is considered to be the other language in the contact situation (the L2), but it cannot serve as the frame because the developers of a creole do not have access to its abstract properties. Therefore, they must fall back on the frame of their L1s. As frames can accept morphemes from another language ‘provided their specifications are sufficiently congruent’ (p. 278), the substrate frame can make use of morphemes from the lexifier. To illustrate lexifier morphemes used in a substrate grammatical frame, Myers-Scotton (2002: 279–81) gives examples of the determiner in Haitian Creole and the transitive suffix and serial verbs in Tok Pisin. The claim is, therefore, that there are two targets in creole formation: the substrate languages for the morphosyntactic frame and the lexifier for most of the morphemes. This is referred to as the ‘Two Targets Hypothesis’ (Myers-Scotton 2006: 285).

However, according to the theory, not all morphemes of the lexifier can be made use of. Recall that in the 4-M Model (Chapter 2), there are content morphemes and three types of system morphemes. Myers-Scotton (2006: 285) says that content morphemes and early system morphemes are accessible since they ‘have the most semantic content’ and therefore ‘would be easiest for creole speakers to pick out of the stream of speech of those who spoke the substrate language’. On the other hand, late system morphemes, which are structurally assigned (Chapter 2), are not available, because they are harder to acquire (Myers-Scotton 2002: 284). But the morphosyntactic frame needs late system morphemes. Therefore, content morphemes from the lexifier with some semantic relationship to system morphemes in the substrate languages are ‘pressed into service’ as system morphemes in the creole morphosyntactic frame (p. 284). In other words, content morphemes from the lexifier are ‘reconfigured as system morphemes to satisfy the requirements of the abstract morphosyntactic creole frame that is based on a composite Matrix Language from the substrates’ (p. 283).

This reconfiguration can occur according to another aspect of Myers-Scotton’s hypothesized mental apparatus—the Abstract Level Model (Myers-Scotton 2001, 2002, 2003). This proposes that lemmas in the mental lexicon have three levels of abstract lexical structure: ‘lexical conceptual structure (semantics and pragmatics), predicate argument structure (how thematic roles are realized in phrase structure) and morphological realization patterns (surface morphological elements and their order)’ (Myers-Scotton 2003: 85). According to the model, any of the three levels from the lexical entry of one language can be split from the others and recombined with levels from another language. As an example, Myers-Scotton

(2001: 233) discusses *bilong* in Tok Pisin (see Chapter 4). She says that the English verb *belong* has been reconfigured to become a bridge late system morpheme in Tok Pisin, serving as a possessive/genitive marker: 'It retains a semblance of lexical-conceptual structure from English, but it does not have the same predicate-argument structure or morphological realization pattern specifications that it has in English.' Instead, *bilong* 'occurs in the same syntactic position and with the same syntactic function in the constituent as it does in at least some of the Austronesian languages that are considered part of the Tok Pisin substrate'. Myers-Scotton (2001: 234) gives the following example (from Jenkins 2000: 140) comparing Tok Pisin and Tigak (similar to examples 47 and 48 in Chapter 4):

- (29) *lip bilong diwai* (Tok Pisin)
pakak ina iai (Tigak)
leaf of tree
'the tree's leaf'

Furthermore, Myers-Scotton (2002: 101) refers to the Abstract Level model as being relevant to 'convergence', which she describes as 'a mechanism in the progressive outcomes of attrition, language shift, language death, and creole formation'. The outcome is 'a linguistic configuration with all surface morphemes from one language, but part of its abstract lexical structure from another language' (p. 101). Unlike the more familiar notion of convergence in which there is mutual influence among the languages in contact (e.g. Gumperz and Wilson 1971), Myers-Scotton's conceptualization is 'largely a one-way phenomenon' (p. 172). She further states (p. 101):

The motivation for convergence is clear: the influence of one language on another reflects generally asymmetrical sociopolitical relations between the native speakers of the languages involved, with the language that is influenced often in the less dominant role.

Later in the same work, Myers-Scotton (2002: 172) reiterates that 'convergence involves the grammar and lexicon of a source language, generally one that has more socioeconomic prestige, impinging on another language' (p.172).

Several problems exist with these points of view as an explanation for the morphological expansion that occurs in the development of expanded pidgins and creoles. First, as we have seen in Chapter 2, the availability of different types of morphemes in acquisition appears to depend not on their intrinsic abstract properties or semantics, but rather on their perceptual salience. Furthermore, when expansion begins, the starting point is a variety

already made up of only content (lexical) morphemes, without grammatical (system) morphemes—i.e. a restricted pidgin.

The second problem is the assertion that ‘[t]here is no such thing as speech taking place without a grammatical frame—unless it is the speech of persons with brain pathologies’ (Myers-Scotton 2002: 291) and that, consequently, from the earliest stages of second language acquisition (and thus creole formation) speakers use the abstract grammatical frame of their own first language (pp. 291–2). This position is similar to that of the Relexification Hypothesis, which assumes that the L1 is the initial state in creole formation as it is in L2 acquisition. However, it is clear from word order in the Basic Variety, for example, that learners do not maintain the frame of their L1 for very long, and as also discussed earlier, there is little evidence in SLA of the kind of reconfiguration Myers-Scotton describes.

Third, the nature of the two proposed targets is problematic. As described above, because of target shift, the lexifier is unlikely to continue being the target when morphological expansion occurs. In addition, it is not at all clear how the substrate languages can be considered a target because if their abstract morphosyntactic characteristics are to serve as the frame or matrix language, they must already be known by the speakers. In fact, the argument has been made that the notion of a target is not relevant in the context of second language use.

Most significantly, sufficient explanation is not given as to how the composite of substrate languages is formed. Myers-Scotton (2002: 290) suggests that some kind of levelling may occur among the substrate languages before creole formation, but no evidence of such a phenomenon is provided, and no motivation given for its occurrence. It would seem to make more sense to conceive of individual speakers using content morphemes from the lexifier in the frame of their own L1.⁹ These individual instances would then enter the pool of variants, and later be either levelled out or retained by the community, as in the framework outlined earlier in this book.

Yet another problem with Myers-Scotton’s point of view is that like the Relexification Hypothesis, it does not provide for the use of only a subset of properties of a substrate feature. Although the Abstract Level Model allows for the recombining of different levels of abstract lexical structure, it assumes that the syntactic function of the substrate feature will remain the same in the creole, as with the example of *bilong* in Tok Pisin. But this is not always the case. Whereas *bilong* behaves like *ina* (example 29 above) by occurring

⁹ Individual instances of what Myers-Scotton calls reconfiguration could be feasible according to de Bot’s (1992) adaptation of Levelt’s (1989) model to cover bilingual speech production.

as a genitive marker in some contexts, it also regularly occurs in Tok Pisin contexts where a different marker would be used in the substrate language. For example, *haus bilong Makeo* ‘Makeo’s house’ and *wok bilong manmeri* ‘the people’s work’ would use different genitive markers in Tigak, as in the following (Beaumont 1979: 67):

- (30) a. *tang lui te Makeo*
 the house of M.
 ‘Makeo’s house’
 b. *a aisok tana vap*
 the work of people
 ‘the people’s work’

Furthermore, *ina* is used in some contexts in Tigak where *bilong* is not used in Tok Pisin. In Tok Pisin *bilong* is used for purposive constructions, as in *Em i kam bilong wok*. ‘He came to work’. This follows the use of *ina* in Tigak, where it is glossed as ‘that’ by Beaumont (1979: 54):

- (31) *ga ime ina aisok.*
 he.PST come that work
 ‘He came to work.’

However, *bilong* is not used in abilitative/permissive constructions in Tok Pisin where *ina* is used in Tigak (Beaumont 1979: 54)

- (32) a. *gi vilrokoli ina kus-au.*
 he be.able that tell-me
 ‘He can tell me.’
 b. *gi kalapang ina matai.*
 he be.in.the.habit that sleep
 ‘He is in the habit of sleeping.’

In Tok Pisin these would be:

- (33) a. *Em i ken tok-im mi.*
 3SG SRP be.able tell-TR 1SG
 b. *Em i save slip.*
 3SG SRP HAB sleep

Finally, the notion of convergence, as defined by Myers-Scotton (2002) does not appear relevant to the development of creoles. If one takes the view that creole genesis is the gradual result of one language influencing another (such as in the superstratist approach, to be discussed in Chapter 7),

then it is the lexifier language that is normally thought to be influenced by the substrate languages. Thus, the lexifier changes through the agency of substrate speakers (i.e. source language agentivity, as described at the beginning of Section 5.1). However, in Myers-Scotton's view, convergence involves the linguistic features of a socially dominant source language impinging on those of a less dominant language. With regard to pidgin and creole languages, this would mean the features of the lexifier affecting those of the substrate languages, which is clearly not what occurs.

Again, the Compensatory Transfer view does not have these problems because it allows for partial replication of substrate properties and clearly deals with source language agentivity.

5.8 Conclusion

This chapter has shown that the process of functional transfer can account for the fact that in expanded pidgins and creoles, lexical forms that originated in the lexifier are used with functional properties of corresponding morphemes in the substrate languages. The context in which this transfer occurs appears to be using the restricted pidgin predecessor as a second language, rather than attempting to acquire the lexifier. The motivation behind this transfer is to meet the communicative needs of the language as its use extends into wider areas.

It is clear, however, that not all substrate features are transferred to an expanded pidgin or creole, and therefore there must be some constraints on the process. This is the topic of the following chapter.

6 Constraints on Substrate Influence

Bickerton's final criticism of the notion of substrate influence in creoles is that no principles have been suggested to account for the selection of some substrate features, but not others. He states (1986: 38): 'The gravest weakness of the substratophile position is that it is absolutely unconstrained.' Bickerton uses the term 'cafeteria principle' (attributed to Dillard 1970) to ridicule the idea of unconstrained selection of features like a person choosing items for lunch at a cafeteria (1981: 49). Mufwene (1990: 6) also comments: 'The fact that no attempt has been made to suggest any principle regulating... a selection of substrate features is deplorable. It is not that such a situation (sometimes ridiculed with the term "cafeteria principle") is impossible, but rather that principles accounting for the selection have not been proposed.' This chapter deals with these criticisms by proposing various constraints on transfer, and therefore on substrate influence.

6.1 Availability constraints and reinforcement principles

In an earlier article (Siegel 1997*a*), I proposed that there are two types of constraints, or what Mufwene (1991: 137) calls 'regulatory principles'—i.e. factors that influence the selection of features, both from the substrate languages and the lexifier. These are with reference to the model of mixing and levelling, referred to here in earlier chapters. First there are 'availability constraints'—factors that influence whether or not features actually reach the pool of variants used in the contact situation. We have seen that substrate features enter the pool of variants as a result of transfer. Thus, with regard to substrate influence, availability constraints are concerned with what languages occur in the contact environment and the likelihood of transfer of particular features from these languages taking place. Second, there are 'reinforcement principles'—factors that influence whether a particular feature in the pool is retained in the contact language or whether it is levelled out.

In other words, out of the features of all the languages in the contact environment, only a subset of these features—i.e. those in specific

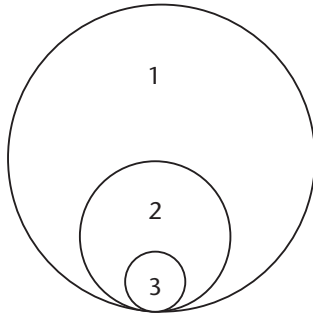


Figure 6.1. Subsets of available linguistic features that end up in a creole

languages—appear to be available sources for the expanding pidgin or creole. This subset is labelled 1 in Figure 6.1. Out of these features of specific languages, only a subset (2 in Figure 6.1) become available—in the case of substrate features, because of constraints on transfer. So, subset 2 represents features in the pool of variants. Finally, of these available features, only a subset (3) are retained in the expanded pidgin or creole because of reinforcement during the levelling process.

The factors that determine both availability of features and their reinforcement may be sociolinguistic or linguistic. Sociolinguistic factors may include the number of speakers of the various languages, their prestige and power, and the amount of contact and frequency of use. Linguistic factors may include semantic transparency, salience, regularity, and lack of markedness (see, for example, Seuren and Wekker 1986; Mufwene 1991). In the next sections, I discuss the factors affecting the selection of features in each of the subsets shown in Figure 6.1.

6.2 Specific languages

According to Mufwene's 'Founder Principle' (1996, 2001), the structure of a creole is determined not only by the languages spoken by the earliest settlers in the colony where the creole develops (the vernacular form of the lexifier as opposed to the standard) but also by the particular substrate languages that were dominant in the number of speakers when the basilectal creole emerged. However, this principle does not account for the features of every creole.

It is the substrate languages that I focus on here. When Hawai'i Creole emerged, from about 1905 to 1920, the dominant substrate language in terms of number of speakers was clearly Japanese (see Table 6.1). For

Table 6.1. Population of Hawai‘i at various census dates, 1853–1930

| | Hawaiian | Part-Hawaiian | Portuguese | Puerto Rican | Spanish | ‘Other Caucasian’ | Chinese | Japanese | Korean | Filipino | Other | Total |
|------|----------|---------------|------------|--------------|---------|-------------------|---------|----------|--------|----------|-------|---------|
| 1853 | 71,019 | | | | | 1,262 | 364 | | | | 493 | 73,138 |
| 1860 | 66,984 | | | | | 1,600 | 700 | | | | 516 | 69,800 |
| 1866 | 57,125 | 1,640 | | | | 2,200 | 1,200 | | | | 794 | 62,959 |
| 1872 | 49,044 | 2,487 | 424 | | | 2,520 | 2,038 | | | | 384 | 56,897 |
| 1878 | 44,088 | 3,420 | 486 | | | 3,262 | 6,045 | | | | 684 | 57,985 |
| 1884 | 40,014 | 4,218 | 9,967 | | | 6,612 | 18,254 | 116 | | | 1,397 | 80,578 |
| 1890 | 34,436 | 6,186 | 12,719 | | | 6,220 | 16,752 | 12,610 | | | 1,067 | 89,990 |
| 1896 | 31,019 | 8,485 | 15,191 | | | 7,247 | 21,616 | 24,407 | | | 1,055 | 109,020 |
| 1900 | 29,799 | 9,857 | 18,272 | 2,672 | | 8,547 | 25,767 | 61,111 | | | 648 | 154,001 |
| 1910 | 26,041 | 12,506 | 22,301 | 3,734 | 4,890 | 14,867 | 21,674 | 79,675 | 4,533 | 2,361 | 1,071 | 191,909 |
| 1920 | 23,723 | 18,027 | 27,002 | 6,955 | 5,602 | 19,708 | 23,507 | 109,274 | 4,950 | 21,031 | 658 | 255,912 |
| 1930 | 22,636 | 28,224 | 27,588 | 12,592 | 6,671 | 44,895 | 27,179 | 139,631 | 6,461 | 63,052 | 780 | 368,336 |

Based on Reinecke 1969 [1935]: 42

example, in 1910, there were 79,675 Japanese as compared to 26,041 Hawaiians, 22,301 Portuguese, and 21,674 Chinese. Yet, as shown in earlier chapters, Portuguese, Cantonese, and Hawaiian, rather than Japanese, appear to have had the most influence on the structure of Hawai'i Creole. It was also noted that transfer from an L1 to an L2 tends to occur when speakers are expanding their use of the L2 into wider contexts, and that in general the Portuguese, Chinese and Hawaiians shifted from their ancestral languages (their L1s) to Hawai'i Pidgin English (the L2) well before the Japanese. Consequently, one would expect that there was more transfer (and thus more substrate influence) from the three languages whose speakers first shifted to the expanding pidgin and used it to speak to their children. Therefore, according to the 'Shifter Principle', the substrate languages whose speakers first shift to the expanding pidgin are most likely to provide features that get transferred and enter the pool of variants, and thus the most likely to influence the structure of the creole.

6.3 Specific features

Of the features of the languages shifted from, only some end up in the creole. Again, using Hawai'i Creole as an example, Cantonese has an optional postverbal marker of perfect aspect (usually referred to as perfective)—the suffix *jó* or particle *dóu* (similar to Hokkien and Mandarin, described in the preceding chapter):

- (1) a. *Ngóh ga chē waaiah-jó.*
 1SG CLF car broken-PFV
 'My car's broken down.' (Matthews and Yip 1994: 204)
- b. *Ngóh ngām-ngām sāu-jó chin.*
 1SG just-just receive-PFV money
 'I've just received the money.' (Matthews and Yip 1994: 211)
- c. *Ngóh ngām-ngām sāu dóu chin.*
 1SG just-just receive PFV money
 'I've just received the money.' (Matthews and Yip 1994: 211)

Hawai'i Creole, like Singapore English, has an optional postverbal perfect marker *awredi* (*already*), which appears to be the result of the transfer of this substrate feature:

- (2) a. *Dah buggah dead already.*
 'The poor guy's dead.' (Pak 1998: 321)

- b. *Shi ste sheim awredi.* (*She stay all shame already.*)
'She was ashamed.' (speaker KK01)
- c. *Da tako no come in already Olowalu-side.*
'The octopus doesn't come to the Olowalu area anymore.' (Masuda 1998: 232)

Example (2c) above clearly shows that this use of *already* is different from English. Cantonese has several other postverbal aspect markers—e.g. *hōi* marking habitual and *yyuh* continuous (Matthews and Yip 1994: 202–10). But in Hawai'i Creole there are no forms originating from the lexifier that mark these functions—i.e. no evidence of functional transfer of these features. In other words, there is no postverbal habitual or continuous marker. This means that either these features were never transferred by individual speakers, or they were transferred but were not retained by the community in the levelling process and therefore did not become part of the creole. Here I assume that transfer by individuals did not take place and identify potential reasons—i.e. constraints on transfer. I also focus here on linguistic rather than sociolinguistic factors.

6.3.1 Features not transferred

In Chapter 4, I showed (following Keesing 1988) that seven of the core grammatical features of the Central Eastern Oceanic (CEO) languages are found in Melanesian Pidgin, and in Chapter 5, I argued that these are primarily the result of transfer in second language use. In a previous article (Siegel 1999), I attempted to identify transfer constraints by examining the reasons for other core features of the CEO *not* being found in Melanesian Pidgin. At that time, I believed that transfer was related to L2 acquisition and took place at an earlier stage of development (i.e. before expansion). However, the findings are still relevant to the transfer that I now assume occurred during increased L2 use.

The grammatical features shared by the majority of CEO substrate languages that are *not* found in Melanesian Pidgin (MP) are:

- (a) marking of inalienable versus alienable possession
- (b) articles
- (c) reciprocal prefix
- (d) adjectives following nouns

Each of these is now briefly described.

(a) *Marking of inalienable versus alienable possession:*

Nearly all CEO languages make some formal distinction between alienable and inalienable possession.¹ In most Micronesian and Eastern Melanesian languages, inalienable possession is marked by a possessive pronoun suffix attached directly to the possessed noun—for example:

- | | | | | |
|--------|-------------|-----------------|---------------|--------------|
| (3) a. | Kiribati: | <i>atuu-na</i> | <i>a-na</i> | <i>katii</i> |
| | | head-3SG | POSS-3SG | gun |
| | | ‘his head’ | ‘his gun’ | |
| b. | Iaai: | <i>hinyö-k</i> | <i>anyi-k</i> | <i>thaan</i> |
| | | mother-1SG | POSS-1SG | chief |
| | | ‘my mother’ | ‘my chief’ | |
| c. | To’aba’ita: | <i>thata-ku</i> | <i>thata</i> | <i>nau</i> |
| | | name-1SG | name I | |
| | | ‘my name’ | ‘my namesake’ | |

As noted by Keesing (1988: 117), the inalienable/alienable distinction is not marked in MP, and *blong* (or *bilong* in PNG Tok Pisin) is always used to mark possession,² for example in Bislama:

- | | | |
|--------------|---------------------|----------------------|
| (4) Bislama: | <i>han blong mi</i> | <i>haos blong mi</i> |
| | hand POSS 1SG | house POSS 1SG |
| | ‘my hand’ | ‘my house’ |

(b) *Articles:*

Most CEO languages, except those in Vanuatu, have a system of articles, generally preceding the noun, as in (5). In contrast, MP has no articles, even though they are found in the lexifier, English.³

- | | | | |
|--------|-----------|----------------|-------------------|
| (5) a. | Kiribati: | <i>te nang</i> | <i>taian nang</i> |
| | | ART.SG cloud | ART.PL cloud |
| | | ‘the cloud’ | ‘the clouds’ |

¹ Nouns which are viewed as being possessed permanently, such as names for body parts and some kinship terms, are typically found in inalienable possessive constructions (also called direct, passive, or subordinate possession), while those viewed as less permanent, such as names for material possessions and animals, are in alienable constructions (indirect, active, or dominant possession).

² Sankoff and Mazzie (1991) show that in Tok Pisin semantically inalienable nouns occur more frequently as possessed forms than alienable nouns (74% vs 12%). But this may be true of all languages, and in their corpus there is little difference in the actual numbers: 204 inalienable NPs possessed (74% of 276) vs 190 alienable NPs possessed (12% of 1589). Since possession of both inalienable and alienable nouns is marked in the same way (with *bilong*), it can be said that there is no formal distinction.

³ Sankoff and Mazzie (1991) also report that in Tok Pisin *wanpela* ‘one’ and *dispela* ‘this’ may be candidates for grammaticalization to indicate indefinite and definite respectively, but at present this is still a very tentative hypothesis. (See also Smith 2002: 147–9.)

- | | | |
|----------------|--|--|
| b. To'aba'ita: | <i>nga 'ai</i> ART wood 'the (fire)wood' | <i>ni 'Oina</i> ART.FEM 'Oina 'Oina' (proper name) |
| c. Iaai: | <i>ke thaan</i> ART.SG chief 'a chief' | <i>je thaan</i> ART.PL chief 'some chiefs' |

(c) Reciprocal prefix:

Most CEO languages have a prefix marking reciprocity as well as one marking causativity (as described above). The reciprocal prefix often occurs with a transitive suffix as well. Some examples are:

- | | | |
|------------------|-------------------------------|---|
| (6) a. Kiribati: | <i>tangitangira</i> 'love' | <i>i-tangitangiria</i> 'love each other' |
| b. Iaai: | <i>beteŋjō</i> 'be kind' | <i>i-beteŋjō</i> 'be kind to each another' |
| c. Nguna: | <i>tawiri</i> 'marry' | <i>pi-tawiri</i> 'get married (to each other)' |

MP has no reciprocal suffix; instead reciprocity is marked by an object pronoun coreferential with the subject, and sometimes by reduplication of the verb, as in this example from Bislama (Crowley 2004: 76):

- (7) Bislama: *Tufala dog i stap ka~kakaē tufala.*
two dog 3SG/PL CONT RECP~bite 2DU
'The two dogs are biting each other.'

(d) Adjectives following nouns:

In all CEO languages, adjectives in the noun phrase follow the noun, for example:

- | | |
|----------------|---|
| (8) a. Iaai: | <i>hiyat aeso</i> old:man good 'good old man' (Tryon 1968: 75) |
| b. To'aba'ita: | <i>nga fau ba'ita</i> ART stone big 'the big stone' (Lynch 1993: 156) |
| c. Nguna: | <i>nakau kiiki</i> stick small 'small stick' (Schütz 1969: 54) |

In contrast, in MP adjectives generally precede nouns. In all three dialects, most prenominal modifiers can occur with an adjectival suffix, *-fala*

in Solomons Pijin and Bislama, *-pela* (usually pronounced as *-pla*) in Tok Pisin, derived from the English *fellow*.⁴ Here is an example from Bislama:

- (9) Bislama: *big-fala haos*
 big-ADJ house
 ‘big house’

It should be noted, however, that in MP when the modifier in the NP is a noun, such as a place name, it follows the head noun, as in CEO languages—for example in Bislama:

- (10) a. *man Tana* ‘a person from Tanna’
 b. *bandel taro* ‘bunch of taro’

In summary, these four common morphosyntactic features of the CEO substrate are not found in MP, while seven others are. Linguistic constraints on transfer may be able to explain why. I will now examine some of these proposed constraints.

6.3.2 Linguistic constraints on transfer

Researchers in SLA have postulated a variety of factors as constraints or influences on the likelihood of particular linguistic features, or aspects of particular features, being transferred by individuals in SLA. Researchers in pidgin and creole (P/C) studies have proposed similar factors to explain which features are more likely to be ‘selected’ in pidgins and creoles. (However, they often overlook the distinction between factors influencing transfer by individuals in early stages of development and those affecting retention and incorporation of particular features by the community in later stages.) Some of these factors are based on structural characteristics of the specific languages involved. Others are based on psycholinguistic constraints on speech perception, storage, retrieval, and production, and modelled on the proposed ‘operating principles’ used to explain the sequence of first language acquisition (Slobin 1985).

Researchers apply a variety of labels to these factors or various combinations of factors. For example, Mufwene (1990: 11) uses ‘unmarked’ as ‘a

⁴ Keesing (1988: 113) notes that this was a regular pattern, established in Melanesian Pidgin by the 1880s. However, the current situation is more complex than what he describes. The *-fala* suffix is generally optional in Bislama and Pijin, and Bislama has another adjectival suffix *-wan* that may occur in place of *-fala* (Crowley 1990a: 279–84). All three MP varieties also have small sets of adjectives that follow nouns in the CEO pattern.

cover label for several factors that affect language acquisition (e.g. simplicity, generality, frequency, semantic transparency, and salience)'. He makes it clear that these factors affect both transfer and ultimate 'selection' into a creole. Seuren and Wekker use the term 'semantic transparency' and define it as 'a property of surface structures enabling listeners to carry out semantic interpretations with the least possible machinery and with the least possible requirements regarding language learning' (1986: 64). They say it involves uniformity, universality (i.e. lack of markedness), and simplicity (minimal processing). They also make it clear that semantic transparency (ST) may determine both the transfer of particular features (p. 62) and the retention of certain features in the creole: '[T]hose features that have a high degree of ST are more likely to persist in the creole than low ST features' (p. 63). (See also Seuren 1995.)

Andersen (1990) summarizes several of his proposed 'cognitive operating principles' for second language acquisition. These include the 'One-to-One Principle' (Andersen 1984), which is concerned with perceptual salience and invariance, and the Transfer to Somewhere Principle (Andersen 1983*b*), concerning superficial congruence of L1 and L2 features as well as simplicity and frequency. Andersen (1983*b*: 181) says that transfer is more likely to occur when an L1 structure conforms more to such operating principles than the corresponding L2 structure. (See further discussion below.)

For the purpose of discussion, I have isolated six factors referred to in the SLA and P/C literature: markedness, perceptual salience, transparency, simplicity, frequency, and congruence. Of course, these factors are not mutually exclusive (for example, perceptual salience and transparency) and not necessarily compatible (for example, transparency and simplicity). In some cases, they are closely connected to other factors, such as frequency and substrate similarity. Nevertheless, they represent convenient labels for the different types of factors described in the literature.

I now give a brief outline of each factor in turn, reporting uncritically what various scholars say about it and attempting to sort out which aspect of transfer the factor is supposed to affect: the particular L1 features that are transferred, the particular L2 features that are reanalysed to fit L1 patterns, or the general characteristics of transferred structures in the interlanguage. I also describe how some of these factors have been used to account for the retention of particular features in contact languages. Then I evaluate each factor to see whether it can account for the typical Central Eastern Oceanic features which are both present and absent in Melanesian Pidgin.

6.3.2.1 *Markedness*

As already mentioned, one factor often proposed in the earlier SLA literature to explain the transfer of some L1 features but not others is markedness. Features that are universal or common to many languages are considered unmarked, while those that are unusual or found only in a few languages are considered marked. The claim is that marked features of the L1 are less likely to be transferred than unmarked features (Eckman 1977, 1985; Kellerman 1977; Hyltenstam 1984).

This constraint is illustrated in a study by Zobl (1984). He cites a universal tendency in languages not to allow extraction of words meaning 'how' or 'how many'. For example, in English, '*How many do you want oranges?' is not grammatical. However, such extraction is allowed in spoken French, and therefore can be considered a marked feature of that language. According to the markedness constraint, this feature would not be transferred from French into English. In the study, a group of French-speaking learners of English were asked to judge the grammaticality of English sentences with extraction, such as the one just given. It was found that these sentences were not acceptable to the majority of learners, especially beginners, and it was assumed that this supported the prediction that transfer would not occur.

Writing about language contact, Thomason and Kaufman also note that 'universally marked features are less likely than unmarked features to be transferred' (1988: 51). With regard to MP, however, markedness cannot account for the absence of some core substrate features but the presence of others. As pointed out by Mufwene (1990: 8), some of the CEO features which occur in MP, such as the transitive suffixes and the pronoun system, 'are considered marked in relation to the world's languages'. Other features, such as adjectives following nouns, are certainly not marked, but are not found in MP.

It appears that markedness is not a constraining factor when the substrate languages are as typologically similar as they are in the CEO substrate for MP. As Singler points out: 'When the homogeneity is great enough, even elements of substrate grammar that are highly marked will be present in the pidgin' (1988: 45). Thomason and Kaufman also conclude that markedness is important 'only when the structures of the substrate languages do *not* coincide substantially' (1988: 165).

6.3.2.2 *Perceptual salience*

It is generally assumed that stressed free morphemes are perceptually more salient (or discernible) than unstressed bound morphemes (see Chapter 2).

Goodman (1985: 121), in discussing ‘reasons for selecting one substratal structure over another’, states that ‘some grammatical structures are much more easily transferred than others to a language in the process of being learned, specifically those which can be formed by using only syntactic arrangements of basic lexical items’. Later he notes the fact that ‘pidgins as well as creoles have the same tendency to select free rather than bound morphemes from the target language...’ (p. 132). Boretzky (1986, cited in Holm 1988: 67) says that transfer of a grammatical feature from the substrate is more likely if the superstrate has a morpheme to express it which could be ‘easily isolated and identified’. Thus, the prediction is that a feature of the L1 is more likely to be transferred if there is a potentially stressed free morpheme in the L2 that can be used or reanalysed according to the L1 pattern. Transfer is constrained if no such morpheme is available in the L2.

All the CEO features in MP are expressed with morphemes that are derived from potentially stressed free morphemes in the lexifier that most probably had already come into the pidgin. These are shown in Table 6.2.

However, this constraint alone cannot explain why certain CEO features were not transferred. For example, English *each other* could have been used as a reciprocal marker, and while *a* and *the* are not stressed, other determiners such as *this* and *one* could have been used to express the CEO system of articles.

Table 6.2. Melanesian Pidgin forms used for typical substrate functions

| CEO feature | MP form(s) in Bislama | English origin |
|------------------------------------|----------------------------|---------------------------|
| subject-referencing marker | <i>i</i> | <i>he</i> |
| | <i>oli</i> | <i>all (= ‘they’) + i</i> |
| transitive suffix | <i>-em, -im, -um</i> | <i>him</i> |
| adjectives as stative verbs | <i>bigfala, naes, etc.</i> | <i>big, nice, etc.</i> |
| preverbal causative marker | <i>mekem</i> | <i>make</i> |
| postnominal possessive marker | <i>blong</i> | <i>belong (to)</i> |
| third-person pronoun plural marker | <i>ol</i> | <i>all</i> |
| pronoun system | <i>mi</i> | <i>me</i> |
| | <i>yu</i> | <i>you</i> |
| | <i>hem/em</i> | <i>him</i> |
| | <i>ol(gheta)</i> | <i>all (together)</i> |
| | <i>-fala</i> | <i>fellow</i> |
| | <i>-tu-</i> | <i>two</i> |
| | <i>-tri-</i> | <i>three</i> |

Perceptual salience of the CEO features themselves also cannot account for whether or not they were transferred. CEO features involving both free and bound morphemes were transferred and retained in MP. Of the CEO features not found in MP, two make use of bound morphemes (inalienable possession and reciprocal) and two of free morphemes (articles and noun adjective ordering). Furthermore, this factor does not seem directly relevant to the ultimate form of the features that were transferred and retained in MP. Some of them are not single, free morphemes: namely, the transitive suffixes and the morphologically complex pronouns. However, perceptual salience may play some role in retention when a bound morpheme and a free morpheme are in competition during the levelling that accompanies stabilization. For example, as Keesing (1988: 125) points out, some older speakers of MP used an alternative causative with a prefix *mek-*, as in the following: *mek-strong* NP ‘strengthen something’.⁵ The reason that the free causative form *mekem* ultimately won out may have something to do with perceptual salience, although it could be argued that the pattern of the lexifier also had some effect.

6.3.2.3 *Transparency*

According to this factor, an invariable form with one uniform meaning is more likely to be transferred. The prediction is also that after a feature is transferred, the resultant structure will have one consistent form and meaning. The main claim of Andersen’s ‘One-to-One Principle’ is that ‘an interlanguage system should be constructed in such a way that an intended underlying meaning is expressed with one clear invariant surface form (or construction)’ (Andersen 1984: 79, 1990: 51). Originally, Andersen (1981) said this principle applied to both SLA (in east coast urban areas of the USA) and the evolution of a pidgin (in Hawai‘i), and in his later work he gives several examples of interlanguage features conforming to this principle which are similar to those in pidgins and creoles. First, learners of languages that have complicated rules for placement of negatives (such as English, French, German, and Swedish) start off by simply placing the negator directly before the entity to be negated. Second, learners of languages that have articles encoding distinctions in several grammatical categories, such as specificity, number, gender, and case (German, for example), initially encode only specificity. Third, learners of languages that have differing forms

⁵ Also, some verbs in Bislama and other dialects are possibly derived from forms with this causative prefix—for example: *mekrere* (< make ready) ‘prepare’ and *meksave* (< make know) ‘teach a lesson’ (Crowley 1990a: 289).

of pronouns for subject, object, and possessive (e.g. Spanish) initially use only one form (usually the stressed form).

Andersen (1984: 80) compares his One-to-One Principle to Naro's 'Factorization Principle' which shapes native speakers' foreigner talk: 'Express each invariant, separately intuited element of meaning by at least one phonologically separate, invariant stress-bearing form...' (1978: 340–1). This may have some effect on the frequency of transparent forms in the contact environment.

In evaluating this factor, if we look at the features of CEO languages which were transferred, such as the complex systems of subject-referencing, possession, and pronouns (see Chapter 4), we do not find regular one-to-one form-function correspondences. We also do not find a consistent pattern of transitive marking in CEO languages (Crowley 1990a: 294). And as Keesing (1988: 126) points out, CEO languages such as Kwaio have two different ways of causative marking. Thus, lack of transparency does not seem to prevent particular L1 features from being transferred.

On the other hand, the CEO features in MP, once they have been transferred, do seem to satisfy the One-to-One Principle by having only one form and one meaning or function, and thus may be transparent in comparison to those corresponding features in the substrate languages. In MP, there is only one possessive morpheme *blong* while in most CEO languages there are at least two separate patterns to mark possession. Also in MP, pronouns generally have only one form, while in most CEO languages there are separate focal, subject, object, and possessive forms. Finally, there is only one transitive suffix in MP and, as pointed out before, it does not have the additional function of marking the object as well.⁶ However, this apparent transparency is only from the point of view of the lexifier. Substrate speakers could presumably view these various single forms as having the multiple functions expressed by separate forms in their languages—for example, *blong* having two functions in marking both alienable and inalienable possession.⁷

6.3.2.4 *Simplicity*

Another factor said to affect transfer is simplicity: L1 features that are formally less complex than corresponding L2 features are reportedly more likely to be transferred (e.g. Zobl 1982: 180). Formal simplicity is one of the more

⁶ The allomorphy in the Bislama transitive suffix is a recent development, and is not found in all dialects of MP.

⁷ Thanks go to Mikael Parkvall for pointing this out.

difficult factors to pin down (see Chapter 2). It is sometimes equated with lack of markedness. For example, Meisel says that L1 transfer is a useful strategy for the learner ‘especially if it leads to a non-complex (“unmarked”) case or it is favoured by similar L2 patterns in the input’ (1983*b*: 37). However, according to Seuren and Wekker (1986: 66), simplicity ‘implies that the amount of processing needed to get from semantic analyses to surface structures, and vice versa, is kept to a minimum’. Thus, one would not expect the transfer of rules for movement of major or minor constituents or the transfer of morphology (pp. 67–8).

However, Seuren and Wekker’s suggestion that the transfer of morphology is unlikely because it violates constraints on simplicity is not borne out by the MP data, as already shown with the transitive suffix. With regard to the prediction that L1 features that are less complex than corresponding L2 features are more likely to be transferred, the transfer of the CEO pronoun system would not be expected. As shown in Chapter 3, this is because even without gender and case, it is not simpler than the English system, having an additional category of inclusiveness and two further distinctions in number. Furthermore, features of the more complex CEO verb phrase—subject-referencing pronouns and transitive marking—have also been transferred. And again, there does not appear to be any overall difference in complexity between those CEO features that are found in MP and those that are not.

6.3.2.5 *Frequency*

Two different aspects of frequency are referred to in the literature: the relative frequency of occurrence of a feature compared to that of others within a language, and the commonness of use of a feature in the contact environment. With regard to the language-internal aspect, it has been claimed that frequently occurring structures in the L1 are more likely to be transferred than rare ones, and frequently occurring L2 structures in the input are more likely to be restructured or reanalysed by transfer (Andersen 1983*b*: 182).

With respect to the transfer of particular L1 features into MP, it seems there would be little differential in frequency of occurrence between the group of CEO features that are found in MP and those that are not. So, for example, it would be difficult to make the case that only the causative prefix was transferred because it occurs more frequently in CEO languages than the reciprocal prefix.

With regard to the L2 features which are affected by transfer, many are not very frequent at all, and often rare compared to other constructions. For example, the possessive construction with *belong (to)*, as in *this house belongs to Fred*, which came into MP as NP *blong* NP, is certainly not as common as the construction with the possessive clitic written as 's, as in *this is Fred's house*. Here it seems that perceptual salience of an L2 form is more significant than frequency. As discussed above, free stressed morphemes from the L2 are more likely to be utilized by the pidgin or creole. This would certainly explain the adaptation of *belong* over the more frequent possessive clitic.⁸ However, if native speakers of the lexifier language engage in foreigner talk, and alter their models according to principles such as Naro's Factorization Principle mentioned above, then there would be a greater frequency of transparent, perceptually salient morphemes in the input.

The second aspect of frequency predicts that features prevalent in the contact environment are more likely to be retained in the emerging contact variety during stabilization (Trudgill 1986). This frequency is closely related to the degree of typological similarity of the substrate languages. The more common a particular feature is, the greater the chance it has of being transferred. Furthermore, the larger the number of substrate speakers having the transferred feature in their language, the greater chance it has of being understood and being used repeatedly as a successful communication strategy. Thus, when common shared substrate features exist, they have the potential to occur frequently in the contact environment because of recurring transfer into the contact language and reinforcement by the substrate languages. This would account for the high degree of substrate influence in contact languages with typologically similar substrates (Sankoff 1984; Mufwene 1986; Keesing 1988; Singler 1988; Thomason and Kaufman 1988; Corne 1995) even when substrate features are marked. The key factor is frequency, as pointed out by Mufwene (1990: 12):

When most of the substrate languages (as in Melanesia) . . . are typologically similar, many of their relevant features will be selected by the relevant creole. Even if, based on their distribution in the world, the selected features may be considered marked, the contact situation makes them unmarked, due particularly to their frequency.

⁸ Another possible example is the ubiquitous MP preposition *long* (< along). Although *along* is not a very frequent preposition in English, it is one which generally receives more stress than others—as in *He walked along the beach* versus *He walked on the beach*.

However, in the case of MP, it seems that as common CEO structures, all eleven features considered here should have been frequent in the contact environment and thus retained. But four of them are not found in MP. Could it be, then, that for some reason the seven retained features were heard more frequently than the four others?

One possibility for greater frequency may have been the occurrence of the same features in other languages in the contact environment. In the case of the development of MP, there was clearly some input from a previously established contact language with several features coincidentally corresponding to those of CEO languages. This was New South Wales Pidgin English (NSWPE), which developed in Australia in the late 1700s and early 1800s (Troy 1990, 1994; Baker 1993; Baker and Mühlhäusler 1996).⁹ This input may have occurred via the Pacific Islanders who were brought to Australia as labourers or via Australian sailors and traders who travelled through the Pacific.¹⁰ The corresponding NSWPE features are given in (11) to (13) with illustrative examples from the literature:

- (11) transitive suffix ‘him’:
massa like him black pellow
 ‘master likes the blacks’ (Dawson 1830 in Baker 1993: 41)
- (12) preverbal causative marker ‘make him’:
Debble debble make him boy massa.
 ‘The devils will kill [make die] master.’ [*boy* = ‘die’]
 (Dawson 1830 in Baker 1993: 53)
- (13) postnominal possessive marker derived from ‘belonging’:
Massa dat Piccaninny (child) blongen me . . .
 ‘Master, that’s my child . . .’ (Dawson 1826 in Troy 1994: 586)

Thus, some common CEO features may have occurred more frequently in the contact environment as a result of diffusion of similar features from NSWPE, as well as from transfer. The role of the typologically similar substrate languages for MP was important in both instances in reinforcing the use of these features and ensuring their retention in the emerging pidgin when levelling of variants occurred (see Chapter 7). However,

⁹ The corresponding features were most probably the result of coincidental similarities in the unrelated substrate languages—for example, postverbal transitive marking found in both Australian Aboriginal and CEO languages.

¹⁰ In 1847, 140 men from what is now Vanuatu, Kiribati, and the Loyalty Islands (New Caledonia) were brought to New South Wales to work in the pastoral industry (Howe 1978). From 1863 to 1904, over 60,000 from these countries as well as the Solomon Islands and Papua New Guinea were brought to Queensland to work on sugarcane plantations (Price and Baker 1976). (See Chapter 7.)

some of the CEO features found in MP, such as the subject-referencing marker and the pronoun system, were not found in NSWPE, and so extra frequency due to contact with the existing pidgin cannot explain their presence.

On the other hand, lack of frequency in the contact environment during levelling may explain the absence of one of the CEO features: the articles. As mentioned earlier, the languages of Vanuatu generally do not have articles (Lynch 1993: 153, 1998: 110), and from 1863 to 1882, when MP began to stabilize on the plantations, labourers from Vanuatu made up more than three quarters of the total number, as can be seen in Table 4.2. Thus, speakers of languages with articles would have been a minority, and the transfer of articles, if it had occurred, would have received insubstantial reinforcement during the formative stages of MP.

However, all ten of the other common CEO features are found in Vanuatu languages. So while the factor of frequency in the contact environment may explain why seven of the eleven CEO features are retained in MP and one is not, it does not explain why the other three are absent. It seems that if these three common features were transferred at an earlier stage, they also would have all been commonly heard during stabilization and thus retained as well. The fact that these three features were not retained leads to the conclusion that for some reason they were not originally transferred. A relevant constraining factor, therefore, still needs to be identified.

6.3.2.6 *Equivalence and congruence*

Weinreich (1970 [1953]: 7–8) notes that linguistic interference (i.e. transfer) occurs as the result of ‘interlingual identification’—i.e. when bilinguals treat differing features of their two languages as being equivalent because of some superficial resemblances between the features. According to Weinreich (1970 [1953]: 39), ‘replica functions for equivalent morphemes’, or what I have been calling instances of functional transfer, are more likely to occur when morphemes or categories in the two languages have ‘formal similarity or a similarity in pre-existing functions’. An example of transfer due to formal similarity may be the use of English *stay* in Hawai‘i Creole modelled on Portuguese *estar*. More important, however, is functional similarity, discussed in more detail below.

Similarly, Heine and Kuteva (2005: 4) say that transfer of linguistic material from one language to another depends on ‘some way of equating a grammatical concept or structure Mx of language M (= the model language)

with a grammatical concept or structure Rx of language R (= the replica language). They apply the term ‘equivalence’ to ‘situations where a use pattern or category in one language is conceived or described as being the same as a corresponding use pattern or category in another language’ (p. 220). The most important parameters for establishing equivalence are semantic or functional rather than structural (p. 229). Heine and Kuteva (2005: 234–6) further discuss some possible constraints on establishing equivalence. One of these is typological dissimilarity—that languages must have structural similarities for transfer to occur. Thomason and Kaufman (1988: 54) also put forward a hypothesis that ‘in cases of light to moderate structural interference, the transferred features are more likely to be those that fit well typologically with corresponding features in the recipient language’. However, after examining the evidence, Heine and Kuteva (2005: 234–5) conclude that transfer can occur even when the languages are typologically dissimilar.

On the other hand, a constraining factor proposed in the SLA literature is that there must be at least some superficial syntactic congruence if transfer is to occur. This is Andersen’s (1983*b*) ‘Transfer to Somewhere Principle’, originally stated as follows:

A grammatical form or structure will occur consistently and to a significant extent in interlanguage as a result of transfer *if and only if* there already exists within the L2 input the potential for (mis-)generalization from the input to produce the same form or structure. (1983*b*: 178, italics in original)

In other words, transfer can occur only if there is a feature in the L2 superficially similar enough to a feature in the L1 that it can be misinterpreted as corresponding to L1 rules. A particular L2 structure may appear to provide a model for an L1 structure that does not really match, or a particular L2 form may become a template for apparently related L1 grammatical functions or meanings. As an example of this principle in operation, Andersen (1990: 61) notes that English learners of French place object pronouns after the verb, following English rules—for example, **je vois les* ‘I see them’—rather than before the verb, following French rules for object clitic pronouns: *je les vois*. This is because in French, full object NPs come after the verb, as in *je vois les enfants* ‘I see the children’, and this is the model that English speakers use for postverbal placement of object pronouns. However, French learners of English do not place object pronouns before the verb, following French rules. Andersen claims that this is because no model for preverbal placement of object NPs occurs in English.

Andersen's revised Transfer to Somewhere Principle (1983*b*: 182, 1990: 61) is more explicit about congruence and includes other factors, some of which were discussed above:

Furthermore, in such transfer, preference is given in the resulting interlanguage to *free, invariant, functionally simple* morphemes which are congruent with the L1 and L2 (or there is congruence with the L1 and L2 acquisitional processes) and [to] morphemes [which] occur *frequently* in the L1 and/or the L2. [italics in original]

The final aspect of this constraint is along the lines of the functional similarity or equivalence proposed by Weinreich and Heine and Kuteva: there must be some function or meaning shared between the L2 forms serving as templates and L1 features transferred onto them.

6.3.2.7 Summary

In summary, if we put all the relevant constraints together, we see that for a substrate feature to be transferred, it must have 'somewhere to transfer to' (Andersen 1983*b*)—i.e. there must be a lexical morpheme (or string of morphemes) in the L2 (here, the expanding pidgin or the lexifier) that can be reanalysed according to the functions of a grammatical morpheme in the L1 (here, one of the substrate languages). This L2 form must be perceptually salient and have a function or meaning related to that of the corresponding L1 morpheme, and it must be in the same surface syntactic position within the phrase. The absence of such a form in the L2 or the lack of superficial structural congruence will constrain transfer, and thus the availability of the particular substrate feature.

With regard to the seven core CEO features found in MP, it appears all of these L1 features would have had somewhere to transfer to in the L2. The developing pidgin provided a perceptually salient form, or a string of forms, originally from English, as a template onto which the CEO form-function relationships could be superimposed because of semantic similarities. Although not dealing specifically with transfer constraints, Keesing similarly points out that English 'provided free forms as lexical items that could be equated with Oceanic grammatical elements' (1988: 123). Examples are given below of plausible English structures that could have served as templates for reanalysis according to CEO rules. Below each, the structure is given in a CEO language. Below that is the gloss of the CEO structure:

(a) *resumptive pronouns (or pronoun copies), common in many varieties of English, reanalysed as subject-referencing pronouns* (Keesing 1988: 143–4):

- (14) English: the man from 'Are'are **he** did it.
 Kwaio: *wane i 'Are'are ka age-a*
 man LOC 'Are'are 3SG do-TR
 Bislama: *man blong 'Are'are i mek-em*

(b) *pronominal direct or indirect object him (or them) reanalysed as a transitive suffix:*

- (15) a. English: I took **him**
 To'aba'ita: *ku ngali-a*
 1SG take-TR
 Bislama: *mi kar-em*
- b. English: they give **him** taro...
 Kwaio: *la kwate-a go'u...*
 3PL give-TR taro...
 Bislama: *oli giv-im taro...*

(c) *predicate adjectives reanalysed as stative verbs:*

- (16) English: the man he's fat
 Tangoa: *tamioci mo paru*
 man 3SG fat
 Bislama: *man i fatfat*

(d) *preverbal make reanalysed as a causative marker:*

- (17) English: **make** it dirty
 Nguna: *vaka- loaloo*
 CAUS- dirty
 Bislama: *mekem i doti*

(e) *verb belong reanalysed as a postnominal possessive marker:*

- (18) English: the house **belongs to** Marika
 Kwaio: *'ifi a-la Marika*
 the house POSS M.
 Bislama: *haos blong Marika*

(f) *all reanalysed as third-person plural pronoun and plural marker:*

- (19) English: **all** women
 Raga: *ira vavine*
 3PL woman
 Bislama: *ol woman*

(g) combinations of pronouns and other morphemes reanalysed (generalized) as inclusive/exclusive and dual/trial pronouns:

- (20) a. English: **you and me**
 Tangoa: *en̄a*
 1 PL.INCL
 Bislama: *yumi*
- b. English: **you** **two fellows**
 Tangoa: *kamim- rua*
 2 NONSG two
 Bislama: *yu- tu -fala*

With regard to the three remaining CEO features not found in MP, there does not appear to be a structure from English, or in an available pre-existing pidgin, that would have provided the necessary template for transfer. First, as noted by Keesing (1988: 118), there is no pattern from English that could have been reanalysed to produce suffixed forms for inalienable nouns, like **mother-me* ‘my mother’ or **head-him* ‘his head’, following the CEO pattern. Second, while *each other* would have been available from English, it follows the verb and there is no preverbal form that could be reanalysed as a marker of reciprocity. Third, English adjectives almost always precede, not follow, nouns.¹¹ On the other hand, place names and other noun modifiers following the noun (with an unstressed preposition intervening) are quite common, such as ‘man from Tanna’ and ‘bunch of taro’. This might explain why in MP, noun modifiers follow the head noun, according to the CEO pattern.

Thus, since these three CEO features had nowhere to transfer to, it is unlikely that transfer occurred, and this is why these substrate features are not found in MP. So congruence appears to be the most relevant factor constraining transfer. It is also likely that the existence of congruent structures in L2 and the lexifier is an important factor in reinforcing certain features during levelling and therefore ensuring their retention in the stabilized contact variety, as described in the following chapter.

The need for somewhere to transfer to would also explain why the equivalent of the Cantonese postverbal perfect aspect marker is found in Hawai‘i Creole while equivalents of other aspect markers from the language are not. The English adverb *already* has a meaning similar to that of perfect aspect—i.e. indicating the completion of an action, as in *She ate already*. And this

¹¹ Mühlhäusler (1986: 48–9) points out the existence of some English adjectives that follow nouns, as in ‘money galore’, but these are quite infrequent.

adverb follows the verb, as the Cantonese perfect marker does. Thus, as there was somewhere to transfer to, transfer occurred; *awredi* entered the pool of variants as a perfect marker, and this feature was retained in the creole. English also has adverbs or other expressions with meanings similar to other Cantonese aspect markers, such as *usually* for habitual and *keep on* for continuous. But these occur before the verb, as in *I usually play tennis* and *They keep on staring*. Since these forms are not congruent with the postverbal markers in Cantonese, transfer did not occur. In other words, these particular substrate features were not available because of constraints on transfer.

6.4 Discussion

Scholars such as Goodman (1985: 134) and Crowley (1990a: 252) have suggested that the nature of substrate influence in a pidgin or creole is affected by several factors, including principles of language acquisition, psycholinguistic constraints, and particular structural characteristics of both the lexifier and the substrate languages themselves. It seems clear that if there is substrate influence in a pidgin or creole, there must have been transfer of substrate features at an earlier stage of development. But, as we have seen, not all substrate features are transferred. Of the potential constraints on transfer examined in this chapter, congruence and perceptual salience appear to account best for both the particular substrate features that were transferred and the kinds of forms from English that were reanalysed to fit substrate patterns. These depend on the structural characteristics of both the substrate languages and the lexifier. Thus we saw in the case of MP that the requirement for transfer was a perceptually salient morpheme or string of morphemes from English which could be misinterpreted as being congruent with structures of the CEO substrate because of a related function or meaning and the same syntactic position. The absence of such congruence meant that transfer was unlikely to occur and therefore was a constraint on the availability of the particular substrate feature.

Other authors in pidgin and creole studies have pointed out this constraint in different terms. For example, with regard to the plantation creole in Suriname, Migge (2003: 123) writes:

The second factor that played a role in the retention of L1 features was the availability of an English structure to which the L1 structure could be applied. The creators of the plantation creole could only retain an L1 structure or feature if they were able to identify an English source structure that could function as

a basic frame onto which the L2 structure could be projected. That is, the agents had to be able to establish (perceived) semantic and syntactic similarities between an English and an L1 structure.

On the question of the retention of particular transferred features, the most significant reinforcement principle appears to be frequency in the contact environment resulting from typologically similar substrate languages. Thus, the transferred features that were retained in MP were those reinforced by their occurrence in a majority of CEO substrate languages in the contact environment at the time of stabilization. I call this 'substrate reinforcement'. Frequency seems to have outweighed other principles, such as markedness based on typological universals of languages, that may be more important when there is no particularly frequent feature. Finally, when two different forms of a transferred feature were in competition, perceptual salience may have played a part in determining which was retained.

However, there are two problems with this analysis of availability constraints, as some readers may have noticed. The first has to do with the role of the lexifier as a constraining factor, and the second with cases of functional transfer without syntactic congruence. I discuss each one in turn.

6.4.1 The role of the lexifier

In Chapter 4 we saw that the lexifier may provide some grammatical features to an expanding pidgin. In the preceding analysis, the lexifier is shown to play an important role, not only in supplying lexical forms for the expanding pidgin but also in constraining transfer of functional features from the substrate. However, there are also certain constraints on the influence of the lexifier. The most important of these appears to be the availability of this language during the time that the pidgin is expanding and people are shifting to it as their primary language. With regard to Tok Pisin, for example, the lexifier, English, was hardly available at all when the language began to expand in Samoa and the New Guinea islands because these areas were then under German control. Thus, features from English were not available as sources of expansion, and none would have reached the pool of variants. As a result, Tok Pisin has few, if any, grammatical features that can be attributed to English. In contrast, speakers of Hawai'i Pidgin English had a great deal of exposure to English because Hawai'i was controlled by the USA, and children learned English in school. Therefore, features from English were available as sources of expansion and some became

part of the pool of variants used for communication. Of these, some were retained in the emerging creole because of reinforcement from English in the environment—for example, the *-ing* suffix. But because of the importance of identity construction, as discussed in the preceding chapter, some of the features of English in the pool of variants may not have been retained, having been levelled out in favour of other features with more covert prestige—such as those derived from the substrate languages.

With regard to constraints on transfer, we have just seen, first, that the lexifier must have a perceptually salient lexical morpheme that can be interpreted as having a function equivalent to a grammatical morpheme in a substrate language. Second, this lexical morpheme has to be in the same syntactic position as the corresponding grammatical morpheme of the substrate language. The problem, however, is that as we have just seen in the case of some expanding pidgins such as Tok Pisin, the lexifier is hardly available at all. And even in cases where it is available—e.g. in Hawai‘i—some lexifier features are avoided because of identity construction. Furthermore, we have postulated in Chapter 5 that there is target shift, so that the lexifier is no longer the target when morphological expansion occurs. Thus, the L2 that is being used is the expanding pidgin, not the lexifier, and the bilingualism we are talking about is between a substrate language and the pidgin.

Nevertheless, the lexifier is still relevant—although indirectly. It is the lexifier that has provided the lexical morphemes to the pidgin. And it is the lexifier that has also determined the syntactic ordering of these morphemes. The lexifier is the target L2 in the development of a restricted pidgin, and while a restricted pidgin does not have any grammatical morphology from the L2, it has acquired the basic word order of the L2, like the Basic Variety. And, as shown in Chapter 5, word order is a much more salient feature than other aspects of grammar. Therefore, while speakers of an expanding pidgin have not acquired the grammar of the lexifier, they have knowledge of its basic word order indirectly through what has already come into the pidgin. Thus, while both the morphemes that are the site of transfer and their syntactic positions originated in the lexifier, they have been adopted by the pidgin, which is the language being used and expanded.

6.4.2 Transfer without congruence

The second problem is that functional transfer has been reported to occur when there is semantic but not syntactic congruence. For example, Bao (2005) demonstrates that in Singapore English the properties of the Chinese

marker of experiential aspect (*guo* in Mandarin) have been transferred to the English word *ever*—as in the following (p. 244):

(21) *I ever tried this type of fruit before.* ‘I have tried this type of fruit before.’

However, the experiential aspect marker follows the verb in Chinese languages, whereas *ever* precedes the verb in English. Therefore, according to the constraints outlined above, transfer would not have been expected.

Bao (2005: 258) proposes two different constraints. The first is ‘system transfer’—that an entire grammatical subsystem transfers, not just particular items from the system. So, for example, Bao claims that the entire Chinese aspect system was transferred to Singapore English, thus accounting for *already* as the perfect marker (see Section 6.3 above), *ever* as the experiential marker, and other aspectual markers. The second constraint is ‘lexifier filter’—that the lexifier ‘acts as a filter, sifting out those categories of the transferred subsystem for which its grammar cannot provide straightforward morphosyntactic exponence’ (pp. 237–8). Thus, the Chinese aspect markers that have equivalents in Singapore English are the ones that can be expressed by similar morphosyntactic means in both Chinese and English—that is, with preverbal or postverbal functional morphemes. The Chinese aspect markers that do not have equivalents in Singapore English are those for which the lexifier has no similar morphosyntactic means of expression. For example, tentative aspect is indicated by reduplication in Chinese, but reduplication is not a productive morphological process in English, so this aspect is not found in Singapore English (p. 262). Bao (2005: 260) says that the lexifier filter constraint is ‘weaker than congruence’ in that it allows for transfer of the *V + guo* experiential aspect marking as *ever + V*, and therefore it better accounts for the data.

Certainly, this constraint seems to work for the data in typical long-term bilingual language contact situations. As mentioned above, Heine and Kuteva (2005) point out that the main factor promoting transfer in contact-induced language change is perceived functional equivalence, not necessarily structural equivalence. However, the lexifier filter constraint cannot account for the data shown above in the morphological expansion of Melanesian Pidgin and Hawai‘i Pidgin English. For example, if this constraint, rather than congruence, were in operation with regard to Melanesian Pidgin, transfer of the entire CEO system of possessive marking would have been expected, and there would have been no reason for the alienable/inalienable distinction not to be marked according to English morphosyntax. With regard to Hawai‘i Pidgin English, transfer of the entire Cantonese aspect system would have

been expected, and there would have been no reason for the lack of transfer of the postverbal habitual marker to a preverbal English adverb, such as *usually*. Another deficiency of this constraint is that in the expansion of pidgins, as we have also seen above, the lexifier may not be available, and even if it is, the details of its deeper morphosyntax are not known and therefore cannot be constraints. Thus, we find morphological processes in expanded pidgins and creoles that clearly do not have similar morphosyntactic means of expression in the lexifier—for example, the productive use of reduplication for a variety of functions, as in Bislama. An example of partial reduplication of the verb used to indicate reciprocal action is found in (7) above. It is also used to indicate continuous, repeated, or habitual action, as in the following examples (from Crowley 2004: 75):

- (22) a. *Tufala i rao~rao, be toktok i no finis yet.*
 ‘They argued on and on, but the discussion isn’t over yet.’
 b. *Pikinini ia i ja~jam olbaot long yad.*
 ‘That child jumped all over the yard.’
 c. *Joseph gia~giaman oltaim nomo.*
 ‘Joseph always lies.’

Therefore, Bao’s constraints may work for indigenized varieties, where speakers have greater knowledge of the lexifier language, but they do not seem to be very useful in the pidgin and creole context.

Another disadvantage of Bao’s constraints is that they do not really constrain transfer. System transfer says nothing about what kinds of systems can be transferred and what kinds cannot. Functional categories from the substrate that are missing in the contact language are assumed to have been transferred, but then ‘filtered out of the transferred system’ (Bao 2005: 259). The implication, then, is that transfer is unconstrained. This is analogous to the Relexification Hypothesis (Chapter 5), which assumes that if there is no suitable phonetic string in the lexifier on which to copy the properties of the substrate lexical entry—i.e. nowhere to transfer to—then the properties of the substrate lexical entry are assigned a null form at relabelling (Lefebvre 1998: 44). In both cases, transfer is thought to occur unconstrained. The advantage of the congruence proposal is that it constrains transfer itself, and therefore there is no need to postulate the abstract filtering out of features or the presence of underlying features with no surface representation. Another advantage of the congruence view is that it allows for partial transfer—i.e. the transfer of only some properties of the substrate functional item, which clearly occurs—whereas the transfer of entire systems implies that all

properties must be transferred, again similar to the view of the Relexification Hypothesis (see Section 5.6.2).

A final point is that the proposed congruence constraints are not meant to be absolute; in other words, they do not say that transfer is impossible if there is no available morpheme that is both perceptually salient and syntactically congruent. Rather, the lack of such a morpheme constrains transfer—that is, makes it less likely. Therefore, these availability constraints would lead to the prediction that transfer will not occur, but it does not rule out the possibility.

Chapter 8 tests the predictions of the availability constraints, along with those of the reinforcement principles, one of which is described in more detail in the following chapter.

7 Substrate Reinforcement

This chapter examines in more detail the role of the principle of substrate reinforcement, as introduced in the preceding chapter, in the stabilization of an expanded pidgin. I follow Mühlhäusler's (1997: 162) definition of stabilization as the reduction of variability and the establishment of firm grammatical conventions. My assumption, as throughout earlier chapters, is that in the process of stabilization, some variants are levelled out, while others are retained to become features of the expanded contact language. Substrate reinforcement occurs when a particular variant has a corresponding feature in the numerically or socially dominant substrate language or languages. By a corresponding feature, I mean one that is in the same surface syntactic position and that can be interpreted as having the same or a closely related function.

The first part of this chapter is a case study of Melanesian Pidgin. This is followed by a shorter account of substrate reinforcement in Hawai'i Creole and other contexts, and discussion of substrate influence versus transfer.

7.1 From variability to stability: Early Melanesian Pidgin¹

As mentioned in earlier chapters, Melanesian Pidgin (MP) is spoken in three countries of the southwest Pacific, each with its own dialect: Papua New Guinea Tok Pisin, Vanuatu Bislama, and Solomon Islands Pijin. These dialects are differentiated by a number of lexical, phonological, and morpho-syntactic features.

Clark (1979) and Mühlhäusler (1979, 1985*a*) say that MP stabilized in the 1870s and 1880s on the plantations of Queensland and Samoa, while Keesing (1988) proposes an earlier date. However, here I argue that at least some of the salient grammatical features of MP did not stabilize until much later, based on the fact that several variants for these features were still in use until the early twentieth century. It was at this time that more complete stabilization began, and this took place on the internal plantations of the New Guinea islands, the Solomon Islands, and the New Hebrides (now Vanuatu).

¹ Sections 7.1 and 7.2 are based on Siegel 1998.

The existence of several variants in earlier, unstable MP can be seen in quotations given by European observers in the contemporary literature. For example, several forms were used for the third-person pronoun, as shown by these quotations:

- (1) a. *He no kaikai him.* (Goodenough 1876: 292)
- b. ... *him catch-em altogether boy.* (Cromar 1935: 138) [1884–5]
- c. ... *you catch them Mr Man-a-Wi-Wi.* (Rannie 1912: 225–6)
- d. *Suppose woman cross she make plenty noise.* (Coote 1882: 206)
- e. *What name you give it belong a boy?* (Giles 1968 [1877]: 41)
- f. *'E no make something.* (Jacomb 1914: 93)
- g. *'Im e go.* (Jacomb 1914: 92)
- h. *I kasèm hème.* (Pionnier 1913: 195, quoted in Crowley 1990a: 222)

In the case of Tok Pisin, for example, when levelling occurred, only *em* was retained as the third-person pronoun. Some variants were eliminated and are no longer found in any variety of MP—i.e. *he*, *him*, *she*, *it*, and *them*. However, others were reallocated different functions, either linguistic or social (Trudgill 1986). Thus, *'e* became the subject-referencing pronoun or predicate marker *i*, and *'im* became the transitive suffix, as in the following example:

- (2) *Em i rait-im pas.*
 3SG SRP write-TR letter
 'He/She wrote a letter.'

Also *hem* rather than *em* remained as the general third-person pronoun in other dialects, and thus functions as a regional marker.

In this and the following section, I demonstrate that the morphosyntactic differences in the three dialects of MP can be accounted for by typological differences in the substrate languages of the three geographic areas in which they stabilized. In other words, during stabilization, differing substrates reinforced different variants.²

This section presents some evidence of variability in the Melanesian Pidgin of the late nineteenth and early twentieth centuries and outlines the social and linguistic conditions which later led to greater stability. Section 7.2 examines five grammatical areas in which there are differences in three current dialects of MP. For each area, historical and/or distributional evidence is presented showing that at least two variants were in use before World War

² For a description of the lexical differentiation of the three dialects, see Tryon and Charpentier 2004: 349–92.

I. Then evidence is presented showing structural and semantic congruence between the particular variant found in the dialect and a corresponding feature of the substrate languages of the area.

7.1.1 Variability in early Melanesian Pidgin

Keesing (1988) proposes that a stable, homogeneous and ‘quite grammatically developed’ (p. 25) Pacific Pidgin English had emerged by 1860 and provided the basis for Melanesian Pidgin. His view is that because of this earlier pidgin, the ‘essential syntactic and semantic/lexical patterns of Melanesian Pidgin’ were ‘in place’ by the 1870s and 1880s, and he lists sixteen of these (pp. 48–50). But while some of these features can be identified in the early data, they were not consistent or systematic (see Siegel 1990c). For example, while Keesing says that the transitive suffix *-im* or *-em* was regularly used by the 1870s, his own examples from literature around this period show a great deal of variability:

- (3) a. ... *me too much like-em smoke.* (Keesing 1988: 43)
b. *Tanna man he no too much like work.* (p. 31)
- (4) a. *Misi make him bokis sing.* (p. 31)
b. *What for you make paper about man Aniwa?* (p. 32)
- (5) a. *Me no want-'im school.* (p. 45)
b. ... *he no want clothes.* (p. 32)
- (6) a. ... *what name you give it belong a boy?* (p. 43)
b. *All right, you give me ten stick tobacco and I give 'em you head belong my small fellow brother.* (p. 42)
- (7) ... *me take him altogether trade ... me take everything.* (p. 44)
- (8) ... *he been hit him Cao first time ... He then hit me first time ...* (p. 45)

Crowley (1990a: 286–7) also shows that there was actually a great deal of variability in the presence or absence of the transitive suffix, and that in written sources from the period between 1870 and 1885, only 27 per cent of verbs in Verb + Object sequences were marked with *-im* or *-em*. He clearly demonstrates that in the development of the Vanuatu dialect of Melanesian Pidgin, this feature, and many others described by Keesing (1988), did not actually become regularized until the first part of this century. (See also Sankoff 1980.)

Thus, during the Pacific labour trade, from 1863 to the turn of the century, many aspects of the early form of Melanesian Pidgin spoken by the labourers were still highly variable, consisting of not only the features listed by Keesing (1988) but also other features from earlier contact varieties (such as New South Wales Pidgin English), from both standard and non-standard varieties of the lexifier, English, and from transfer in second language use. More complete stabilization took place only when the labourers went back to their own islands and used this pool of features as a lingua franca among themselves.

7.1.2 The second plantation era and stabilization

The situation that promoted this stabilization was the wider use of the language in a more typologically homogeneous linguistic environment. An important factor often overlooked in descriptions of the origins of Melanesian Pidgin is the large-scale internal labour force which worked on the plantations of New Guinea, the then New Hebrides, and the Solomon Islands after the external labour trade had ended (see Siegel 1998; Tryon and Charpentier 2004). Table 7.1 gives figures for the total number of Melanesian labourers recruited for both external and internal migration to work in plantations, taken from Munro (1990: xlv–xlvii). From these figures, it is clear many more Melanesians were involved in the second plantation era, i.e. in internal plantations, than in the first plantation era in Queensland, Samoa, and Fiji.

As pointed out by Jourdan (1985: 69–70) for the Solomon Islands, when labour recruiting for the internal plantations began in 1910, the first to sign

Table 7.1. Number of Melanesians involved in labour migration

| | Years | Number of Melanesians |
|------------------------|-----------|-----------------------|
| External migration to: | | |
| Queensland | 1863–1904 | 62,080 |
| Samoa | 1878–1913 | c.10,000 |
| Fiji | 1865–1911 | 24,044 |
| TOTAL | | c.96,124 |
| Internal migration in: | | |
| German New Guinea | 1884–1914 | c.85,000 |
| Australian New Guinea | 1920–40 | 279,598 |
| New Hebrides (Vanuatu) | 1908–41 | 54,110 |
| Solomon Islands | 1913–40 | 37,871 |
| TOTAL | | c.456,579 |

up were labourers who had already worked in plantations overseas, and most of these had worked in Queensland or Samoa where earlier forms of Melanesian Pidgin were spoken.³ Their use of Melanesian Pidgin was then 'reactivated' for this second plantation era. The same can be said for New Guinea and Vanuatu.

On the plantations of Queensland and Samoa, labourers came from all over Melanesia and from many areas of Micronesia, and they spoke diverse Austronesian languages from many different groups and subgroups and also some non-Austronesian languages. But on the internal plantations, the substrate languages were more similar to each other, especially in the earlier years when most of the labourers were recent returnees from overseas plantations. This was another important factor that contributed to the emergence of more stable varieties of Melanesian Pidgin.

About 6,000 labourers from German New Guinea had gone to Samoa during the period 1879–1912 (Mühlhäusler 1978: 78) and 3,119 to Queensland during 1883–4 (Price and Baker 1976: 110–11). As pointed out in Chapter 4, nearly all of these labourers were from the New Guinea Islands. About 20 per cent were from the Gazelle peninsula of New Britain, where only one language, now called Tolai, was spoken (Mosel 1980: 4). Approximately 50 per cent were from New Ireland and neighbouring small islands, where many languages were spoken, but all closely related to Tolai and belonging to the Meso-Melanesian Cluster of Western Oceanic languages (Lynch, Ross, and Crowley 2002). The labour force of the internal plantations was made up mostly of labourers from these same areas, and until the turn of the century most of the plantations were located there as well (Firth 1976: 53; Mühlhäusler 1978: 109).

With regard to Vanuatu, 39,975 labourers went to Queensland during the years 1863–1904, and 1,201 to Samoa during 1878–85 (Crowley 1990a: 88–9). These labourers came from all over Vanuatu, but in the last twelve years of the plantation era in Queensland, 5,202 out of the total of 5,795 Vanuatu labourers (86.3 per cent) came from the central or northern islands of the group (based on Price and Baker 1976: 110–11), and spoke closely related Eastern Oceanic languages of the North-Central Vanuatu subgroup. With regard to internal migration, between 1911 and 1939, 28,609 out of 30,357 labourers (94.2 per cent) also came from these areas (based on Crowley 1990a: 104–5). Furthermore, from 1910 to 1930 at least 97.5 per cent of the internal labourers worked on plantations located in these same areas.

³ Again, as noted in Chapters 2 and 4, Pidgin Fijian rather than any form of pidgin English was spoken on Fiji's plantations.

Table 7.2. Major language group of returned labourers at the end of the external labour trade

| Country | Years | Major language group | Percentage of country total |
|------------------------|-----------|--|-----------------------------|
| German New Guinea | 1879–1912 | Western Oceanic (Meso-Melanesian Cluster) | c.70–90% |
| New Hebrides (Vanuatu) | 1893–1904 | North-Central Vanuatu | 86% |
| Solomon Islands | 1893–1904 | Southeast Solomonian | 98% |

The area which had the largest number of labourers during this period (50.1 per cent) was the central island of Efate.

From the Solomon Islands, 18,217 went to Queensland during 1871–1904 (Price and Baker 1976: 110–11) and 618 to Samoa during 1880–5 (Mühlhäusler 1978: 78). These labourers came from all over the Solomons, but in the last twelve years, 8,179 out of the 8,306 Solomon Islands labourers (98.5 per cent) were from the southeast islands, speaking the closely related languages of the Southeast Solomonian subgroup. Of these, approximately 65 per cent were from the island of Malaita. With regard to internal migration, Shlomowitz and Bedford (1988: 77) show that over 90 per cent of the labourers were from these same islands: 67.6 per cent from Malaita, 15.4 per cent from Guadalcanal, 5.9 per cent from Makira (San Cristobal), and 1.2 per cent from Gela (Nggela).

This information is summarized in Tables 7.2 and 7.3.

7.1.3 The emergence of separate dialects

Keesing (1988) agrees with Mühlhäusler (1978), Jourdan (1985), Crowley (1990a), and other scholars who show that the development of the separate dialects of Melanesian Pidgin occurred when the external plantation

Table 7.3. Major language group of labourers at the beginning of the internal labour trade

| Country | Years | Major language group | Percentage of country total |
|------------------------|-----------|--|-----------------------------|
| German New Guinea | 1884–1914 | Western Oceanic (Meso-Melanesian Cluster) | c.70–90% |
| New Hebrides (Vanuatu) | 1911–39 | North-Central Vanuatu | 94% |
| Solomon Islands | 1913–40 | Southeast Solomonian | 90% |

labourers returned to their home islands. No one argues the fact that in each country the grammar of Melanesian Pidgin was gradually ‘bent in the direction of the dominant substrate languages’ (Keesing 1988: 172) and its lexicon was supplemented by items from these languages.⁴ However, there is one point of disagreement, again relating to the Eastern Oceanic grammatical features that were supposedly established in Melanesian Pidgin before dialect differentiation occurred. In accounting for differences between Tok Pisin and the other two dialects, Bislama and Pijin, Keesing (1988: 115) argues that some of these established grammatical features had ‘withered’ away when they were transplanted to the ‘alien linguistic soil’ of the non-Eastern Oceanic New Guinea Islands.

I am arguing for a slightly different scenario. As shown above, these features may have been used as variants by some speakers, but they were not established as regular grammatical patterns. When labourers returned to their islands, they brought back with them a contact variety which still had a great deal of variability and used it for communication on the internal plantations. At this time, the use of particular variants was reinforced by similar features found in the relatively similar local substrate languages, and these variants remained to become features of the current dialect. In contrast, other variants, some from the lexifier and others similar to the unfamiliar languages of other islands, were not reinforced, and these gradually disappeared or were reallocated new functions. In other words, levelling occurred and substrate reinforcement was one factor that accounted for the retention of particular features. According to this view, then, the levelling that occurred in the New Guinea Islands, Solomon Islands, and Vanuatu had different results because of differing substrates, and this would account for the dialectal differences. The next section examines the evidence for this point of view.

7.2 Early dialectal differences

There are only about fifteen to twenty grammatical features which distinguish the three regional dialects of Melanesian Pidgin. Out of these, I have identified five areas in which the differences go back to earlier variation rather than recent developments (in the last eighty years). These are: demonstratives, the adjectival and numeral marker, relative clause marking,

⁴ Similarly, Singler (1988) has shown that grammatical differences in varieties of Liberian English can be accounted for by differences in the substrate languages.

progressive aspect marking and abilitative modality marking. Each of these areas is described in turn. For each one, the differences among the dialects are first illustrated. Then documentary or distributional evidence is presented showing that the differing features were available as variants. Finally, examples from representative substrate languages are given when there is a corresponding feature which could have reinforced the use of the variant retained by that dialect.

The documentary evidence consists of examples from the literature of the use of the different variants before the end of World War I. The distributional evidence is the occurrence of the variants as features or residual features in Tok Pisin and either Bislama or Pijin or both. This is because, as shown in Chapter 4, Tok Pisin split from the other two dialects in 1885 when labourers from the New Hebrides and Solomons stopped going to Samoa and labourers from New Guinea stopped going to Queensland.

The particular substrate languages used to illustrate this analysis are Tolai for Papua New Guinea Tok Pisin; Nguna and Tangoa for Vanuatu Bislama; and Kwaio and To'aba'ita for Solomons Pijin. These were chosen on the basis of both the availability of data (when I first carried out this study) and evidence that they have had a major impact on the dialect, for example in the lexicon.⁵ However, a total of twenty-six languages have been surveyed. (See the summary in Section 7.3.6.) Abbreviations used in examples are TP (PNG Tok Pisin), VB (Vanuatu Bislama), SP (Solomons Pijin), Tol (Tolai), Ngu (Nguna), Kwa (Kwaio), and To'a (To'aba'ita).

7.2.1 Demonstratives

In Tok Pisin, the demonstrative is generally *dispela* and precedes the noun, while in Bislama, it is *ya* and follows the noun. Pijin uses both prenominal *desfala* or *disfala* 'this' (and for some speakers *datfala* 'that') and postnominal *ia*. Simons (1985: 59–60) shows that it is *ia* which functions as the demonstrative, and Simons and Young (1978: 159) note that *desfala* functions as an article rather than as a demonstrative. In all three dialects postnominal *ia/ya* also has other functions as well, such as focus, emphasis,

⁵ The vast majority of Melanesian words in Tok Pisin are from Tolai (Mosel 1980), and in Pijin from Malaita languages such as Kwaio and To'aba'ita (Simons 1983). Nguna (or Nakanamanga) is a major source for local Bislama items (Crowley 1990a). Also, for the New Guinea Islands, Tolai is numerically the most important language by far. According to figures presented by Beaumont (1972: 13), the number of speakers of Tolai was more than the total of all New Ireland languages put together (63,200 vs 53,585). Furthermore, the total number of speakers of languages in the Patpatar-Tolai subgroup (which includes Tolai, Duke of York, Patpatar, Siar, and Kandas) was 89,350 as opposed to 27,435 for the remaining languages.

or marking a noun phrase previously mentioned in the discourse (see Smith 2002: 154–6). Here are some examples showing demonstratives:

- (9) TP: *Dispela haus i bikpela*.
 VB: *Haos ya i big(fala/wan)*.
 SP: *(Desfala) haos ia i big(fala)*.
 ‘This house is big.’

Both these variants are found in early texts. First, Baker (1993: 24, 1996: 246–7) shows that *this fellow N*, presumably the source of *dispela* and *desfala*, originated in Australia and gives examples from the period before and during the labour trade. However, this form continues to vary with the standard form *this*. Some examples are:

- (10) a. ... *me no belong this fellow place* ... (Giles 1968 [1877]: 41)
 b. ... *me plenty work long that fellow massa long-a-soogar*.
 (Giles 1968 [1877]: 37)
 c. *Dis Kurân belonger me Abdul Khan he sabe readim* ...
 (Thomson 1894: 54)

Examples of ‘N here’, presumably the origin of the N *ya/ia* construction, are also found in early texts, as in the following:

- (11) a. ... *man here no good* ...
 [‘... these men are no good ...’] (Giles 1968 [1877]: 41)
 b. *Plate ’ere ’e kaikai me*.
 [‘This plate burnt me ...’] (Jacomb 1914: 101)

With regard to the substrate languages, Mosel (1980: 114) shows clear parallels between the use of pronominal demonstratives in Tok Pisin and Tolai, where ‘D’ refers to a determinative particle:

- (12) Tol: *nam ra pal*
 DEM D house
 TP: *dis -pela haus*
 ‘this house’

Likewise, Camden (1979: 76) shows parallels between postnominal demonstratives in Bislama and Tangoa. The other North-Central Vanuatu languages I have surveyed all have the N DEM pattern as well—for example, Nguna (Schütz 1969: 63):

- (13) Ngu: *na-atañoli waia*
 person DEM
 VB: *man ya*
 ‘this person’

Similarly, the Southeast Solomonic languages I have surveyed all have post-nominal demonstratives, parallel with Solomons Pijin, as shown by Simons (1985: 59) for To'aba'ita:

- (14) To'a: *buka ne'e*
 book DEM
 SP: *buk ia*
 'this book'

But Southeast Solomonic languages also have a prenominal article similar in function to Pijin *desfala*, as in this example (Keesing 1988: 244):

- (15) Kwa: *nga gani lo'oo*
 ART day DEM
 SP: *desfala dei ia*
 'this day'

It appears then that in Tok Pisin, the *this fellow N* variant was reinforced by a superficially similar structure in the substrate, while in Bislama and Pijin *N here* was reinforced by similar substrate structures. In all three dialects, the standard variant, *this*, was eliminated, except in compounds such as SP *deskaen* 'this kind'. In Pijin, *this fellow N* was retained but reallocated the function of an article, as found in many of the substrate languages.⁶

7.2.2 Adjectival and numeral marker (-*pela*/*-fala*)

All three dialects have a suffix derived from English *fellow* (-*pela* in Tok Pisin and -*fala* in Bislama and Pijin) which marks a set of prenominal adjectives, predicate adjectives, and numeral modifiers (as well as prenominal demonstratives in TP and SP). This suffix is generally obligatory in Tok Pisin for most prenominal adjectives and for numbers up to ten, while in Bislama it is optional. In Pijin it is generally obligatory for numbers up to ten and optional with a smaller set of adjectives.⁷

- (16) TP: *Mi lukim tripela bikpela kar.*
 VB: *Mi luk tri(fala) big(fala) trak.*
 SP: *Mi lukem trifala big(fala) ka.*
 'I saw three big cars.'

⁶ Crowley (1990a: 143) reports that in Vanuatu *disfala* and *datfala* are also used in radio broadcasting, possibly due to recent borrowing from either Solomons Pijin or English. However, Tryon (1991a, 1991b) says that structures such as *disfala man ia* are rare but long-standing regional features of Bislama in certain areas of Vanuatu (Ambrym, Southeast Pentecost, and Tanna).

⁷ Simons and Young (1978: 43) say that the -*fala* suffix is optional for some adjectives, but that it is used more by older than younger speakers. Texts given in Keesing (1988: 233–43) show a variable use of the suffix with both prenominal and predicate modifiers. Beimers (in preparation) reports that the suffix is now optional on adjectives and seems to have no identifiable function.

In Pijin, the *-fala* suffix, when it does occur, is said to ‘intensify’ adjectives (Simons and Young 1978: 43) or to add ‘emphasis or affect’ (Jourdan 2002: 46), while in Bislama it may have these functions, as well as that of marking a noun phrase with specific reference (Crowley 1990a: 282).⁸

The *-pela/-fala* suffix again seems to have originated in Australia, as shown by examples from 1842 given by Dutton (1983: 113–14) and quoted by Baker (1993: 45, 1996: 248) such as: ‘*where big fellow water sit down?*’. Keesing (1988) claims that this suffix was established as a feature of Pacific Pidgin by the 1880s, but it is clear that its use was not stable, as shown in these examples:

- (17) a. *Me get big fellow box.* (*Fiji Gazette*, 14 December 1878)
 b. *You plenty big fool.* (David 1899: 115)
 c. *Me work big store...* (*Fiji Times*, 3 July 1909)
- (18) a. *Suppose you give me one fellow musket, me give you one fellow boy.*
 (Giles 1968 [1877]: 41)
 b. *Captain, he buy him four boy belong a me.*
 (Kay 1872: 80, quoted by Clark 1979: 39)

With regard to the substrate languages, in Tolai there are constructions parallel to those with the *-pela* suffix for both preposed ‘attributive adjectives’ and numbers, as pointed out by Faraclas (1988: 129–31). Here are examples given by Mosel (1980: 56, 114), where ‘c’ refers to a connective particle:

- (19) Tol: *a ngala na pal*
 D big c house
 TP: *bik -pela haus*
 ‘(a) big house’
- (20) Tol: *a ilima na pal*
 D five c house
 TP: *faiv -pela haus*
 ‘five houses’

Similar constructions are also found in other languages of New Ireland, such as Tigak and Siar (see Ross 1997).⁹

⁸ In Bislama other factors, such as the number of syllables of the adjective, also determine the use of *-fala*, and furthermore, some adjectives may take the alternative suffix *-wan* (see Crowley 1990a: 279–82).

⁹ Faraclas (1988: 128) argues that ‘the category “adjective” ... has little justification in Tok Pisin and its substrate languages’. Rather, the ADJ marker N pattern is a type of ‘associative-genitive construction’. Ross (1997) calls this the ‘possessive-like attribute construction’.

In contrast, the major substrate languages of Bislama and Pijin have no such constructions for adjectives, which always occur postnominally or as stative verbs.

With regard to numbers, the North-Central Vanuatu languages again have no similar construction, with numbers occurring after the noun, in some cases functioning as verbs. However, numbers in Southeast Solomonic languages precede the noun. Furthermore, most languages have a system of classifiers which come between the number and a large set of nouns, parallel to *-fala*. Here is an example from To'aba'ita (Lichtenberk 1984: 43):

- (21) To'a: *fai gwa fau*
 four CLF stone
 SP: *fo -pela ston*
 'four stones'

A likely scenario, then, is that the use of the *-pela/-fala* suffix for both adjectives and numbers was reinforced in Tok Pisin by congruent patterns in Tolai and related substrate languages. The use of the suffix for numbers was similarly reinforced in Pijin by a congruent structure in Southeast Solomonic languages. However, with regard to adjectives in Pijin and Bislama and numbers in Bislama, its use remained variable because of the lack of any substrate reinforcement, and it was reallocated to different functions such as intensification.

7.2.3 Relative clause marking

In Bislama, relative clauses are normally introduced by *we*, whereas in Tok Pisin, they are generally unmarked by any special relativizer. However, *we* is used by some speakers in the New Ireland Province and is becoming more common in modern nativized Tok Pisin (Aitchison 1981; Smith 2002). In current Pijin, relative clauses are either unmarked or introduced by *wea*.¹⁰

- (22) TP: *Mi save wanpela meri Ø (em) i gat twenti pikinini.*
 VB: *Mi save wan woman we i gat twenti pikinini.*
 SP: *Mi save wan woman Ø/wea hem i garem twenti pikinini.*
 'I know a woman who has twenty children.'

On the basis of distributional evidence (the use of *we* by Tok Pisin speakers in New Ireland and *wea* by Pijin speakers in the Solomons), Crowley

¹⁰ The use of *husat* as a relative pronoun in Tok Pisin writing and broadcasting is a relatively recent phenomenon (Siegel 1981, 1985) (see Chapter 9). In Pijin, *hu* is also used by some speakers as the relative pronoun 'who' (Jourdan 2002: 75), but this is also a fairly recent development (Simons and Young 1978: 164).

(1990a: 330) suggests that ‘this was originally a feature of all varieties of Melanesian Pidgin by the mid-1880s and that it subsequently became reduced in its distribution in Tok Pisin.’ However, I would argue that this was originally a possible option for speakers of Melanesian Pidgin and that there was variation in its use, as seen in the following examples:

- (23) a. *you go take 'im one feller something Ø 'e stop along room belong me...* [‘You go and get something which is in my room...’]
(Jacomb 1914: 99)
- b. *White man where 'e look out long store long Liro.* [‘The European who looks after the store at Liro.’] (Asterisk 1923 [1916]: 327)

The scenario proposed here is that the marking of relative clauses with *we* was not reinforced by the substrate languages in the New Guinea Islands such as Tolai (Mosel 1980: 113, 1984: 26), which do not have relative clause markers, and so this feature was never established in Tok Pisin (except perhaps in New Ireland). On the other hand, most substrate languages in North-Central Vanuatu, such as Nguna, do have relative clause markers (Crowley 1990a: 331) and therefore the use of *we* was reinforced and this feature retained in Bislama.¹¹

- (24) Tol: *i ga mut-kutu pa ra ul =i na ra luluai*
3SG TA cut-sever COMPL ART head of DEM ART chief
Ø i ga ubu na na =na
3SG TA kill DEM mother his (Mosel 1984: 26)
‘...he cut off the head of the chief who had killed his mother.’
TP: *i bin katim pinis het bilong hetman Ø i bin kilim mama bilong em.*
- (25) Ngu: *e pei kusue waina e atulake paaḗai namoloku*
3SG be rat REL 3SG first find kava
(Schütz 1969: 82)
VB: *hem i rat we i festaem faenem kava*
‘...it was the rat who first discovered kava.’

With regard to Solomons Pijin, Baker (1993: 30) says that *wea* is actually a modern development. In fact, Keesing (1988) describes the use of subject-referencing pronouns (rather than relativizers such as *we* or *wea*) as the main strategy for embedding relative clauses in Pijin, and his examples (e.g. on p. 220) back up this point of view. Further evidence comes from a manuscript (Keesing n.d.) containing data collected in the 1980s by Christine Jourdan

¹¹ Camden (1979: 106–7) says Tangoa has no parallel to Bislama *we*, but ten out of the eleven other North-Central Vanuatu languages surveyed do have a relative marker. (See Table 7.5.)

from Simone Maa'eobi, a Solomon Islander who learned Pijin on plantations in the 1930s but who had not used it much since World War II, and who had no education in English. In this corpus of pre-modern Pijin, only two out of nineteen sentences with relative clauses are marked with a relativizer (*wei* instead of *wea*); the others used pronouns, corresponding to the strategy used in Kwaio (Keesing 1988: 146) and other Southeast Solomonic languages. Here is an example from Keesing (n.d.):

(26) Kwa: *Ta'a geni Ø la a'ari la 'ame nigi 'ua.* (ex. 368)

PL women 3PL carry 3PL NEG arrive yet

SP: *Olketa woman Ø i kare kam i no kam yet.*

'The women who are doing the carrying haven't arrived yet.'

Thus, as with *we* in Tok Pisin, the widespread use of *wea* as a relativizer in Pijin appears to be a fairly recent consequence of renewed contact with English or language-internal expansion. In the earlier stage of dialect differentiation, however, the use of *we* was not reinforced by the Southeast Solomonic substrate languages, such as Kwaio, which do not have relativizers.

7.2.4 Progressive aspect marking

The three dialects differ in the ways they indicate progressive aspect. Tok Pisin most often uses the locative or existential verb *stap* 'stay, exist' following the verb (with an intervening *i*); Bislama also uses *stap* but preceding the verb (and sometimes to indicate habitual aspect as well); and Pijin sometimes uses initial CV reduplication (but often doesn't mark progressive aspect). Here are some examples taken from Crowley (1990a: 10–12):

(27) TP: *Em i dring i stap.*

VB: *Hem i stap dring.*

SP: *Hem didring.*

'He's drinking.'¹²

The historical examples of New South Wales Pidgin English and early Melanesian Pidgin from the last century illustrate the frequent use of locative/existential verbs such as *stay*, *sit down*, and *stop* (see Clark 1979; Troy 1994), but there is little documentary evidence of their being used then as either preverbal or postverbal progressive aspect markers. One possible example, however, comes from Jacomb (1914: 93) with the punctuation possibly added to make sense in English:

¹² Both Tok Pisin and Pijin also have a complex sentence construction to indicate progressive, for example: TP *Em i wok long dring* and SP *Hem i gohed fo dring*. 'He's drinking.' The Tok Pisin construction is a recent development (Mühlhäusler 1985b: 380), although it is becoming more widespread (Smith 1997: 256; 2002: 133).

(28) *Altogether man 'e look 'im arm belong 'im 'e sore; 'e stap.*

'Everyone's arms were hurting them, and remain sore still (as a result of vaccination).'

Nevertheless, distributional evidence suggests that the two variants were previously in use in the Pacific. First, a Highlands variety of Tok Pisin uses *stap* V (like Bislama) to mark the progressive (Wurm 1971: 39). Second, Tryon (1991*a*, 1991*b*) observes that some Bislama speakers on the island of Epi use V *i stap* (like Tok Pisin). Third, both Carr (1972: 150) and Clark (1979: 18, referring to Bickerton and Odo 1976: 151–2), indicate that *stap* was either an older form or a one-time alternative for the Hawai'i Creole preverbal progressive marker *stei*.

As Crowley (1990*a*: 217) notes, the use of an existential verb to mark progressive aspect is common in the world's languages, and so there is the possibility that this tendency emerged independently in all of these varieties. However, the wide distribution of these progressive markers more likely indicates that they were in existence in the last century as possible variants, but were perhaps unnoticed by most European reporters because of lack of any similar structure in English.

If this was indeed the case, then once again substrate reinforcement would have been significant—here reinforcement of one of the two strategies using *stap*. First, Crowley (1990*a*: 218) comments on the widespread use of an existential verb as a preverbal progressive aspect marker in Vanuatu languages and gives an example from Paamese. Camden (1979: 93–4) also shows that the progressive *stap* in Bislama corresponds to the preverbal 'durative' marker *lo* in Tongoa. There is a similar correspondence with the progressive marker *too* in Nguna (Schütz 1969: 29):

(29) Ngu: *e too mari a*
 he PROG do it
 VB: *hem i stap wokem.*
 'He's doing it.'

Of the twelve North-Central Vanuatu languages I have surveyed, all but one indicate progressive aspect with a preverbal marker of some kind, corresponding to the major Bislama pattern. The one exception is Lamén, which uses postverbal markers to indicate progressive aspect. Significantly, it is spoken off the coast of Epi, where the V *i stap* pattern has been reported.¹³

¹³ For another Epi language, Lewo, Robert Early (p.c., April 1997) shows there are two kinds of imperfective aspect distinctions, progressive and durative. These are normally marked by postverbal aspect particles, but they may also be indicated with serial verb constructions using posture verbs meaning 'sit', 'stand', or 'lie' (see Early 1995). Early believes that this distinction is reflected in Bislama

The possible substrate reinforcement of *V i stap* in Tok Pisin is less straightforward. There is no progressive construction in Tolai and related languages which is parallel to that of Tok Pisin. Rather, as pointed out by Mosel (1980: 102, 1984: 97), Tolai uses reduplication to indicate progressive and related aspects. However, Crowley (1990a: 218) makes the useful suggestion that serial constructions with locative/existential verbs in Tolai and related languages may have predisposed speakers to the *V i stap* construction rather than *stap V*. Here is an example from Tolai using the verb *ki* 'sit, stay, live' (Franklin, Kerr, and Beaumont 1974: 35):

- (30) Tol: *Ra beo i tar pukai ki ta ra pui.*
 ART bird 3SG PST land stay in ART bush
 'The bird has landed in the bush.'

With regard to Pijin, the Southeast Solomonic languages generally use reduplication, like Tolai and related languages, to indicate aspects related to the progressive, such as continuous, habitual, or persistive, but it appears that serial constructions are more limited. Lichtenberk (1984: 102) notes for To'aba'ita that 'only verbs of motion may form serial constructions'. Thus, it may have been that no structure was available to reinforce either variant and they were both levelled out. Since there is no evidence that reduplication was a possible variant for showing progressive aspect before World War I, it seems that this is a case of substrate influence as a more recent development rather than as part of stabilization.

7.2.5 Modality marking

In all three dialects, *save* is a verb meaning 'know'. It also functions to mark habitual aspect in all three dialects (although it is used in this way by a larger proportion of Tok Pisin speakers than Bislama or Pijin speakers). However, with regard to modality, Bislama and Pijin again use *save* as a preverbal marker of ability while Tok Pisin has separate markers for this function: *inap* and *ken*.¹⁴

- (31) TP: *Mi save dispela tok ples.*
 VB: *Mi save lanwis ia.*
 SP: *Mi save langwij ia.*
 'I know this language.'

with *stap V* indicating progressive/continuous and *V i stap* indicating durative. This could be an example of reallocation.

¹⁴ The two markers overlap in meaning but *inap* signifies capability such as that derived from requisite strength or knowledge while *ken* expresses ability because of likelihood, permission or willingness.

- (32) TP: *Mi save dring bia.*
 VB: *Mi save dring bia.*
 SP: *Mi save dring bia.*
 ‘I (usually) drink beer.’
- (33) TP: *Mi inap/ken wok.*
 VB: *Mi save wok.*
 SP: *Mi save waka.*
 ‘I can work.’¹⁵

The earlier use of *save* as an ability marker is illustrated in the following:

- (34) a. *Chief he old man. No savey walk good.* (Wawn 1973 [1893]: 143)
 b. *White man allsame woman, he no savee fight...*
 (Coote 1882: 206, quoted in Keesing 1988: 44)

Although there are no similar written examples showing *ken* as a variant, the fact that it is found in regional varieties of Bislama, i.e. northwest Malakula (Tryon 1991a, 1991b), as well as in Tok Pisin, led Crowley (1990a: 189–90) to conclude that it probably dates back to at least the 1880s. The same could be said of *inap* because of its distribution in both Tok Pisin and Bislama (where it occurs as *naf*).

Further evidence of the previously wider distribution of *ken* comes from the corpus of pre-modern Pijin from Simone Maa’eobi (Keesing n.d.). Here are some examples:

- (35) a. *Yumi no ken go kasem ples blong mi.* (ex. 92)
 ‘We wouldn’t be able to reach my place.’
 b. *Hem i no ken go long hem.* (ex. 113)
 ‘She can’t go there.’

Again differences among the groups of substrate languages appear to account for the variants eventually chosen by the different dialects. Mosel (1980: 124, 126) illustrates that in some dialects of Tolai the same form *la* is a verb meaning ‘know (how to)’ and a preverbal habitual aspect marker, but a different form is used to indicate ability. This is parallel to Tok Pisin:

- (36) a. Tol: *iau la ta ra tinata Kuanua*
 1SG know PR D speaking K.
 TP: *mi save toktok Kuanua*
 ‘I know how to speak Kuanua.’

¹⁵ Both Bislama and Pijin also have a complex sentence construction that may be used to indicate physical capability: VB *Hem i naf long wok* (Crowley 1990a: 11–12) and SP *Iu no fit fo karem bag ia* ‘You are not able to carry this bag’ (Jourdan 2002: 50).

- b. Tol: *u la vana*
 2SG HAB go
 TP: *yu save go*
 ‘You usually go’
- c. Tol: *dia ga nunure ra nialir*
 3PL TA know/ABIL D swimming
 TP: *ol inap swim*
 ‘They can swim.’

In contrast, Camden (1979: 58–9) illustrates that the Tangoa preverbal marker *eři* can mean ‘be able to, be allowed to, know how to, be in the habit of’, corresponding to Bislama *save*. This is also true of many other (but not all) North-Central Vanuatu languages.

- (37) a. Tan: *enau na eři evievi...*
 1SG PM know read
 VP: *mi mi save rid*
 ‘I know how to read.’
- b. Tan: *...i eři reti socena...*
 3SG HAB talk like. that
 VP: *...i save tok olsem*
 ‘...he regularly talks like that’
- c. Tan: *enau na eři cakau, paloku mo řucu moiso*
 1SG PM ABIL walk leg.my PM good COMPL
 VP: *mi mi save wokbaot, leg blong mi i gud finis*
 ‘I am able to walk, my leg has healed.’

Similarly, Keesing (1985: 128) notes that for Kwaio, ‘the verb “know” (*su’a*) ... refers to both ability and knowledge’, corresponding to Pijin *save*. This is also true for other Southeast Solomonian languages such as To’aba’ita, as shown in these examples from Lichtenberk (1984: 82):

- (38) a. To’a: *ni nau ku thaito’oma-na wane ne’e ki*
 ART 1SG 1SG know-3SG man DEM PL
 SP: *mi mi save olketa man ia.*
 ‘I know these men.’
- b. To’a: *kaliwela ’e thaito’oma-na ’aranga-laa*
 little child 3SG know/ABIL-3SG swim-NOM
 SP: *pikinini hemi save swim*
 ‘The little child can swim.’

7.2.6 Summary

The preceding analysis has shown that in nearly all cases there are structural or semantic parallels between the variants which ended up in each dialect of MP and corresponding features of substrate languages of that geographic region. In only three cases, involving adjectives in Bislama and Pijin and numerals in Bislama, there were no substrate features corresponding with either of the existing variants—one with the *-pela/-fala* suffix and one without it. In these instances, both variants ended up in the dialect, the one with the suffix being reallocated a new function.

Although the analysis was illustrated with data from only five substrate languages, grammatical descriptions of twenty-six languages were actually examined, as mentioned earlier. These are listed with their references in Table 7.4.

Table 7.4. Sources of data for substrate languages

| | |
|--------------------|---|
| New Guinea Islands | |
| Tolai | Mosel 1980, 1984; Franklin <i>et al.</i> 1974 |
| Duke of York | Brown, Rooney, and Danks 1882 |
| Kandas | Peekel 1929–30 |
| Patpatar | Peekel 1909 |
| Siar | Ross 2002 |
| Tigak | Beaumont 1979 |
| Vanuatu | |
| Nguna | Schütz 1969 |
| Tangoa | Camden 1979 |
| Paamese | Crowley 1982 |
| Atchin | Capell and Layard (1980) |
| Big Nambas | Fox 1979 |
| Lamen | Early 2002 |
| Lonwolwol | Paton 1971 |
| Port Sandwich | Crowley 2002 <i>b</i> |
| Raga | Crowley 2002 <i>c</i> |
| Sakao | Guy 1974; Crowley 2002 <i>d</i> |
| Southeast Ambrym | Crowley 2002 <i>e</i> |
| Vinmavis | Crowley 2002 <i>f</i> |
| Solomon Islands | |
| Kwaio | Keesing 1985, n.d. |
| To'aba'ita | Lichtenberk 1984 |
| Arosi | Capell 1971 |
| Gela | Crowley 2002 <i>a</i> |
| Kwara'ae | Deck 1933–4; Ivens 1931 |
| Lau | Ivens 1921, 1929 |
| Oroha | Ivens 1927 |
| Sa'a/Ulawa | Ivens 1918 |

These languages and their relevant features are set out in Table 7.5. The languages are listed on the left, grouped according to geographic region, along with the MP dialect of that region (in bold). The features are listed at the top, grouped into the grammatical categories discussed in the preceding analysis. For the purpose of the table, adjective and numeral marking were separated, giving a total of six categories. A tick (✓) indicates that the feature given at the top of the column exists in the substrate language (or dialect of MP) on the left. The absence of any tick in a category for a particular language indicates that there was inadequate information about that category in the available grammatical descriptions (listed in Table 7.4).

With six grammatical categories and three regions, there are a total of eighteen large cells in Table 7.5. In fifteen out of the eighteen cells, the feature found in the dialect of MP corresponds with the feature found in the majority of substrate languages from that region. These in turn correspond with one of the historical variants. The only three exceptions are the ones mentioned above, where there was no substrate feature corresponding with either of the variants.

There are some other grammatical differences between the three dialects that may be explained by substrate differences. However, since there is no evidence that variants relevant to these differences were available before World War I, it may be that they are the result of more recent substrate influence (e.g. from transfer in acquisition or use) rather than of substrate reinforcement (or lack of reinforcement) during levelling. Some of these are briefly described here (see also Tryon and Charpentier 2004: 393–8):

- (a) Bislama and Pijin have separate prepositions/subordinators for marking purpose and cause but Tok Pisin does not. There are parallels in the substrate languages (Crowley 1990a, 1991; Keesing n.d.; Franklin, Kerr, and Beaumont 1974).
- (b) In Pijin, unlike the other two dialects, *nao* 'now' is used as both a postverbal perfect marker and a focus marker, for example marking fronted question words (Simons 1985; Keesing n.d.). Tok Pisin uses *yet* 'yet' as a focus marker but not as a perfect marker (Sankoff 1993). In both cases, there is a substrate feature similar in form as well as function.
- (c) Both Bislama and Pijin have a set of verbal propositions (ending with the transitive marker) such as *agensem* 'against' and *raonem* 'around' which correspond to similar structures in the substrate languages (Crowley 1990a: 321; Keesing 1988: 181).
- (d) Only Bislama has the complementizer *se*, derived from the verb of the same form meaning 'say' (Crowley 1989a, 1990a). Keesing (1988: 50) says this feature was established by the 1870s, but his examples only

Table 7.5. Features of the substrate languages of the dialects of Melanesian Pidgin

| | DEM marker N N DEM only | ADJ marker N N ADJ only ADJ (marker) N | NUM marker N N NUM NUM marker N | REL marker no REL marker | PROG V V PROG or serial V neither | know = ABIL know ≠ ABIL |
|---------------|----------------------------|--|---------------------------------------|-----------------------------|---|----------------------------|
| New Guinea Is | | | | | | |
| Tolai | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Duke of York | | ✓ | ✓ | ✓ | | |
| Kandas | | ✓ | ✓ | | | |
| Patpatar | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Siar | ✓ | ✓ | ✓ | ✓ | | |
| Tigak | | ✓ | ✓ | ✓ | | |
| Tok Pisin | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Vanuatu | | | | | | |
| Nguna | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Tangoa | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Paamese | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Atchin | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Big Nambas | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Lamen | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Lonwolwol | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Port Sandwich | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Raga | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Sakao | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| SE Ambrym | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Vinmavis | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Bislama | ✓ | | ✓ | ✓ | ✓ | ✓ |
| Solomon Is | | | | | | |
| Kwaio | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| To'aba'ita | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Arosi | ✓ | ✓ | ✓ | | | |
| Gela | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Kwara'ae | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Lau | ✓ | ✓ | ✓ | ✓ | | |
| Oroha | ✓ | ✓ | ✓ | ✓ | | |
| Sa'a/U.lawa | ✓ | ✓ | ✓ | ✓ | | |
| Pijin | ✓ | | ✓ | ✓ | ✓ | ✓ |

show *say* being used as a main verb. Crowley (1990a: 270) notes that there is no record of *se* being used with a grammatical role from the 1920s or before. Its modern usage has parallels in the substrate languages but may also result from contact with the French form *c'est* (Crowley 1989a: 206), as well as from universal tendencies to grammaticalize such words as complementizers.

7.3 Discussion

The view presented here is that the modern dialects of MP differ in the five grammatical areas covered in Section 7.2 because they retained different variants in the process of levelling, or reallocated some of them different functions. The variants that were retained as consistent features appear to be those that were reinforced by congruent patterns in the substrate languages. Therefore, typological differences in the group of languages making up the three substrates—Western Oceanic (Meso-Melanesian Cluster), North-Central Vanuatu, and Southeast Solomonian—meant that substrate reinforcement was different in the three areas. These typological differences may also account for other grammatical distinctions between the dialects that developed at later stages.

This kind of scenario would explain some of the mysteries regarding the role of the substrate languages in the development of Melanesian Pidgin (and other contact languages as well). These are specifically concerned with the origin and distribution of substrate features.

For example, the similarity between the proposed attributive construction in Tolai and the *-pela* adjective construction in Tok Pisin has led to speculation that this feature may have resulted from substrate influence, presumably due to transfer by speakers of Tolai and related languages. But this does not account for the existence of the cognate construction with *-fala* in the other two varieties of Melanesian Pidgin. First of all, plantation labourers from the New Guinea Islands were only a small minority—approximately 8,000 out of a total of 96,000 (or about 12 per cent). Secondly, as Crowley (1990a: 285) points out, there was no such structural parallel in the languages of the majority of the labourers—those from the New Hebrides (Vanuatu) and Solomon Islands.

Another big question is: If there was substrate influence, why do some aspects of substrate grammar appear in the contact variety but others do not? For example, although there is the clear structural correspondence between proposed attributive adjectives in Tok Pisin and Tolai, there is no correspondence between the classes of postposed adjectives in the two languages. This leads Mosel (1980: 57) to doubt that Tolai played any role as the substrate language in the ‘construction’ of Tok Pisin adjectives (for example, as a result of transfer). Similarly, Mosel discounts substrate influence in the origin of Tok Pisin aspect and modality marking (pp. 123, 127).

But then how can we account for the striking structural parallels that do exist? The answer may be that in some cases the role of the substrate

languages was not in the construction or origin of particular features but in the reinforcement of particular features that were already in existence as variants in the contact environment. These variants originated not from the substrate but from sources such as the lexifier, foreigner talk, or an already existing contact variety.

For example, we have seen in Chapter 6 that some of the features of Melanesian Pidgin may have originated from the New South Wales Pidgin English (NSWPE) rather than as the result of transfer from the CEO substrate languages—e.g. the *-im* transitive suffix and the possessive marker *bilong/blong*. There is also good evidence that the *-pela/-fela* suffix is derived from NSWPE as well (Baker 1996; Koch 2000). So it is likely that the presence of these features in Melanesian Pidgin is ultimately the result not of substrate transfer but substrate reinforcement. Similar examples are found in Hawai'i Creole.

7.4 Substrate reinforcement in Hawai'i Creole

Chapter 4 showed that the use of the single form *get* for both possessive and existential functions in Hawai'i Creole has parallels in Cantonese, one of the key substrate languages when expansion was occurring. Thus, it may seem that this feature, like others described in the chapter, came into Hawai'i Pidgin English via transfer and ultimately ended up in the creole. However, both Chinese Pidgin English (CPE) and Pacific Pidgin English (PPE) already had a similar feature: the use of *got* (or alternatively in CPE, *habgot*) to indicate both possessive and existential. Therefore, an alternative explanation is that instead of this feature being transferred from Cantonese, the presence of a corresponding feature in that language reinforced an already existing feature of pidgins that had spread to Hawai'i via trading and Chinese immigration. This feature may have been further reinforced by the other prominent substrate languages. As already pointed out, Portuguese *ter* and *haver* are also used to indicate both possessive and existential (Siegel 2000: 214; Roberts 2005: 254), as well as Hawaiian *loa'a* (Roberts 2005: 255–6).

Other features from CPE and PPE may have also been reinforced by similar features in the dominant substrate languages. Table 7.6 lists nine grammatical features from CPE and PPE that were attested in Hawai'i before 1900 (based on Baker and Mühlhäusler 1996; Roberts 1998). Of these, the first six features have come into Hawai'i Creole, while the last three have not. All of the first six have congruent features in either Portuguese or

Table 7.6. Grammatical features from CPE and PPE found in Hawai'i before 1900

| Feature | Meaning/function | 1st year attested |
|-------------------|---------------------------|-------------------|
| both CPE and PPE: | | |
| <i>no</i> | preverbal negative marker | 1819 |
| <i>stop</i> | locative copula | 1860 |
| <i>go V</i> | future marker | 1881 |
| <i>(hab)got</i> | possessive/existential | 1888 |
| CPE only | | |
| <i>one</i> | indefinite article | 1838 |
| PPE only | | |
| <i>been</i> | past tense marker | 1890 |
| <i>he</i> | resumptive pronoun | 1824 |
| <i>belong</i> | possessive marker | 1871 |
| <i>-Vm</i> | transitive marker | 1883 |

Cantonese or both. In addition to using the same word for possessives and existentials, as just mentioned, both Portuguese and Cantonese have a preverbal negative marker (Portuguese *não* and Cantonese *ính*), a locative copula (Portuguese *estar* and Cantonese *hái/háidouh*), and the word for 'one' used as an indefinite article (Portuguese *um/uma* and Cantonese *yāt*). Parallels between Portuguese periphrastic tense markers and *go V* and *been V* in Hawai'i Creole were described in Chapter 4. Thus, these six features were reinforced by the main substrate languages and retained in the creole.

In contrast, the last three features do not have congruent features in Portuguese or Cantonese. Portuguese does have a possessive construction with *de/do* which is parallel to the PPE construction with *belong*—e.g. *os pais do estudante* 'the parents of the student'. But unlike PPE, this is not used with pronominal possessors—e.g. *minha casa* 'my house' versus (in modern Tok Pisin), *haus bilong mi*. Cantonese also uses a possessive marker (either the possessive word *ge* or a classifier), but as opposed to PPE (and modern MP) where the ordering is POSSESSED MARKER POSSESSOR for both nominal and pronominal possessors, in Cantonese the ordering is POSSESSOR MARKER POSSESSED, as in these examples (Matthews and Yip 1994: 107):

- (39) a. *hohksāng ge gājéung*
 student poss parents
 'the student's parents' (or 'the parents of the student')

- b. *ngoh gāan ūk*
 my CLF house
 ‘my house’

Therefore, this feature and the other two were not reinforced, and were levelled out so that they are not found in Hawai‘i Creole. On the other hand, these three features have come into Melanesian Pidgin as the subject-referencing pronoun (or predicate marker) *i*, the possessive marker *bilong/blong*, and the transitive suffix *-im/-em*. This is because they were reinforced by congruent structures in the substrate languages, as shown in Chapter 4.

There also may be substrate reinforcement of features from the lexifier. For example, the use of *ir* ‘to go’ before the verb in Portuguese to indicate future tense may have reinforced the English use of *going to* or *gonna* as a future marker (presumably the origin of *go V* in CPE and PPE as well), and thus account for the Hawai‘i Creole preverbal future (or irrealis) marker *go/gon/goin*. Similarly, the presence of a verbal suffix to indicate progressive aspect in both Portuguese and Cantonese may have reinforced the use of English *-ing*, which has also come into Hawai‘i Creole.

Thus, it seems that substrate influence may arise from two different sources: substrate transfer and substrate reinforcement. Substrate transfer occurs in individuals expanding their use of a pidgin. The consequence is that features similar to those of a substrate language enter the pool of variants used for communication. Substrate reinforcement occurs at the community level during the stabilization of the contact language when levelling is taking place. The consequence is the retention in the stable contact variety of a subset of the features in the pool of variants. Some of these result from substrate transfer, while others may be from other contact varieties or the lexifier.

7.5 Substrate reinforcement versus transfer

The superstratist point of view focusses on substrate reinforcement rather than substrate transfer. Recall from Chapter 3 that Chaudenson (1992, 2001, 2003) and others believe that a creole develops gradually from its lexifier according to normal processes of language change. Chaudenson uses the term *l’auto-régulation* (2003: 182) or ‘self-regulation’ (2001: 158) to refer to the language-internal processes, such as a move towards transparency

or regularity, that diachronically lead to linguistic changes in a language. According to Chaudenson, such processes do not affect all areas of a language—only those that are sensitive to change. With respect to French, he calls these areas *français zéro* (F^0) (e.g. 2001: 170).

For example, the substrate explanation of the origin of the postnominal definite determiner *la* in French-lexified creoles is that the French postnominal emphatic deictic marker *là* was reanalysed on the model of the postposed definite articles found in the Kwa (West African) substrate languages, via transfer or relexification (Lefebvre 1998: 81–4). According to Mather (2000, 2006), for instance, the use of *la* as a postnominal determiner is also found in the interlanguage of Ewe-speaking learners of French. Since postposed determiners are found in Ewe, this could be the result of transfer. But according to Chaudenson, this area of French grammar was one that was already subject to variation and linguistic change. The fact that Kwa languages such as Ewe have postnominal determiners is merely an example of a coincidental similarity between a substrate feature and the result of language change that was already occurring in French, and not necessarily of any direct influence. In fact, he says that ‘clearly there are almost no positive “transfers” of obviously non-European linguistic features’ (Chaudenson 2001: 148). But with regard to processes of change outside those normally found in the lexifier, Chaudenson does accept the possibility that the direction of the restructuring processes ‘could be partly determined by convergences with the learners’ original linguistic systems’ (2001: 171). Furthermore, he says that in areas outside F^0 , ‘the slaves’ languages can be claimed to have influenced their appropriations of the target language’ (p. 183). In other words, features of the substrate languages could have reinforced particular features that emerged from both language change and the process of second language learning.

Valdman (2005: 452) sums up Chaudenson’s position as follows:

In the final analysis, Chaudenson considers the structure of substrate languages as serving as a filtering device that focused the attention of alloglots on certain features of the TL [target language]. For example, the fact that their L1s express verbal tense and aspect with preposed free forms led African alloglots to select French auxiliaries and modals rather than highly diverse inflected forms, which also occurred in the TL.

Here Valdman is referring to arguments by Chaudenson (e.g. 2001, 2003) that, although French creole TMA markers have been attributed to substrate

influence, they are actually derived from usages in popular French or regional dialects. For example, the Haitian Creole preverbal indefinite future marker *a-va* (and its allomorphs *va*, *av*, *a*) would be said to derive from French *va*, imperfective *ap* from *après*, subjunctive *pou* from *pour* and anterior *te* from *été*, as illustrated in the following examples (from Lefebvre 1998: 113):

- (40) a. *Jean va manger.* ‘John will eat (in the near future).’
 b. *Jean est après manger.* ‘John is eating.’
 c. *Jean est pour partir.* ‘John is about to go.’
 d. *Jean a été malade.* ‘John has been sick.’

According to Chaudenson, but using the terminology adopted here, the use of these forms to express tense and aspect in the lexifier would have been reinforced by parallel features in the West African substrate languages. Thus transfer did not occur. However, scholars such as Baker (2001) and Mather (2001) criticize Chaudenson’s analysis of French creole TMA systems by pointing out that he merely examines the etymology of the markers rather than looking at the underlying syntax of the systems as a whole. As Lefebvre (1998: 114–33) clearly describes, the semantic and structural properties of the Haitian Creole TMA markers are strikingly different from those of their French etyma, but similar to corresponding markers in the substrate languages. Not the least of these differences is that the creole TMA markers can be combined to form complex tenses, something that does not occur with these forms in French, but does occur in the substrate languages—for example (Lefebvre 1998: 130, 132):

- (41) Haitian: *Mari t’ a prepare pat.*
 Fongbe: *Mari kò ná-wá dâ wǒ*
 Mary ANT IND-FUT prepare dough
 ‘Mary might prepare dough’ or ‘Mary might have prepared dough’.

A more feasible conclusion, then, is that the French forms provided somewhere to transfer to, rather than models for what became the creole features, or simply continuations of French grammar.

With regard to Melanesian Pidgin, there are some features that arguably could be the result of substrate reinforcement as envisaged by Chaudenson rather than transfer. For example, the subject-referencing pronouns could have been modelled on the resumptive pronouns that are common in

vernacular and indigenized varieties of English, such as Fiji English (Mugler and Tent 2004: 784):

- (42) a. *My dad he works for FEA* [Fiji Electricity Authority].
b. *Some* [i.e. teachers] *they treat us badly.*

Another possible example is the causative construction using *mekem* based on English *make*, which is already frequently used for causative functions. However, there are other features that are so different from anything in English but so close to features of the substrate language that they could not result from reinforcement of a feature of the lexifier—for example, prenominal plural marking and the inclusive-exclusive distinction in first-person plural pronouns (see Chapter 4).

Similar examples can be found in Hawai'i Creole, such as the use of *stay* as a progressive marker, which has no possible parallel in English that could have been reinforced by the substrate languages. In such cases, therefore, substrate transfer rather than reinforcement seems to be the best explanation.

In the following chapter, we will test the principles of reinforcement and the constraints on transfer discussed in this and the preceding chapter to see whether they can predict which substrate features end up in a creole.

8 Predicting substrate influence

In Chapter 4, I demonstrated that a significant amount of morphological expansion occurred in the pidgin predecessors of both Melanesian Pidgin and Hawai'i Creole, and that a significant proportion of the expanded features were modelled on the grammatical morphology of the substrate languages. Then in Chapter 5, I argued that the substrate-based features came into the expanding pidgins via the process of functional transfer. A large proportion of these transferred substrate features were then retained when the expanded pidgins were nativized to become creoles. In order to explain why some substrate features end up in a creole while others do not, I proposed in Chapter 6 that there are certain 'availability constraints'—factors which may determine the likelihood of a substrate feature being transferred by individuals, and thus available as a possible feature of the contact language. I also proposed that there are 'reinforcement principles' that determine which of the available features are ultimately retained in the contact language by the community—one of those being substrate reinforcement, described in Chapter 7.

The purpose of this chapter is to test these constraints and principles to see whether or not they can predict the nature of substrate influence in creoles. To do so, I present case studies involving specific linguistic areas in two different creoles—TMA marking in Tayo, a French-lexified creole spoken in New Caledonia (mentioned in Chapter 5), and the verb phrase in Roper Kriol, a variety of the English-lexified creole spoken in Northern Australia (mentioned in Chapter 1). In each case study, I reverse the usual methodology of studying substrate influence, which is to examine features of a creole and see whether there are corresponding features in the relevant substrate languages. In contrast, I first identify the common core features of the substrate languages; then I determine which of these features would be expected in the creole according to the constraints and principles outlined in Chapters 6 and 7; and finally I examine the features of the creole to see whether or not these expectations are borne out. But first I review the specific factors used to predict substrate influence.

8.1 Review of availability constraints, reinforcement principles, and contraction

The specific availability constraints identified in Chapter 6 have to do with certain linguistic properties of both the L1 and the L2. Here the L1 is a substrate language, with fully developed morphosyntax, and the L2 is the expanding pidgin with morphology just beginning to evolve. The most important factors constraining functional transfer appear to be perceptual salience and congruence. First, for a feature of the L1 substrate to be transferred, it must have ‘somewhere to transfer to’ (Andersen 1983*b*)—i.e. there must be a morpheme (or string of morphemes) in the L2 (the expanding pidgin) that can be used or reanalysed according to the rules of the L1. This morpheme or string must be perceptually salient—a separate word, or words, or at least a stressed syllable—and it must have a function or meaning related to that of the corresponding substrate morpheme. Second, the L1 and L2 morphemes should be syntactically congruent, at least superficially. The absence of such a morpheme in the L2 or the lack of structural congruence will constrain transfer, and thus reduce the availability of the particular substrate feature. Another factor which may also play a part is transparency: transfer will be more likely if the L2 morpheme is invariant in form and has a single function. With regard to the linguistic properties of the expanding pidgin, the lexifier is always indirectly involved, since it supplied the lexical items and the superficial syntactic structure (i.e. word order) to the pidgin. However, the lexifier may also be directly involved as a lexical source if it is still in contact with the expanding pidgin. Since precise data on the total lexicon of an expanding pidgin is never available, the lexifier must be used for the purposes of comparison in testing the availability constraints, and that is what is done in this chapter.

The most important reinforcement principle appears to be frequency of use in communication in the contact environment. The degree of frequency depends on the proportion of speakers of the substrate languages that have the particular feature, and this is affected by whether particular features occur in more than one of the languages in contact. Also, according to the ‘Shifter Principle’ presented in Chapter 6, the languages of speakers who first shift to the pidgin as their primary language will have the strongest effect on the nature of the developing contact language.

Finally, we need to add the other factor that affects substrate influence—partial transfer resulting in contraction of L1 features. As pointed out earlier, it is common that only some properties of a particular L1 feature are adopted

by the L2. We saw evidence of this in the transitive suffix of Melanesian Pidgin, which marks only transitivity, whereas the corresponding suffix in the CEO substrate languages indexes person and number of the object as well. Consequently, even the most ardent substratist would not expect every grammatical distinction that occurs in the substrate languages to be found in the contact language. Rather, one would expect, for example, that some grammatical categories would be merged, especially those that are closely related.

8.2 TMA system of Tayo¹

8.2.1 Sociohistorical background

Tayo, also known in French as *Patois de St-Louis* or just *Patois*, is spoken primarily in the village of St-Louis, about fifteen kilometres from Nouméa, the capital of the South Pacific French territory of New Caledonia. It has about 2,000 speakers, half of these the permanent inhabitants of St-Louis and the other half former residents who live elsewhere around the territory. Information on the origins of Tayo comes from Ehrhart (1993) and Ehrhart and Corne (1996).

St-Louis was established at an uninhabited site by French Marist missionaries in 1860. It was to be a village for new converts and a training centre for catechists. From 1860 to 1880, speakers of as many as twenty different Melanesian languages were attracted to St-Louis. But three languages were the most common. The first Melanesian settlers were Touho people from the north-central part of the island. They were speakers of Cèmuhi. Soon after, Païta and other people from the far south settled nearby. They were speakers of Drubea and Numèè, two closely related dialects of the same language. By 1868 there were approximately 200 people living in or near St-Louis. After 1878, Thio-Canala people began to arrive from the south part of the island. They were speakers of Xârâgurè and the closely related dialect of Xârâcùù, and settled in a different part of the village. The languages of these three groups were not mutually intelligible.

The Melanesian settlers were exposed to French in varying degrees at the mission, where they went to school and church and worked in the sawmill, rice paddies, sugarcane fields and vegetable gardens. During the first twenty years of the settlement, a French-lexified pidgin began to develop

¹ This section is based on Siegel, Sandeman, and Corne 2000.

as the lingua franca. This pidgin became more and more important as the medium of communication at St-Louis, especially among the first locally born generation. According to oral tradition, this generation was bilingual in the pidgin and the Melanesian language of their group, but the next generation, especially those born after around 1920, acquired the pidgin as their first language and had only passive knowledge of their parents' and grandparents' first languages. This is when the creole, now known as Tayo, became established in the community. (Note that this matches the three-generational shift scenario, mentioned in Section 5.3.) Today there are very few speakers of Melanesian languages left in St-Louis.²

In recent years, with increased education and social mobility, more and more Tayo speakers have become bilingual in French and decreolization has occurred (see Corne 2000). People believe that Tayo is best spoken by the elders and young children of the village (Ehrhart 1993: 32)—i.e. those who have not become fluent in French. In any event, all speakers emphasize the variation present in the language due to the influence of French.

8.2.2 The substrate languages and TMA marking

The substrate languages are closely related members of the New Caledonian branch of the Southern Melanesian languages, which in turn comprise a branch of the Southern Oceanic subgroup of Central Eastern Oceanic languages (see Figure 7.1). Information on the three major substrate languages comes from the following sources: Rivierre (1980, 1994) for Cèmuhi, Païta and Shintani (1990*a*, 1990*b*) for Drubea, and Moyse-Faurie (1995) and Moyse-Faurie and Jorédié (1986) for Xârâcùù. Examples follow the orthographies used in these works.³ Page numbers are given in square brackets.

Although the languages differ in their TMA systems, they do share some similarities. Each language marks only one tense: future in Cèmuhi and Drubea, and past in Xârâcùù. With regard to modality, they all have an evidential marker of asserted reality, focussing attention on the verb or indicating that the proposition is perceived to be real. In terms of aspect, each language has separate markers of progressivity, temporal proximity, and accomplishment (indicating that an outcome has been achieved or has

² Kihm (1995) argues that the social circumstances involved in the creation of Tayo were similar to those of plantation creoles in the Caribbean and Indian Ocean.

³ In these orthographies, *c* and *j* represent palatal stops; *ê* = [ɛ], *é* = [e], *ô* = [o]. A circumflex over a vowel indicates nasalization.

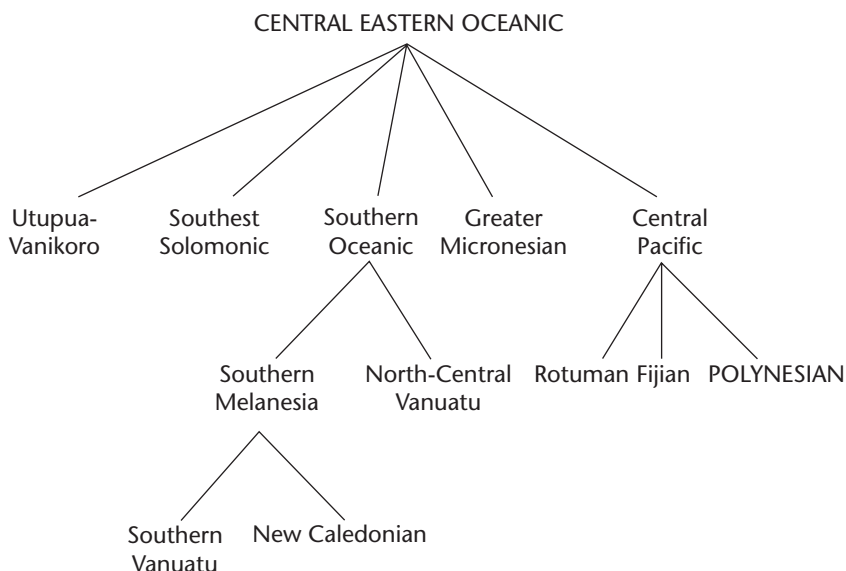


Figure 8.1. Subgrouping of Oceanic languages (based on Lynch, Ross, and Crowley 2002)

taken effect). Various markers can be combined to make more complex distinctions. Nearly all the markers are preverbal. The exceptions are in Xârâcùù where three markers are always postverbal and three others may be either preverbal or postverbal.

8.2.2.1 Cèmuhi

Cèmuhi has the following TMA markers, all preverbal:

| | | |
|----------|-------------|--|
| Tense | <i>o</i> | Definite future (FUT) |
| Modality | <i>bo</i> | Potential (POT) |
| | <i>tè</i> | Asserted reality (ASS) |
| | <i>tèko</i> | Insisted reality (INS) |
| Aspect | <i>ko</i> | Progressive (in the process of happening, becoming) (PROG) |
| | <i>mu</i> | Iterative (repeated or habitual) (ITER) |
| | <i>tèè</i> | Continuative (prolonged, persisting) (CONT) |
| | <i>bwö</i> | Punctual (considered as a complete action) (PUNC) |
| | <i>caa</i> | Accomplished (ACP) |
| | <i>mwo</i> | Temporal proximity (PROX) |

Cèmuhi differentiates definite future and potential, which includes doubtful events or states and counterfactual statements. (Examples are all from Rivierre (1980), but with tone marking deleted.)

(1) *lé o abé* [101]
 3PL FUT come
 ‘They will come.’

(2) *ganye bo pwö* [101]
 1PL.INCL POT do
 ‘We will do it (but we don’t know when; it’s not for certain).’

Markers of evidential modality indicate the speakers’ beliefs about the reality of the state or event being reported. Statements which the speaker asserts to be real are marked with *tè*, whereas *tèko* indicates a stronger claim for reality:

(3) *tè a péi* [103]
 ASS ART stone
 ‘It is a stone.’

(4) *lé tèko pwölu* [103]
 3PL INS dance
 ‘They are dancing (The dance is in full swing).’

The aspect markers are illustrated in the following examples:

(5) *lu ko pwö-jèkut* [107]
 3DU PROG make-story
 ‘They are having a discussion.’

(6) *ganye mu pii ko-n...* [100]
 1PL.INCL ITER say about-3SG
 ‘We call it ... (It is usually called...).’

(7) *è tèè mu pomwo* [104]
 3SG CONT stay house
 ‘He has remained at the house (whereas I have come here).’

(8) *è bwö mu...* [103]
 3SG PUNC live
 ‘Once upon a time there was ...’

The accomplished marker refers to an accomplished process or an achieved state, or to something which will assuredly be accomplished in the immediate future:

(9) *caa magalè* [102]
 ACP cooked
 ‘It is cooked.’

The temporal proximity marker indicates either the immediate past or the immediate future—i.e. it marks events that have just occurred or are about to occur:

- (10) *lé mwo tabuhî* [102]
 3PL PROX begin
 ‘They have just begun.’

8.2.2.2 *Drubea*

Drubea has the following TMA markers, all preverbal:

| | | |
|----------|-------------------|--|
| Tense | <i>nre</i> | Definite future (FUT) |
| Modality | <i>me</i> | Potential (POT) |
| | <i>pa</i> | Asserted (ASS) |
| | <i>te</i> | Descriptive (DESC) |
| | <i>pwe</i> | Desiderative accomplished (DSID) |
| | <i>yoo</i> | Desiderative unaccomplished or Intentional (INT) |
| Aspect | <i>tôô/tôônri</i> | Progressive (PROG) |
| | <i>mwa</i> | Accomplished (ACP) |
| | <i>kââ</i> | Temporal proximity (PROX) |

The future marker is used on its own with non-stative verbs in subordinate clauses and with second-person subjects to express the speaker’s wish or a softened imperative. (Examples are from Païta and Shintani (1990a), unless indicated otherwise, with tone marking deleted.)⁴

- (11) *carâ me ki nre ituu-re taa mwa* [35]
 hurry COMPL 2SG FUT find-NONST ART house
 ‘Hurry up and find a house.’

- (12) *ki nre kuka-re* [35]
 2SG FUT cook-NONST
 ‘You do the cooking.’

Like *Cèmuhî*, *Drubea* has a potential and an asserted reality marker:

- (13) *ko me trôkô nga-re mii yuukwââ* [34]
 1SG POT be-able work-NONST with.you tomorrow
 ‘I will work with you tomorrow (It is possible that I may work with you tomorrow).’

- (14) *nri pa ngere-re ye* [27]
 3PL ASS think-NONST 1PL
 ‘They think of us.’

⁴ In the orthography, an *r* following a consonant indicates that the consonant is retroflex.

The future is more often used in combination with these modality markers to signal a realis/irrealis distinction in future events:

- (15) *xi me nre xi-re* [36]
 rain POT FUT rain-NONST
 ‘It’s going to rain (It looks like rain, but I’m not absolutely sure).’
- (16) *nraa pa nre yai-mwere-re* [36]
 3DU ASS FUT arrive-again-NONST
 ‘They will come again (as they usually do).’

Drubea also has a descriptive marker marking a ‘neutral’ predicate—without any particular claim being made for its reality:

- (17) *nyi te vê-re kangia nrewetriîre* [26]
 3SG DESC leave-NONST just.now morning
 ‘He left this morning.’

Unlike Cèmuhî, Drubea has two desiderative markers—one for actions that have been accomplished (DSID) and one for intentional actions (INT)—i.e. those that have not yet been accomplished:

- (18) *nyi pwe vi ce-nri* [31]
 3SG DSID take spear-3SG.POSS
 ‘He took his spear [i.e. He wanted to take his spear and he took it].’
- (19) *ko yoo tu-re koota kwe nre mwagacâ* [32]
 1SG INT look for-NONST egg DIR LOC shop
 ‘I am going to get some eggs from the shop.’

Progressive is as follows:

- (20) *nyi te tôônri vuu-re katre* [28]
 3SG DESC PROG weave-NONST mat
 ‘She is/was weaving a mat.’

With regard to iterative, Païta and Shintani’s (1990*b*) dictionary of Drubea shows that *nromwe* can be used to indicate continuing or habitual actions, for example:

- (21) *ki pa nromwe nga-re?* [73]
 2SG ASS still work-NONST
 ‘Are you still working?’

However, since no separate iterative marker is described in the grammar (Païta and Shintani 1990*a*), and since *nromwe* can also occur after the verb, we consider it to be an adverb.

Finally, the accomplished marker and the temporal proximity marker occur as in Cèmuhi:

- (22) *nyi mwa bedri* [29]
 3SG ACP passed.out
 ‘He has passed out (and he’s still unconscious).’
- (23) *nyi kââ mee vê-re* [40]
 3SG PROX come-NONST
 ‘He is just coming.’

8.2.2.3 Xârâcùù

The TMA markers of Xârâcùù differ from those of the other two languages in that they do not all precede the verb. Those that normally follow the verb are marked with an asterisk. Those that can either precede or follow the verb are marked with a plus sign:

| | | |
|----------|------------------------|--------------------------------------|
| Tense | <i>nâ*</i> | Past* (PAST) |
| Modality | <i>va⁺</i> | Asserted reality ⁺ (ASS) |
| | <i>xwâ⁺</i> | Insisted reality ⁺ (INS) |
| Aspect | <i>nâ ... (rè)</i> | Progressive (PROG) |
| | <i>nââ ... (rè)</i> | Past progressive (PPRG) |
| | <i>ii⁺</i> | Continuative ⁺ (CONT) |
| | <i>xânî</i> | Habitual (HAB) |
| | <i>ra*</i> | Repeated* (REP) |
| | <i>wâ</i> | Accomplished (recent/imminent) (ACP) |
| | <i>mörö*</i> | Past accomplished* (PACP) |
| | <i>mââ</i> | Temporal proximity (PROX) |

The past marker does not include the recent past, often expressed by the temporal proximity marker. It usually comes directly after the verb, except when it is used with the preverbal habitual marker. Examples are all from Moyse-Faurie (1995).⁵

- (24) *nâ fê ti na nâ gwèè* [126]
 1SG go to PAST LOC formerly
 ‘I went there in the old days.’

Unlike Cèmuhi and Drubea, Xârâcùù does not have a potential marker, but like Cèmuhi it has evidential markers of both asserted and insisted (or undisputed) reality. However, both may either precede or follow the verb.

⁵ Additional orthographic symbols are $\bar{a} = [\bar{\alpha}]$, $\hat{u} = [i]$.

(25) *è va piicè chaa péci* [121]
 3SG ASS look.for ART book
 ‘He is really looking for a book.’

(26) *gu nâ da xwa* [123]
 1SG.EM 1SG eat INS
 ‘Me, I’m eating.’

The preverbal markers *nâ* and *nâä* express progressive or durative action, with *nâä* used only for past actions. A transitive verb preceded by either of these markers is followed by *rè* or its variant *rê*:

(27) *è nâ kê rê ku* [118]
 3SG PROG eat PROG yam
 ‘He is eating yams.’

(28) *pââubêêrî nâä kê rê ku mata* [119]
 old people PPRG eat PROG yam raw
 ‘The old people were eating raw yams.’

Unlike Cèmuhî and Drubea, Xârâcùù has separate markers for the habitual and continuative (which Moyse-Faurie (1995: 119) labels ‘l’itératif’), and another marker for a repeated action. The habitual marker is preverbal, the continuative marker either preverbal or postverbal, and the repeated marker postverbal:

(29) *mwêê-nâ xânî cuè tö nâ* [121]
 uncle-1SG HAB sit at LOC
 ‘My uncle often/usually sits there.’

(30) *ke fê ii ti Nûûméa* [119]
 2SG go CONT to Nouméa
 ‘You are continually going to Nouméa.’

(31) *nâ nââ wîjô ra* [120]
 1SG want drink REP
 ‘I need to drink again.’

Like the other two substrate languages, Xârâcùù marks the accomplishment of an action or the achievement of a changed state, but in contrast, it distinguishes between recent or imminent accomplishment (marked preverbally) and past accomplishment (marked postverbally):

(32) *è wâ toa ngê chêêdè* [80]
 3SG ACP arrive during evening
 ‘He arrived this evening.’

Table 8.1. TMA categories marked in the three substrate languages

| Cèmuhì | Drubea | Xàràcùù |
|--|---|---|
| Future Potential | Future Potential | |
| Asserted reality Insisted reality | Asserted reality | Past* Asserted reality ⁺ Insisted reality ⁺ |
| | Descriptive Desiderative accompl. Intentional | |
| Progressive Iterative Continuative Punctual | Progressive | Progressive Continuative ⁺ |
| Accomplished | Accomplished | Habitual Repeated* Accomplished Past Accomplished* |
| Temporal proximity | Temporal proximity | Temporal proximity |

- (33) *nâ fê ti môrô kètè nâ* [120]
 1SG GO TO PACP place LOC
 ‘I have already been there.’

Finally, like the other two languages, Xàràcùù has a preverbal marker of temporal proximity:

- (34) *nâ mââ toa* [121]
 1SG PROX arrive
 ‘I am coming right this minute.’

A summary of the TMA categories marked in the three languages is given in Table 8.1.

8.2.3 Predicting substrate influence in Tayo

Taking into account the factors just outlined, I now discuss what kind of TMA marking we would expect to find in a French-lexified creole with the three main substrate languages just described: Cèmuhì, Drubea, and Xàràcùù.

8.2.3.1 Reinforcement principles

I look first at the substrate features that would be retained if they had actually been transferred at an earlier stage of development. Here we need to refer to the reinforcement principles mentioned above, based on demographic and linguistic factors. Regarding demographics, we do not have exact population figures for the three language groups, but it appears from the literature that they were fairly equal in size, or at least that there was no one group that dominated in number. Regarding historical factors, the formation of the contact language had probably already begun by the time the Xârâcùù speakers began to settle at St-Louis. This also means that the Cêmuhi and Drubea groups had a ten-year head start in producing the second generation which shifted to the contact language. However, since figures are not available, no firm conclusions can be drawn.

With regard to frequency, then, the prediction is that a transferred feature occurring in all three languages would be most likely to be retained, followed by a feature occurring consistently in two languages. A feature that occurs in only one language would not be likely to be retained.

All the markers for the TMA categories shown in Table 8.1 occur as separate morphemes and occur preverbally except the ones marked by an asterisk, which occur postverbally, and those marked by a plus sign, which occur in either position.

Therefore, with regard to frequency and historical factors, marking of the following categories would have had the greatest likelihood of being retained in the creole: asserted reality, progressive, accomplished, and temporal proximity. Marking of future and potential would also have been likely because it occurs consistently in the same position in two languages. Marking of continuative and insisted reality would have also been a possibility, but slightly less likely since the markers vary in position in Xârâcùù. It is predicted that marking of the remaining nine categories would not have been retained. Categories grouped together in the order of likelihood of retention so far are:

- (a) asserted reality, progressive, accomplished, temporal proximity;
- (b) future, potential;
- (c) continuative, insisted reality.

8.2.3.2 Availability constraints

Next I consider the availability constraints. As shown in Chapter 6 for Melanesian Pidgin, a feature may be present in nearly all the substrate

languages and yet not occur in the contact language. This may be because certain linguistic factors or constraints prevented the feature from being transferred at an earlier stage of development and thus it was not available. In other words, a substrate feature must first be transferred by individual speakers before it can be reinforced and ultimately retained by the community.

In the Tayo situation, we have seen that there is the potential for reinforcement for eight categories of TMA marking—those that occur in at least two of the substrate languages. But before such reinforcement could take place, each of these features would have had to be transferred earlier into the French being used as the lingua franca in the village adjacent to the St-Louis mission. In light of the constraints on transfer described above, for this transfer to have occurred the following conditions would have had to be present in each case. First, there must have been a perceptually salient morpheme or string of morphemes originating from French (in the pidgin or the French heard at the mission) that could have been interpreted as having a function or meaning related to the particular type of TMA marker in the substrate languages. Second, this morpheme or string of morphemes must have been syntactically congruent—in all cases here, preverbal, as in the majority of the substrate languages. Third, although not necessary, transfer would have been more likely if the pidgin or French morpheme or morphemes had been invariant in form and had a single function.

I begin by looking at all the substrate categories for which there are French morphemes that clearly meet the requirements just outlined—i.e. somewhere to transfer to. These are Progressive, Accomplished, and Future.

(a) *Progressive*:

While standard French normally expresses progressive events with either present or imperfect affixes on the verb, colloquial French has at least two periphrastic strategies. One of these was mentioned in Chapter 7: using a form of *être* ('to be') with *après* before the infinitive of the verb. Another is with *en train de*. These are shown in examples from Lefebvre (1996: 261):

- (35) *Marie est en train de manger.*
Marie est après manger.
 'Mary is eating.'

The *être* part of each expression would not be adopted because of lack of perceptual salience and transparency—i.e. it is unstressed and varies in form depending on person and number of the subject. That would leave *en train de* and *après*. Both expressions are invariant in form, but perhaps *en train de* is more transparent because it has only one meaning, whereas *après* has a different meaning in other contexts (e.g. ‘after’). (There is also some evidence that the *après* construction was not widely used in New Caledonian French.)

(b) *Accomplished:*

French does not normally mark perfect or accomplished aspect, but it has a periphrastic expression that can express this meaning when emphasis is required—a form of *avoir* (‘to have’) followed by *fini de* and the infinitive of the verb:

(36) *Jean a fini de travailler.*

‘John has finished working.’

Again, *avoir* would not be adopted because of lack of perceptual salience and transparency (especially in the first-person form *j’ai*), but *fini* is invariant in form and has a single meaning in this context.

(c) *Future:*

As shown in Chapter 7, one of the two strategies in French for expressing future tense is the *futur proche*, using a form of *aller* (‘to go’) as an auxiliary before the infinitive of the verb:

(37) *Marie va écrire une lettre.*

‘Mary will write a letter.’

Although this auxiliary is a free morpheme, congruent to the future markers in Cèmuhî and Drubea, it could be argued that, like *être* and *avoir*, its varying forms would have made it not transparent enough to be adopted. However, *aller* differs in two ways. First, this form generally receives more stress in the future construction than do the various forms of *être* and *avoir* in the progressive and accomplished constructions. Second, it has one form which is much more common than the others: the second- and third-person singular *vas* and *va*, which are both pronounced as [va]. In popular French, the first-person form can also be *va* (instead of *vais*). Furthermore, the same form, *va*, is employed both for the singular imperative and with the third-person impersonal pronoun, often used for first-person plural, as in *on va jouer au tennis* ‘we’re going to play tennis’.

The remaining substrate TMA markers do not have such clear-cut places to transfer to.

(d) *Continuative*:

French normally expresses continuative actions with the use of an adverb, *encore* or *toujours*:

(38) *Il habite encore/toujours à Nouméa.*

‘He still lives in Nouméa.’ (OR ‘He lives habitually in Nouméa.’)

These adverbs are perceptually salient and transparent, and for Xârâcùù speakers they could have been reinterpreted as postverbal continuative markers. There is a problem, though, in that they are not syntactically congruent with the continuative marker in Cèmuhi which precedes the verb. However, French uses the same adverbs with adjectives to indicate continuity of a state, and in this case they precede the adjective:

(39) *Elle est encore/toujours malade.*

‘She is still/always sick.’

Since in Cèmuhi and the other substrate languages adjectives are stative verbs, one of these two adverbs could have been reanalysed as a preverbal continuative marker according to the substrate pattern.

(e) *Temporal proximity*:

French can express temporal proximity with some expressions which precede the infinitive form of the main verb. Again, as shown in Chapter 7, immediate future can be shown by the use of *être* and either *pour* or *sur le point de* before the verb and immediate past by *venir de* before the verb (see Lefebvre 1996: 259):

(40) *Jean est pour partir.*

Jean est sur le point de partir.

‘John is about to go.’

(41) *Jean vient de partir.*

‘John has just left.’

The problem with adopting any of these forms to mark the category of temporal proximity is that each of them expresses only half the range of meaning of the markers in the substrate languages—i.e. they can express immediate past or immediate future but not both. (Also, there is some

evidence that the colloquial *pour* construction may not have been widely used in New Caledonian French.)

(f) *Asserted reality*:

French does not have a grammatical marker of asserted reality. The adverb *vraiment* ‘really, truly’ could also have been reanalysed as such a marker, but this is not very likely because it only sometimes precedes the verb, unlike the corresponding markers in the two key substrate languages. It appears that there are no other morphemes with related meaning that occur preverbally.

(g) *Potential*:

Like the substrate languages, French distinguishes between the definite future and the indefinite future, using the subjunctive mood to mark potential, doubtful, or counterfactual events. However, the subjective mood is marked with bound morphemes. There is an adverb which can express some of the same meanings, for example *peut-être* ‘perhaps’, but this can occur before the main verb only when it follows an auxiliary.

(h) *Insisted reality*:

Other than the adverb *vraiment*, which we saw was unlikely for asserted reality, there does not seem to be another morpheme or string of morphemes that could be used to express a contrasting insisted reality.

To summarize, I list the substrate categories in order of likelihood that transfer occurred at an earlier stage of development:

- (a) progressive, accomplished, future;
- (b) continuative, temporal proximity;
- (c) asserted reality, potential, insisted reality.

8.2.3.3 *Contraction*

As mentioned above, some contraction or reduction of categories marked in the substrate languages would be expected resulting from the merging of closely related categories. On this basis, of the eight TMA categories listed above, the most likely mergers would have been between (1) future and potential, (2) asserted and insisted reality, and (3) progressive and continuative.

8.2.3.4 *Predictions*

The preceding discussion leads to the following expectations about substrate influence in Tayo with regard to TMA marking:

- (a) Tayo will have preverbal markers of progressive and accomplished aspect because these clearly could have been transferred and then reinforced by their occurrence in all three key substrate languages.
- (b) Tayo will most likely have a preverbal marker of future tense because it clearly could have been transferred and then reinforced by the two major substrate languages.
- (c) Tayo could possibly have a marker of continuative aspect, as transfer could not be ruled out and this feature occurs in two of the substrate languages. If it does occur, preverbal marking is more likely because optional postverbal marking occurs in only one language, Xârâcùù. However, this category may have merged with progressive.
- (d) There is a slight chance that Tayo could have a preverbal marker of temporal proximity since transfer cannot be completely discounted and the feature occurs in all three substrate languages.
- (e) It is unlikely that Tayo will have separate markers of asserted reality, potential, and insisted reality because of constraints on transfer. It is quite feasible, however, that potential could have merged with future.

8.2.4 The Tayo TMA system

It is now the time to examine the actual TMA system of Tayo. Data on Tayo come mainly from the work of Ehrhart (1993), and from fieldwork done by Chris Corne shortly before his untimely death in 1999. The page numbers following each example below refer to Ehrhart (1993) unless otherwise indicated. However, the orthography has been changed here to an adapted version of the *lortograf-linite* system created by Baker and Hookoomsing (1987) for Mauritian Creole.⁶

Several problems exist with the data, but the most relevant one here is that there are not enough examples to draw firm conclusions about some of the TMA markers. Thus, some of the analyses still remain tentative. Consequently, I first describe those markers that clearly exist in Tayo and then others which are more uncertain because of insufficient information.

8.2.4.1 Clearly existing TMA markers

Tayo has three clearly existing TMA markers, one for tense and modality and two for aspect. They are all preverbal and not obligatory in some contexts.

⁶ The major differences between this system and IPA are that *tch* = [c] and *ch* = [ʃ]; also, either *ain* or *ain* = [ã] and *oin* or *oin* = [õ].

(a) *Tense and modality:*

The Tayo system makes a major distinction between realized events/situations and future or unrealized (or potential) events/situations. Future/potential is most commonly marked by the preverbal marker *va*, which is labelled as future (FUT) (there are also two less common variants, *wa* and *a*):

- (42) *boñ la va rañtre se swar ...* [220]
 good 3SG FUT come.home DEM evening
 ‘OK, she will come home this evening...’

This marker, also found in Haitian Creole, appears to be derived from the second- and third-person singular form of the French verb *aller* used in the *futur proche* construction. As in French, it is used to mark events in the near future:

- (43) *mwa va rakoñte a usot* [139]
 1SG FUT tell story to 2PL
 ‘I am going to tell you a story.’

But *va* can signal other meanings as well. First, it can mark indefinite as well as the definite future:

- (44) *petet Rok la va arive avan ...* [220]⁷
 perhaps Rok SRP FUT arrive before
 ‘Perhaps Rok will arrive first...’

Second it can indicate a potential event:

- (45) *ta añterede ale vit paske añ va seke dela a twa* [179]
 2SG interest.in go quickly because one FUT steal 3DU POSS 2SG
 ‘You have reason to run (you should run) because someone could steal your [husband].’

It is used in clauses where the subjunctive mood would be used in French:

- (46) *noñ fo pa ke nu va tire ave le fisi* [128]
 no necessary NEG SUB 1PL FUT shoot with ART gun
 ‘No, we mustn’t shoot with guns.’

Finally, it can also express the counterfactual:

⁷ Note that like Melanesian Pidgin, Tayo has subject-referencing pronouns modelled on those of the CEO substrate languages (Corne 1995, 1999). Further examples are found in (47), (50), and (51b).

- (47) *pi si ta fe kom sa avañ epi tle vye le war twa*
 and if 2SG do like that before and PL old.people SRP see 2SG
sola wa tape twa pu tye twa [204]
 3PL FUT beat 2SG COMPL kill 2SG
 ‘And if you had done that before (in the olden days) and the elders
 had seen you they would have beaten you to death.’

Although past tense is normally unmarked, there is increasing use by some speakers of a preverbal tense marker. This is *ete* or its variant *te*, which is the form of the past tense or anterior marker in other French-lexified creoles such as Haitian Creole, and derived from French *été* or *était*. However, Ehrhart (1993: 164) notes that in Tayo these markers are used by younger speakers and those speaking a more decreolized variety, and there are only four examples in her 1993 data. Therefore, we will assume that they were not part of the original TMA system.

(b) *Aspect:*

Tayo has a preverbal marker of progressive aspect (PROG), *antrañde*:

- (48) *nu antrañde mwañche chokola* [118]
 1PL PROG eat chocolate
 ‘We are eating chocolate.’

This is derived from the French expression *en train de* and is in contrast to other French-lexified creoles whose progressive marker is derived from *après*. Like other creoles, this progressive marker can also be used before stative verbs, but unlike other creoles without an inchoative meaning:

- (49) *la antrañde malad* [161]
 3SG PROG ill
 ‘S/he is ill (at the moment).’

In addition, *antrañde* does not express habitual aspect, which is unmarked:

- (50) *le boñ myel-la sa abey le fe* [121]
 it.is good honey-ART REL bees SRP make
 ‘The honey that (the) bees make is good.’

Tayo also has a marker for accomplished aspect (ACP): *fini* or its variants *hni* and *ni*:

- (51) a. *pi kañ sola fini labure later sola plante mais* [246]
 and when 3PL ACP plough earth 3PL plant maize
 ‘And when they had finished ploughing the earth, they planted
 the maize.’

- b. *yer kañ mari pma le rantré*
 yesterday when husband 1SG.POSS SRP come.home
ma fini aretede travaye [163]
 1SG ACP stop work
 ‘Yesterday when my husband came home I stopped work.’

Fini is similar in form to the completive markers of other French-lexified creoles such as Haitian Creole (*ni*) and Mauritian Creole (*fin*)—all presumably derived from French *fini* (the past participle of *finir* ‘finish’). However, *fini* in Tayo, like the accomplished marker in the substrate languages, seems to focus on an achieved state resulting from the action rather than on the action itself. It is used with stative as well as non-stative verbs—to express the state of being old (*fini vye*) and being dead (*fini mor*); that is, having become old and having become dead, rather than the action of aging and dying respectively. Unlike completive markers, *fini* can be used with inchoative verbs without presenting a contradiction as in the following example (Ehrhart 1992: 152–3):

- (52) *apre kañ la premye lapli fini komanse tombe...*
 after when ART first rain ACP begin fall
 ‘After the first rain has begun to fall...’

Tayo also has an alternative accomplished marker *tcha* (derived from French *déjà* ‘already’). However, Ehrhart (1993: 164) reports that the form *fini* and its variants are used consistently by speakers over 50 years old, *tcha* and *fini* are used as synonyms by 20 to 50 year olds, and *tcha* is used almost exclusively by those under 20. Thus, it appears to be a more recent development.

8.2.4.2 Other possible TMA markers

Two other preverbal particles which are found in several contexts in the data could possibly be additional TMA markers. First, there is *ke*, which is normally used to introduce subordinate clauses but also occurs directly before the verb. Ehrhart (1993: 167) describes preverbal *ke* as expressing emphasis, and sometimes translates it (usually before adjectives/stative verbs) as *très* ‘very’, but often it is given no specific value. Here are some examples, in which *ke* is tentatively labelled emphatic [EMPH]:

- (53) a. *nu a ke mwanche sinyam-la selman* (Ehrhart 1992: 155)
 1PL FUT [EMPH] eat yam-DEM only
 ‘We will only eat yams.’

- b. *ma ke fitch* [167]
 1SG [EMPH] worn out
 ‘I am very tired.’
- c. *la ke kuri ambrase lya* [167]
 3SG [EMPH] run kiss 3SG
 ‘How he ran to kiss her!’

Ehrhart (1993: 167) says that *ke* derives from the now obsolete *ryanke* (which in turn comes from French *rien que* ‘nothing but’), and gives this example:

- (54) *ma ryanke kuri chiske lao* [167]
 1SG [EMPH] run right.to up.there
 ‘How I ran all the way up there!’

However, in examples more recently collected by Corne, *ryanke* and its variant *anke* are still used:

- (55) a. *nude ryanke parle komsa pu rigole*
 2DL [EMPH] speak like.that for laugh
 ‘We’re just chatting, nothing serious.’
- b. *sola anke fe an gran barach si larut*
 3PL [EMPH] make a big barricade on road
 ‘They’ve made a big barricade on the road.’

The common ground among the various uses of preverbal ((*ry*)*an*)*ke* appears to lie with the emphasis the speaker is placing on the verb. It is possible that by contrast with the unmarked verb, it implies some degree of subjective reality; that the speaker is bearing witness to the truth of the statement, so that the import of *ryanke kuri* in example (54) is ‘I really did run’. Therefore, it may be a marker of evidentiality.

It is also possible that *ankor* (from French *encore*) and its variants *anko* and *ko* may function as continuative markers when they are used preverbally:

- (56) a. *la anko malad* [167]
 3SG [CONT] ill
 ‘She is still ill.’
- b. *ta ko travay pu nikel?* [163]
 2SG [CONT] work for Société.le.Nickel
 ‘Do you work for the Société le Nickel?’

However, it is more usual to find *(aɲ)ko(r)* used to mean ‘again’:

- (57) *la wa arive petet se swar aɲkor* [181]
 3SG FUT arrive perhaps DEM evening again
 ‘Perhaps she will come again this evening.’

Thus, while preverbal *(aɲ)ko(r)* may suggest continuative marking, it may be that its primary function is as an adverb meaning ‘again’, like *nromwe* in Drubea, which can occur both before and after the verb. However, at this stage it is not possible to come to a conclusion without considering further data.

Finally, Corne collected a small number of examples from only one speaker in which *vyaɲ de* (French *vient de*) is possibly being used to mark temporal proximity:

- (58) *mersi a twa ta vyaɲ de done lamaɲ a mwa*
 thanks to 2SG 2SG PROX give hand to 1SG
 ‘Thanks for just giving me a hand.’ OR ‘Thanks for coming to give me a hand.’

However, no such usage of *vyaɲ de* is found in any of Ehrhart’s texts, and the few examples collected by Corne are restricted to the immediate past, as in the French construction, rather than both past and future, as in the substrate languages. Furthermore, in all the examples, *vyaɲ de* may be used to mean ‘come and do something’. Thus, at this stage, the conclusion is that there is no established marker of temporal proximity in Tayo.

8.2.5 Discussion

TMA marking in three substrate categories was expected to occur in Tayo on the basis of both reinforcement principles and availability constraints: future, progressive, and accomplished, and this is borne out by the data. Furthermore, nine markers were expected not to be retained on the basis of reinforcement principles alone, and these do not occur in the data. The expected merging of the categories of future and potential is also confirmed by the data.

With regard to the less likely but still possible categories, there may be a preverbal continuative marker, but the data are inconclusive. With regard to temporal proximity, even though it is marked in all three substrate languages, it appears that there is no established marker in Tayo, presumably because of constraints on transfer—i.e. the absence of perceptually salient, invariant preverbal morphemes in French which could

be (mis)interpreted as having functions similar to the substrate markers (in other words, nowhere to transfer to). The only inaccurate prediction concerns the markers of asserted and insisted reality. Even though all three substrate languages mark asserted reality and two mark insisted reality, the expectation was that such markers would be unlikely in Tayo because of nowhere to transfer to. However, it appears that Tayo does have a preverbal evidential marker which indicates asserted or insisted reality—*ke* and its variants, which have been labelled emphatic in examples (53) to (55). This is derived from the French *rien que* ‘nothing but’. So if the categories of asserted and insisted reality merged as predicted because of contraction, there was a perceptually salient and invariant string of morphemes to transfer to. But the functional link between *rien que* and the substrate markers is not obvious at first glance, and so the transfer was not expected. Furthermore, it is not clear that there is structural congruence with the substrate markers, as *rien que* normally precedes nouns, but not verbs or adjectives, unless there is an intervening preposition such as *pour*. Thus, the existence of this marker in Tayo does present a problem. Nevertheless, the notion of making predictions based on the potential of transfer proved to be valid overall.

8.3 Roper Kriol verb phrase

8.3.1 Sociohistorical background

Kriol is spoken by approximately 20,000 Aboriginal people in the northern part of Australia, primarily in the Northern Territory and the Kimberley region of Western Australia. Roper Kriol is one of numerous varieties of the language. It is spoken by at least 950 people in the Roper River region of the Northern Territory, which includes the communities of Ngukurr, Minyerri, Urupunga, and Jilkminggan, and by people from the region living in Darwin and smaller towns in the Territory. Information on origins of Roper Kriol comes from Harris (1986) and Munro (2000, 2004).

Kriol arose as a result of the invasion of the region by the pastoral industry, starting in the 1870s. Pastoralists had gradually moved up from southern New South Wales, starting in the 1820s, and then up through Queensland before entering the Northern Territory. With them, they brought varieties of New South Wales and Queensland Pidgin English. During the 1880s and early 1900s, these developed further in the Territory and stabilized to form Northern Territory Pidgin English (NTPE).

The first cattle station in the Roper River region was established in 1879; five others followed in the 1880s. The Aboriginal people of the region fought to maintain their country and freedom of movement by spearing cattle and in a few cases by killing pastoralists. The retaliation by the Northern Territory Police and groups of pastoralists, however, were often way out of proportion, and many atrocities were committed. From 1903 to 1908, the company that held massive leases in the region employed two gangs of ten to fourteen men to hunt and kill Aboriginal people on sight (Munro 2004: 53). Many Aboriginal families went to live on stations for safety, and the adults eventually became part of the labour force in the industry.

In 1908, the Church Missionary Society (CMS) established a mission on the banks of the Roper River, where Ngukurr is now located. Aboriginal families from the many language groups of the region took refuge there and worked, as people did on the stations. The difference was the existence of a dormitory for children. It was once thought that Kriol emerged rapidly among the children who were brought up in this dormitory. However, it now appears that most children remained bilingual in their traditional language and NTPE through the 1930s, and the pidgin expanded at this time. During the period from the 1940s to the 1960s, people began to shift from their traditional languages to the expanded NTPE, and their children acquired this as their first language. It was at this time then that Roper Kriol emerged.

8.3.2 The substrate languages and the verbal complex

The substrate languages for Roper Kriol were Alawa, Marra, Ngalakgan, Warndarrang, Mangarrayi, Ngandi, and Nunggubuyu. All of these are classified as belonging to the extremely diverse non-Pama-Nyungan group of languages. The examination of the substrate languages and their influence on Roper Kriol in this section relies heavily on the work of Munro (2004), although it does not follow her analysis exactly. Munro examined the four most significant of the substrate languages in terms of number of speakers and vitality: Alawa, Marra, Ngalakgan, and Nunggubuyu. Information on these languages comes from the published works referred to for each example. Since the orthographic conventions used in these various linguistic descriptions differ considerably from each other, Munro (2004) developed a compromise orthography, based on the published descriptions and the conventions used by the Diwurruwurru-jaru Aboriginal Corporation, the

Aboriginal Language Centre in Katherine, Northern Territory. This orthography is used here.

All four of these languages, like others of the non-Pama-Nyungan group, are non-configurational and agglutinative languages. The most intricate part of these languages is the verb complex, consisting of a verb stem and numerous affixes and other incorporated elements. Munro (p. 81) refers to Mufwene's (1986) observation that bound morphemes in agglutinative substrate languages are not normally transferred to contact languages, which are generally isolating languages. However, she argues that the function of each morpheme in the substrate verb complex could be transferred to free morphemes in the contact language, and if this occurs they would occur in the same order as in the verb complex. Furthermore, as we have seen for Melanesian Pidgin, transfer of affixes is certainly possible.

The verb complexes in all four substrate languages have the same core elements (as well as other different incorporated elements). These are as follows:

- (a) verb root
- (b) coverb (CV)
- (c) TMA marking suffix (TMA)
- (d) reciprocal/reflexive suffix (RECP/REFL)
- (e) pronominal prefix (usually on the verb root)

In addition, all four substrate languages use reduplication to indicate progressive aspect. Thus, with regard to reinforcement principles, one would expect all five of these elements plus reduplication for progressive to have been reinforced if they were transferred. I will now discuss each of these features with regard to availability constraints to examine the likelihood of their transfer.

8.3.2.1 *Verb root and coverb*

Munro (p. 82) provides a clear explanation of a coverb versus a verb root:

In the substrate languages, as in many Australian languages, there are two word classes corresponding to the category 'verb'. One word class is closed, and consists of around 30 finite roots, which inflect for tense, mood, and aspect. The other word class, called the 'coverb' class, is open, consisting of forms that do not inflect directly and which carry the main semantic weight of the verb. Most verbs in the substrate languages consist of both a coverb and an inflected finite root (see e.g. Baker and Harvey 2003: 9).

She also gives the following examples (p. 83), with the coverb marked CV:

- (59) *wan.gan nga-arlugu werneju*
 alone 1SG-poor.fellow bad:CV
nya-a-nja-rranya
 1DU.INCL-ROOT-RECP/REFL-PST.CONT
 ‘Poor me, we two have spoilt/ruined each other/ourselves.’
 (Alawa, Sharpe 1972: 153)

- (60) *yirri-watj-bim-bu-tji-na*
 1PL.EXCL-each-white.ochre:CV-ROOT-RECP-FUT
 ‘We’ll each ochre up/We’ll paint each other up.’
 (Ngalakgan, Merlan 1983: 132)

As can be seen in these two examples, the languages differ in the ordering of the coverb and pronominal prefix. In Alawa and Marra the coverb precedes the pronominal prefix, while in Ngalakgan and Nunggubuyu, it follows the prefix.

The following examples (p. 100) illustrate how the same coverb used with different verb roots leads to different meanings:

- (61) *mululbiri garr-arr-mudinyu-nu*
 echidna pierce:CV-1SG-ROOT:PRS-3SG
 ‘I pierce/spear the echidna.’ (Alawa, Sharpe 1972: 144)

- (62) *garr-arr-ngadan-na ardal-da*
 pierce:CV-1SG-ROOT:PST-3SG stone.oven-LOC
 ‘I cooked it in the ground oven.’ (Alawa, Sharpe 2001: 33)

Note, however, that having a coverb is not obligatory; some constructions have only the verb root. This fact, plus the different ordering in the two groups of languages, would discourage transfer. But the greatest constraint would be lack of somewhere to transfer to. There seems to be nothing in English like the dual verb structure in the substrate languages, and it is difficult to imagine lexical items being interpreted as functioning in combination as a coverb plus verb root. Therefore, transfer of this feature would not be expected.

8.3.2.2 TMA suffix and reduplication

All the substrate languages distinguish between several TMA categories, including past punctual, past continuous, present, future, and potential. These categories are usually marked by suffixes, as shown in examples (59) and (60) above, and in the following (p. 85):

- (63) *gu-jandah Ø-marninyh-mi-tji-ny*
 NC-stick 3SG-make-AUX-RECP-PPUNC
 ‘He made himself into a stick.’ (Ngalakgan, Merlan 1983: 104–5)

However, according to Munro (p. 85), the form of the suffix for each particular TMA category is irregular and depends on the verb class (see Baker and Harvey 2003). Furthermore, for some verb roots and coverbs, TMA is indicated by root modification rather than the addition of a suffix. The only exception to the irregularity of TMA suffixation is that in one language, Alawa, there is an additional suffix *-gay* with consistent form. This marks habitual, and can occur after verbs marked by root modification or by other TMA suffixes—for example (p. 86):

- (64) *nyag-jil-abarla-na-gay*
 spear:CV-3PL/3PL-ROOT-PST-HAB
 ‘They used to spear them.’ (Sharpe 1972: 78)

We have seen in Chapter 6 that Cantonese has postverbal aspect markers, but that only one of these transferred to the predecessor of Hawai‘i Creole because of the availability of somewhere to transfer to—i.e. *already* being interpreted as a perfect aspect marker. While the substrate languages here do not have the perfect category, it is possible that there may be other postverbal adverbs in English that could have been reanalysed as markers for some of the substrate TMA categories, or combinations of these categories, such as *now* and *before* for present and past. It would seem more difficult, however, to find a postverbal item to express future or potential. Therefore, because of the lack of somewhere to transfer to for some categories, in addition to the fact that the use of suffixes to mark TMA is not mandatory, only a small number of postverbal TMA markers would be expected, if any.

On the other hand, both partial and complete reduplication consistently occur in all four substrate languages to indicate progressive aspect, as in these examples (p. 85):

- (65) a. *ni-ja~janda-ngu-duma-na*
 3SG-PROG~back:CV-LIG-be.black-PRS
 ‘It (crow) has black on its back.’ (Nunggubuyu, Heath 1984: 341)
 b. *warra-maya~maya*
 MDP-PROG~sing
 ‘to be singing over and over’ (Nunggubuyu, Heath 1984: 342)

Since we have already seen that reduplication was transferred into the predecessor of modern Melanesian Pidgin (Chapter 6), there is no reason why it should not be expected here.

8.3.2.3 Reciprocal/reflexive suffix (RECP/REFL)

Three of the substrate languages—Ngalakgan, Alawa, and Marra—have one form that expresses both reciprocal and reflexive. The form may also indicate tense or aspect—for example *-nja-* in Alawa (p. 91), as shown in example (59), repeated here as (66):

- (66) *wan.gan nga-arlugu werneju*
 alone 1SG-poor.fellow bad:CV
nya-a-nja-rranya
 1DU.INCL-ROOT-RECP/REFL-PST.CONT
 ‘Poor me, we two have spoilt/ruined each other/ourselves.’
 (Alawa, Sharpe 1972: 153)

Marra differs from the other two in that the reflexive/reciprocal marker *-rlana* comes after the TMA suffix (p. 92):

- (67) *rang-bala-nyi-rlana*
 hit.CV-3PL/3PL-ROOT:PST-RECP/REFL
 ‘They hit each other/They fought/They hit themselves.’
 (Marra, Heath 1981: 205)

Nunggubuyu has separate forms for the two functions, *-nyji-* for reciprocal and *-i-*, which according to the morphophonemic rules of the language changes the final vowel of the verb stem to /i/ (p. 91):

- (68) a. *wini-jurrjurriga-nyji-iny*
 3DU-push-RECP-PST
 ‘They (two) shoved each other.’ (Nunggubuyu, Heath 1980: 41)
 b. *ni-barumi-ny-bugij*
 3SG-coil.up.REFL-PST-only
 ‘He coiled himself up.’ (Nunggubuyu, Heath 1980: 152)

The expectation would be, therefore, that Roper Kriol would use one form for both reciprocal and reflexive—but only if a postverbally occurring lexical item from English exists that could be interpreted as having a meaning related to both functions. However, this is unlikely. Therefore, one would expect separate markers. In the case of Melanesian Pidgin, we saw in Chapter 6 that the preverbal reciprocal marker had nowhere to transfer to,

but in this case there is the postverbal *each other* in English. The English reflexive ending in *-self/selves* also occurs postverbally. Therefore, the expectation would be that the use of both of these forms would be reinforced by the presence of the reciprocal/reflexive suffixes in the substrate languages.

8.3.2.4 *Pronominal prefix*

We have seen that the preverbal subject-referencing pronoun of the CEO substrate languages was transferred into the predecessor of Melanesian Pidgin, so at first glance the transfer of the pronominal prefix into the predecessor of Kriol would also seem feasible. However, there is one crucial difference: the pronominal prefix in the Kriol substrate languages often marks both the subject and direct object. The prefix may be segmentable, transparently indicating the two arguments—for example (p. 97):

- (69) *yirrirn-bi-bak-wotj-ma*
 1PL.EXCL-3PL-always-steal-ROOT.TMA
 ‘They always steal from us.’ (Ngalakgan, Baker 2002: 54)

But it also may be non-segmentable (p. 98):

- (70) *yini-wanyh-bun*
 2SG/1SG-NEG-hit:TMA
 ‘You shouldn’t hit me.’ (Ngalakgan, Merlan 1983: 87)

Clearly, there is no construction in English such as *you me shouldn’t hit* where both the subject and object pronoun come before the verb. Therefore, transfer of the pronominal prefix would not be expected.

8.3.2.5 *Summary*

With regard to the core features of the verb complex of the substrate languages, the following features would be expected in Roper Kriol:

- (a) limited number of postverbal TMA markers;
- (b) reduplication to indicate progressive aspect;
- (c) postverbal reciprocal and reflexive marker or markers.

On the other hand, the two verb construction (coverb and root) and the pronominal prefix (indexing more than one argument) would not be expected.

8.3.3 The Roper Kriol verb phrase

Now it is time to look at the actual verb phrase in Roper Kriol. All examples come from Munro (2004), using the orthography slightly adapted from that devised by Sandefur (1979).

Munro (2004: 87) points out that in contrast to the substrate languages, Kriol generally indicates TMA with preverbal markers—for example:

- (71) a. *main mami bin oldei gemp langa gemp*
 POSS mother PST CONT live/stay PREP camp
 ‘My mum stayed (slept) at camp.’
 b. *mela garra weit-na bla olgamen*
 1PL.EXCL OBLIG wait-EM PREP respected.lady
 ‘We have to wait for the old lady.’
 c. *im mait gaman en ran-im-wei en it yunmi*
 3SG POT come CONJ run-TR-DIR CONJ eat IDU.INCL
 ‘It might come and run this way and eat us (you and me).’

However, there is one suffix that marks progressive aspect in past or present: *-bat*—for example (p. 88):

- (72) a. *dei bin stat len-im-bat mi*
 3PL PST INCH teach-TR-PROG 1SG
 ‘They started teaching me.’
 b. *ai bin stat werk-na baba, ai bin werk-na*
 1SG PST INCH work-EM sister 1SG PST work-EM
olawei-na ai bin werk~werk-bat
 all.the.way-EM 1SG PST PROG~WORK-PROG
 ‘I started to work (then), sister, I worked all the time (then), I was working (and working/for a long time).’

Munro (p. 90) attributes the origin of *-bat* to the English word *about* in sentences such as *I was jumping about*.

In addition, reduplication can also be used to indicate progressive aspect, with the *-bat* suffix, as in (72b), or without, as in the following (p. 88):

- (73) *ai bin stat gu-wei-na jinikiwei~jinik-iwei yuno*
 1SG PST INCH go-DIR-EM PROG~sneak-DIR you.know
gu werk najableis~najableis
 go work PL~another.place

‘I started to go away now, sneaking away again and again, you know, to go working at other places.’

Therefore, the first two expected substrate features are found in Kriol.

With regard to the third expected feature, Kriol has separate reciprocal and reflexive markers, *gija* and *mijelp* (p. 94):

- (74) a. *olabat gula~gula gija jeya*
 3PL PROG~fight RECP there
 ‘They are fighting (together/each other) there.’
- b. *minbala bin dok~dok gija en minbala bin*
 1DU.EXCL PST PROG~talk RECP CONJ 1DU.EXCL PST
gut-binji gija
 good-stomach RECP
 ‘We two were talking to each other and we (made each other feel) felt happy (good).’
- (75) a. *yu lafda waj-im mijelp*
 2SG NEC wash-TR REFL
 ‘You must wash yourself.’ (Sandefur 1979: 92)
- b. *dubala bin luj-im mijelp*
 3DU PST lose-TR REFL
 ‘They got lost.’ (lit. ‘They lost themselves.’) (Sandefur 1979: 92)

According to Munro (p. 95), the origin of the reciprocal marker *gija* is the English word *together*, which changed to *gija* under the influence of substrate phonologies. So rather than reinforcing the English lexical reciprocal marker *each other*, it appears that the properties of the substrate reciprocal marker were transferred to *together*. The origin of *mijelp* is *meself*, the non-standard English form of *myself* widely used around Australia and most probably by workers in the pastoral industry (pp. 95–6). This has been reinforced by the substrate reflexive marker, and overgeneralized to be used for all persons and numbers.⁸

With regard to the unexpected features, Munro (2004: 99, 102–3) illustrates that both are not found in Roper Kriol.

In summary, by examining the core linguistic features of the verbal complex of the substrate phrase in light of availability constraints on transfer, we were able to make valid predictions about the extent of substrate influence in the Kriol verb phrase. In fact, Munro (2004) examined the entire grammars of the substrate languages and found twenty-seven grammatical features that are shared by the majority of the substrate languages and therefore that

⁸ Munro (2004: 96) observes that in Fitzroy Kriol, the form *jelp* is used for both reciprocal and reflexive. According to Hudson (1983: 124), this follows the pattern of the local substrate language, Walmajarri.

potentially could have been found in the creole because of the reinforcement principle of frequency. Out of these, seven are not found in the creole. But Munro found that the absence of six of these could be explained by availability constraints—i.e. they could not be transferred because of the absence of perceptually salient forms in congruent constructions in the lexifier that could have been interpreted as having shared function or meaning.

8.4 Conclusions

These two case studies have shown that by examining reinforcement principles and availability constraints, we could account for most of the substrate features of the TMA system in Tayo and the verb phrase of Roper Kriol. In addition, although nowhere near perfect, this approach seems to offer more than other substrate analyses. Examining in detail one particular substrate language may account for the presence of some features in a creole but it cannot account for the absence of others. Looking at the degree of substrate homogeneity may provide explanations for the absence of some features, but it cannot explain the absence of a feature shared by all the dominant substrate languages. The approach outlined here seems to come closest to offering a principled account of substrate influence in a creole.

9 Decreolization?

According to the classic ‘life-cycle’ view of pidgin/creole development (Schuchardt 1909; Hall 1966), a pidgin develops into an expanded pidgin, and then a creole, and finally a ‘post-creole continuum’ (De Camp 1971). This continuum is thought to develop through the process of decreolization, as already mentioned several times in this work. In this chapter, I take a critical look at the notions of decreolization and the creole continuum on the basis of two of the varieties being focussed on in this book: Melanesian Pidgin and Hawai‘i Creole. But first, I give some additional background on these notions.

9.1 Introduction

Originally described (but not named) by Schuchardt (1883) (see Meijer and Muysken 1977: 31), a post-creole continuum is characterized by a cline of lexical, phonological, and grammatical features ranging from those closest to a standard form of the creole’s lexifier language (the acrolect) to those furthest from the lexifier language, and therefore most ‘creole-like’ (the basilect). Thus, there is a great deal of variation in the speech community and the point at which a form of speech is located along the continuum depends on the context as well as the social characteristics of the speaker. For example, the speech of the urban professional elite would be towards the acrolectal end whereas the speech of a poor rural villager would be towards the basilectal end. Intermediate or mesolectal varieties are also found in between. Similarly, formal speech would be more towards the acrolectal end of the continuum, and informal speech towards the basilectal end. An example of the range of speech in the Jamaica Creole continuum can be seen in Figure 9.1.

The social conditions for a post-creole continuum outlined by DeCamp (1971: 351) include a standard form of the lexifier language being the dominant official language, the partial breakdown of formerly rigid social stratification so that some social mobility is possible, and access to education in the dominant language. Thus, this phenomenon is supposedly the result of the lexifier language becoming the target and the creole then becoming

| | | |
|-----------|------------------------------------|--------------------------------------|
| acrolect: | <i>hi iz i: ting hiz dina.</i> | <i>he is eating his dinner.</i> |
| ↑ | <i>(h)im iz i: tin (h)im dina.</i> | <i>(h)im is eating (h)im dinner.</i> |
| | <i>(h)im i: tin (h)im dina.</i> | <i>(h)im eating (h)im dinner.</i> |
| ↓ | <i>im a i: t im dina.</i> | <i>im a eat im dinner.</i> |
| basilect: | <i>im a nyam im dina.</i> | <i>im a nyam im dina.</i> |

Figure 9.1. Range of speech in the Jamaican Creole continuum (Alleyne 1980)

heavily influenced or restructured by it, a process called ‘decreolization’. Decreolization is usually defined as the gradual modification of a creole in the direction of the lexifier. It is usually thought of in terms of the adoption of particular features for example, in TMA marking in Jamaican Creole (Alleyne 1980):

- (1) a. conditional: *ben + go* → *wuda*
 b. progressive: *(d)a + V* → *V-in*
 c. past tense: *ben + V* → *did + V* → English past tense

The terms post-creole continuum and decreolization are sometimes applied to situations where an expanded pidgin comes into renewed close contact with its lexifier. For example, O’Donnell and Todd (1980: 52) state:

A further phase in the development of a pidgin is what has been called a ‘post-creole continuum’, although the phenomenon thus described is not limited to areas where pidgins have become the mother tongue of a speech community. When a creole or expanded pidgin exists in a community where its lexical source language is the language of education and politics... the two linguistic systems inter-influence each other with the result that one finds, not two distinct systems, but an unbroken spectrum between the pidgin or creole on one hand and the prestigious standard language on the other.

The terms ‘post-pidgin’ and ‘post-pidgin continuum’, though, are now used to describe the situation relating specifically to a pidgin language (Mühlhäusler 1980: 22; Appel and Muysken 1987: 156). Mühlhäusler (1997: 211–12) gives the following definition:

In general terms, by a post-Pidgin or post-Creole variety we understand a Pidgin or Creole which, after a period of relative linguistic independence, has come under renewed vigorous influence from its original lexifier language, involving restructuring and/or replacement of earlier lexicon and grammar in favour of patterns from the superimposed ‘target’ language.

The most well-known post-creoles are in the Caribbean region (e.g. DeCamp 1971; Bickerton 1975a), and the most well-known post-pidgin continua are in West Africa (Todd 1982: 286; Bokamba 1991: 497).

Several issues have been debated with regard to the notions of decreolization and the post-creole continuum. First, there is the view that the continua of internal variation are not necessarily the result of decreolization but were present in many creoles from the beginning (e.g. Alleyne 1971; Valdman 1991). Second, many scholars have thought that linguistic change in creoles does not necessarily take place in the direction of the lexifier (e.g. LePage 1977; Bailey and Maynor 1998). In fact, as mentioned in Chapter 3, many creolists (e.g. Chaudenson 2001; Mufwene 2001) believe that creoles develop via a process of gradual basilectalization, where a creole becomes more unlike its lexifier, rather than decreolization, where it becomes more like its lexifier. Because of these two views, most creolists now refer to the 'creole continuum' rather than the post-creole continuum. Third, the whole concept of the creole continuum has been attacked on two fronts. Scholars such as LePage and Tabouret-Keller (1985) argue against the notion of variation in the continuum occurring along a single dimension. Other researchers reject the whole notion of a continuum in some situations, favouring a model with two discrete systems, the creole and the lexifier (Lawton 1980; Edwards 1983; Siegel 1997*b*), or a model with an intermediate system as well (Winford 1997), and code-switching between the systems.

9.2 Melanesian Pidgin and English: Is there a continuum?

In this section, I examine the question of whether or not there is a pidgin/creole continuum where Melanesian Pidgin (MP) is spoken, concentrating on Papua New Guinea, but with some discussion of the situation in the Solomon Islands and Vanuatu as well.¹

9.2.1 Papua New Guinea: Background

In Papua New Guinea (PNG), English holds an important official position as the language of government (at least in written communication) and the language of education. Formerly, it was the medium of instruction from Grade 1 in all government schools. But since the 1990s, communities can choose any language they want to be used for the first three years of elementary schooling, after which English takes over (see Section 9.2.8.2 below). While English is the designated official language, Tok Pisin is more widely

¹ Most of this section is an update of Siegel 1997*b*.

used as a lingua franca in both official and unofficial contexts. It is also used to a large extent in parliamentary debates (Nekitel 1990) and in government publications. On the other hand, broadcasting on the national level is almost entirely in English, except for certain news bulletins in Tok Pisin and Hiri Motu (another pidgin, once spoken widely in the southern part of the country), and the relay of parliamentary debates. There are two English daily newspapers and a Tok Pisin weekly, *Wantok*. A distinct indigenized variety of English has also emerged in PNG (Platt, Weber, and Ho 1984). The features of PNG English have been described in detail by Smith (1978, 1988a, 1988b). A regional variety of PNG English spoken in the Milne Bay province has been outlined by Yarupawa (1986).

Since the sociolinguistic situation in PNG appears to be similar to that in the English-speaking Caribbean and West Africa, some scholars have applied the notions of a post-pidgin/creole continuum and decreolization to Tok Pisin. For example, Bickerton (1975b) speculates that a continuum may develop in PNG similar to those in Guyana and Nigeria. A similar point is made by Sankoff (1976: 308). More than a decade later, Kale (1990: 190) says that 'a pidgin-English continuum may be evolving'.

However, O'Donnell and Todd (1980: 52) clearly include PNG, along with the West Indies and West Africa, in the areas where post-creole continua have already developed. Aitchison (1981: 212–14) also describes the 'decreolization' of Tok Pisin and Romaine (1992b: 323) concludes that 'decreolization is already advanced in urban areas like Lae', and says that a 'fully fledged continuum of the Jamaican type' has recently come into existence in PNG. In her earlier textbook on pidgin and creole languages, Romaine (1988: 304) also mentions the existence of a post-pidgin continuum in PNG as well as in West Africa. Finally, Mühlhäusler (1997: 211–21) gives several linguistic examples from Tok Pisin to illustrate the post-pidgin situation, although he questions the unilinear view of decreolization (and 'depidginization').

But is there really a post-pidgin continuum, or more specifically a pidgin-to-English continuum, in PNG? In order to answer this question, I examine the following: (1) the current linguistic features of Tok Pisin (TP) which reportedly result from decreolization (or depidginization); (2) the current status of English-influenced innovations that were reported almost forty years ago; (3) the linguistic features of PNG English, looking for the influence of Tok Pisin; (4) code alternation; and (5) the reported existence of intermediate varieties.

9.2.2 Linguistic features of Tok Pisin influenced by English

9.2.2.1 *Lexicon*

The influence of English in the TP lexicon is unmistakable; the distinction between the urban and rural sociolects made by Mühlhäusler (1975, 1985*b*) is based mainly on differences in the distribution of lexical items, some more commonly rural and others more commonly urban. Some examples are (Siegel 1985: 531):

| | | | |
|-----|------------------|-----------------|-----------|
| (2) | rural | urban | |
| | <i>bungim</i> | <i>kolektim</i> | ‘collect’ |
| | <i>meri</i> | <i>gel</i> | ‘girl’ |
| | <i>gat</i> | <i>hevim</i> | ‘have’ |
| | <i>tok nogut</i> | <i>swea</i> | ‘swear’ |

However, other formerly urban or anglicized TP items have now become common all over PNG, even in rural areas:

| | | | |
|-----|-------------------|--------------------|---|
| (3) | rural | urban/rural | |
| | <i>bosman</i> | <i>menesa</i> | ‘manager’ |
| | <i>gohet</i> | <i>divelopmen</i> | ‘development’ |
| | <i>yangpela</i> | <i>yut</i> | ‘youth’ |
| | <i>ol manmeri</i> | <i>pablik</i> | ‘the public’ |
| | <i>helpim</i> | <i>sapotim</i> | ‘support’ |
| | <i>orait</i> | <i>oke</i> | ‘OK’ (especially as a discourse marker) |

Also, there are many lexical items supposedly part of urban Tok Pisin which are comprehensible only to English/TP bilinguals, for example, the items in small capitals in the following extract from a speech of a Member of Parliament (Nekitel 1990: 31):

- (4) *Tenkyu Mista Spika; mi laik askim A SUPPLEMENTARY tasol long minista a-a em i gat tingting long a-am FORMULATE-im wanpela POLICY dispela ol man ya ol i kolim ol yut ya ol i raskol na gavman i givim ol mani taim SINCE taim ol i stat i kam inap nau na i nogat wanpela bikpela wok i kam na ol i no go bek na ol i no REHABILITATE-im ol. So inap long painim wanpela as o i no inap—inap long yu putim dispela ol mani bilong yut i go insait long kristen—kristen yut ORGANIZATION we i gat moa kaikai... Olsem na inap long Minista bilong Yut i senisim POLICY bilong yu na lukluk long dispela na DIVERT-im mani i go...*

[Thank you, Mr Speaker. I want to ask a supplementary (question) to the minister—whether he’s thinking of formulating a policy about

these people called youth who are really criminals and the government gives them money since they started (the scheme) up until now and they haven't done anything with it and they haven't gone back and haven't been rehabilitated. So can a reason be found or not—can you put this money for youth into a Christian youth organization that has more credit. Thus, can you the Minister of Youth change your policy and look into this and divert the money...]

However, it is more likely such items are not really integrated into any widely spoken variety of Tok Pisin. Either they are part of a special political register (Scorza and Franklin 1989: 48), or they are the result of code alternation (Muysken 2000) or nonce borrowing (Poplack, Sankoff, and Miller 1988)—the spontaneous and momentary use of an assimilated lexical item or phrase from another linguistic system.

Aitchison's (1981: 212–14) claim that TP is undergoing decreolization is based almost entirely on the widespread borrowing from English among some urban speakers. Romaine (1992*b*: 171) says: 'There is now a considerable gap between urban and rural Tok Pisin which is due partly to the greater anglicization of the lexicon of town speech. The increasing use of English is one manifestation of decreolization.' However, careful reading of her study shows that for certain items, some rural areas show greater usage of an anglicized form than urban areas, for example English *cow* instead of TP *bulmakau* (p. 158). Also, the degree of anglicization in some cases seems to be based on geographical rather than social factors, for example the use of *oke* rather than *orait* in various locations in one province (p. 147).

It is also important to point out that a great deal of the lexical expansion occurring in both urban and rural TP is based on the internal resources of the language, not English. For example, the development of many new idioms and metaphorical expressions, as described by Smith (1990), are not based on English:

| (5) expression | literal meaning | idiomatic meaning |
|-----------------------|-------------------|-----------------------------|
| <i>kisim win</i> | 'get wind' | 'have a rest' |
| <i>karim kaikai</i> | 'give food' | 'get the desired result' |
| <i>kapsaitim wara</i> | 'pour water' | 'urinate' |
| <i>putim skin</i> | 'put one's skin' | 'try to make an impression' |
| <i>sem pipia</i> | 'ashamed rubbish' | 'very ashamed' |
| <i>sutim tok</i> | 'shoot talk' | 'blame' |

(See also Smith 2002: 109–11.) In addition, although the vast majority of new lexical items come from English, indigenous PNG languages are still

an important potential source—for example: Tolai *karakap* ‘green vegetable’ and Manus *mao* ‘leprechaun, fairy’ (Smith 2002: 100).

Thus, while it is true that the lexicon of TP is being anglicized to some extent, this phenomenon cannot be correlated specifically with any particular social group. Furthermore, English is not the only source of lexical expansion in the language, and the use of English items by bilinguals may indicate nonce borrowing (or insertion) rather than integrated borrowing.

9.2.2.2 Phonology

Mühlhäusler (1997: 212) mentions the introduction of consonant clusters—as in *bihaindim* instead of *bihainim* ‘to follow’—as an example of phonological restructuring of TP due to English, but gives no details of their distribution. Romaine (1992*b*: 172–210) describes in detail phonological variation in TP with regard to certain phonological contrasts, such as [p] versus [f]. She claims that ‘the most important factor seems to be the influence of English’ (p. 208), although she shows that many other factors may be involved, such as the nature of the substrate languages and variation earlier in Tok Pisin’s history. Her conclusion (p. 211) is that ‘these changes can be regarded as part of the more general process of decreolization.’ On the other hand, Smith (2002: 210) concludes that while there is some phonological convergence with English, the adopted lexical items are for the most part fully integrated into Tok Pisin phonology, and that there is no evidence of any change in Tok Pisin phonological distinctions.

Furthermore, the most striking phonological change in TP is once again internally motivated and has nothing to do with English; this is morphophonological reduction (Lynch 1979; Romaine 1992*b*; Smith 2002). For example, in the Tok Pisin of young urban speakers, the preposition *bilong* is most often reduced to /blo/, /bloŋ/ or even /bl/ as in *dok bilong em* ‘his dog’ pronounced as /dok blem/.

9.2.2.3 Morphology

One of the most commonly referred to ‘post-pidgin’ features of TP is the reported existence of two systems of plural marking. The first is the TP use of *ol* as an NP non-obligatory plural marker, as in *Em i lukim ol bikpela pik* ‘He saw the big pigs’. The second is the use of the English *-s* plural, as in *gels* ‘girls’ in *Sampela gels i wok long pilai basketbol* ‘Some girls are playing basketball’. However, Mühlhäusler points out that *-s* plural marking is unsystematic and results from language mixing (1997: 214). He illustrates, for example, how one writer of Tok Pisin uses both methods inconsistently, as in ‘*ol gels*’ and

'*ol girl*' both being used to mean 'the girls', while another consistently uses '*boys*' for 'boys' but '*meri*' or '*ol meri*' for 'girls' (p. 215). Another uses the -s plural for only certain items:

- (6) *planti meri wok olsem taipis, post office clerk, nurses, radio announcer na sampela wok moa*
 'many women work as typists, post office clerks, nurses, radio announcers and other jobs'

Similar examples are given by Smith (2002: 72). Thus, it may be misleading to say that using the -s plural is an alternative 'system' of plural marking in Tok Pisin.

Furthermore, Romaine (1992*b*: 237) notes that in her detailed data on plural marking, 41 per cent of -s marked nouns are 'double marked' with *ol*, for example: *ol skul bois na gels* 'the school boys and girls'. This seems to indicate that the TP system is still in operation, despite the presence of the -s. Also, since plural marking is optional in TP grammar, the fact that a word occurs in TP with the -s plural marker but without the *ol* plural marker does not necessarily mean it is being grammatically marked for plural just because that is the function of the -s in English. Romaine points out (p. 238): 'The occurrence of *wanpela inseks* ["one insect"] indicates a case where the form was borrowed in the plural, rather than a true suffixed plural.'

This may be true of many other cases as well, and rather than having a dual system of plural marking, educated Tok Pisin speakers may be spontaneously borrowing English words with their plural suffix. As pointed out by Crowley (1992: 217–18), the most likely words to occur in TP with the -s plural are those 'that are copied from English on an *ad hoc* basis'. Romaine's study (1992*b*: 226–32) shows that -s plural marking occurs more frequently in urban areas and that there is a correlation between its use and amount of schooling. Lynch (1979: 5) also notes that it occurs mainly among TP speakers who are also fluent in English. Linguistic evidence is also found in Romaine's (1992*b*) work. First of all, she classifies 107 out of a total of 195 types (about 55 per cent) of -s plural marking as 'nonce plural formations' (p. 233). Second, according to the data, only 9 per cent of the -s marked forms are exclusively TP words (i.e. those with non-transparent English origin, such as *mambu* 'bamboo', and those from other languages, such as *kiau* 'egg'); the remainder are clearly English, adapted into TP from English, or ambiguously either English or Tok Pisin. Only 2 per cent are 'nonce-formations' of words of non-English origin with the -s plural, such as *pikininis* 'children' and *muruks* 'cassowaries' (p. 238).

The existence of these forms, as well as those with double marking, may indicate the beginning of a linguistic change, but at present there is actually very little evidence of two competing systems of morphological plural marking in TP. Instead, there is variation in the degree of insertion of English plural forms into TP. (For a more detailed discussion, see Smith 2002: 71–6.)

9.2.2.4 Syntax

Mühlhäusler (1985a: 138–40) lists several syntactic ‘post-pidgin’ features of TP. Some of these, such as new prepositions and new causal conjunctions, can be considered as lexical borrowings which have been around for a long time. For example, *bikos* ‘because’ can be found in Mihalic’s 1971 dictionary. Others are part of borrowed phrases, such as *ov* for *of* in *Haus ov Assembli* ‘House of Assembly’. Two features, embedded sentences with *hau* (‘how’) and comparatives with *mo* ADJ *long* (modelled on *more* ADJ *than*) may reflect English syntax, but their distribution is not known:

- (7) ‘post-pidgin’: *Yu lukim hau ol i sindaun.*
 normal usage: *Yu lukim ol i sindaun olsem wanem.*
 ‘See how they live.’
- (8) ‘post-pidgin’: *Em i mo bikipela long mi.*
 normal usage: *Em i bikipela winim mi.*
 ‘He’s bigger than me.’

Mühlhäusler (1997: 217–18), Romaine (1992b: 297–8), and Smith (2002: 152) deal with the relatively recent innovation in TP writing and broadcasting of using *husat* ‘who’ as a relativizer in addition to its normal use as an interrogative pronoun (Siegel 1981), for example:

- (9) *Na i gat planti nesenel politik man husat i givim sapot bilong ol i go long pati ya.* (*Wantok*, no. 379, p. 6)
 [‘And there are many national politicians who are giving their support to this party.’]

Mühlhäusler (1997: 218) says that this construction began as a calque on written English, but points out that it has diverged from English usage as it is no longer restricted to human referent, as in the following:

- (10) *East New Britain em wanpela long ol tripela Provinces husat i bin kisim ful pawa bilong em yet.* (Radio Morobe 29/6/1981)
 [‘East New Britain is one of the three provinces which has got complete power for itself.’]

Smith (2002: 152) gives examples from spoken Tok Pisin, but in each of these the referent is human, for instance:

- (11) *tupela manmeri usat i sawe kilim man na dai tupla bin kechim boi ia*
'a couple who killed people caught the boy'

Romaine (1992*b*: 244–317) discusses the other TP relativizer *we* and additional syntactic developments, namely the grammaticalization of *bai* as a future marker (see Chapter 4) and the 'degrammaticalization' of *i* as the predicate marker. These developments, however, are not related to English. Other relatively recent developments in TP morphosyntax, such as the *sa-* and *la-* aspect prefixes (Lynch 1979; Smith 2002), also have nothing to do with English.

Thus, there appears to have been little effect of English on the developing grammar of TP, and thus no evidence of the kind of restructuring which characterizes a post-pidgin/creole continuum.

9.2.3 English-influenced innovations in the past

In an article published more than fifty years ago, Hall (1955) describes many linguistic innovations that had taken place in TP since the 1930s. The main source of these innovations, he said, was English—more specifically, Australian English. Since access to English began to increase even more after the 1950s as a result of more widespread formal education, it is likely that these innovations would have been reinforced, and that if there was a continuum, they would be found at the acrolectal end. However, this does not appear to be the case, except for lexical items, as I will now illustrate.

9.2.3.1 *Lexicon*

Most of the lexical innovations described by Hall still exist in PNG. These include English replacements for former German loans, for example *plen* for *hobel* 'plane', and single English items for compounds, such as *opis* for *haus pepa* 'office'. However, a few are no longer commonly found, for example: *damis* 'damage', *els* 'otherwise', and *farawe* 'faraway'. Significantly, Hall also talks about urban-rural differences in vocabulary existing forty years ago (p. 105).

9.2.3.2 *Phonology*

The following innovations described by Hall are not commonplace features of current TP:

- a) /θ/ and /ð/ as additional phonemes (rather than allophones);
- b) /ts/ for what is /tʃ/ or /tʃ/ in words from English, e.g. /tuməts/ 'very' (> too much); and
- c) supposedly Australian pronunciations of certain vowels, e.g. /aɪ/ for /e/ as in /naɪm/ for /nem/ 'name'.

However, one innovation he lists that still exists is that of additional consonant clusters, mentioned in Section 9.2.2.2.

9.2.3.3 Morphology

The following innovations described by Hall are not features of any variety of current TP:

- (a) omission of the *-pela* suffix on adjectives, e.g. *gut taim* instead of *gutpela taim* 'good time';
- (b) use of the indefinite articles *a* and *an* (still only in loan phrases);
- (c) use of the *-ing* verbal suffix (see also Mühlhäusler 1985a: 135);
- (d) use of English *and* /æn/ and *but* as conjunctions.

On the other hand, many of the morphological innovations listed by Hall are found in current TP, but they cannot really be attributed to the influence of English. These include:

- (a) use of the suffix *-pela* with polysyllabic adjectives, e.g. *yelopela* 'yellow';
- (b) use of *husat* 'who' and *wanem* 'what' with additional indefinite functions, e.g. *wanem ples* 'whatever place' or 'any place';
- (c) use of *save* 'know' as a habitual marker (mentioned above);
- (d) use of *bin* as a past marker, as in *em i bin sik* 'she was sick'.

The morphological innovations that can be attributed to English are:

- (a) *-s* plural marking (already discussed);
- (b) use of the English number system, e.g. *twenti* instead of *tupela ten* 'twenty'.

With regard to *-s* plural marking, if this was developing as a competing system in TP more than fifty years ago, we would expect it to be more widespread in current TP. The fact that it is not is further evidence that its use in current TP is more indicative of insertion than restructuring. The adoption of the English number system, however, has permeated virtually all varieties of TP, but it is more a lexical than a morphological innovation.

9.2.3.4 Syntax

Again, the following innovations in phrase structure are not found in current TP except in loan phrases:

- (a) attribute + head NPs, such as *gavmen skul* ‘government school’;
- (b) possessor + head NPs, e.g. *Mista Roberts trak* instead of *trak bilong Mista Roberts* ‘Mr Roberts’ truck’;
- (c) adverb + adjective, e.g. *mo planti* instead of *planti tumas* ‘very much’.

An English kind of dative construction in TP is mentioned by Hall (p. 105), but it is not clear to me that it is really due to ‘post-pidgin’ influence:

- (12) ‘post-pidgin’: *Em i givim mi liklik pe.*
normal usage: *Em i givim liklik pe long mi.*
‘He gave me a little pay.’

At the end of the study, Hall concludes (pp. 108–9):

... [T]he chief respects in which Neo-Melanesian [a now obsolete term for TP] is being affected by recent innovations are those of vocabulary, phrase-structure and phonemics, in the order given. The two most basic aspects, morphology (except for the numeral system) and clause-structure, are relatively untouched.

If we consider that the innovations in phrase structure he describes are mainly in loan phrases, then the influence from English seems again to be mostly in the lexical area. Restructuring had not begun to any extent, and nearly all those innovations which were recorded did not last or become more widespread. This is not what we would expect if TP was under structural pressure from English. As Hall puts it (p. 109): ‘These considerations would suggest that, despite present-day innovations under cultural pressure from English, Neo-Melanesian is keeping its individuality and independence of linguistic structure.’

9.2.4 The linguistic features of Papua New Guinea English

If a pidgin-to-English continuum exists in PNG, we would expect not only the influence of English on Tok Pisin but also the influence of Tok Pisin on the indigenized variety, PNG English (PNGE). However, again with the exception of the lexicon, little if any such influence can be found.

A small set of TP words have come into PNGE, as well as into the English spoken by expatriates living in the country. These are terms for some relatives, such as *bubu* ‘grandparent, grandchild’ and *tambu* ‘in-law’ (see Holzknicht 1989), and for typically Papua New Guinean items, for example:

Table 9.1. Plural pronouns in three varieties

| | Tok Pisin | PNG English | Aboriginal English |
|--------------------|---------------------|-------------|-----------------------|
| 1 inclusive dual | <i>mitupela</i> | <i>we</i> | <i>me'n'you</i> |
| 1 inclusive plural | <i>mipela</i> | <i>we</i> | <i>us mob/we</i> |
| 1 exclusive dual | <i>yumi(tupela)</i> | <i>we</i> | <i>me'n'him/her</i> |
| 1 exclusive plural | <i>yumi</i> | <i>we</i> | <i>us mob/we</i> |
| 2 dual | <i>yutupela</i> | <i>you</i> | <i>you-two</i> |
| 2 plural | <i>yupela</i> | <i>you</i> | <i>you-mob/youse</i> |
| 3 dual | <i>(em)tupela</i> | <i>they</i> | <i>them/those-two</i> |
| 3 plural | <i>ol</i> | <i>they</i> | <i>them/that-mob</i> |

- (13) *wantok* ‘speaker of the same language’
bilum ‘string bag’
kaukau ‘sweet potato’
kumu ‘spinach-like greens’
singsing ‘traditional singing and dancing’
mumu ‘earth oven’
laplap ‘sarong or wrap-around piece of material’
pitpit ‘edible wild sugar cane’
bilas ‘decoration (including make-up and jewellery)’

Other English words with shifted meaning appear to have come into TP and PNGE around the same time, for example *raskol/rascal* ‘criminal’. Also, some PNGE expressions are clearly loan translations from TP, e.g. *give sixty* from *givim siksti* ‘go very quickly’. However, most common words which are exclusively identified with TP are not generally heard in normal PNGE conversation, for example: *pikinini* ‘child’, *arere* ‘border, edge’, *malumalu* ‘soft’, and *surik* or *suruk* ‘move back’.

With regard to phonology, Smith (1988a) shows that, as with TP, PNGE is affected by speakers’ first languages, and so this is not a fruitful area of comparison. An examination of PNGE grammar, however, shows virtually no influence from TP. For example, the inclusive-exclusive and dual-plural distinctions of the TP pronoun system are not reflected in PNGE. In contrast, in the creole-to-English continuum in Australia, similar distinctions in Australian Kriol are found in some varieties of Aboriginal English (Harkins 1994: 52), as shown in Table 9.1.

With regard to PNGE morphology, there is no marking of adjectives analogous to the use of the *-pela* suffix in TP, and no marking of transitive verbs with the *-im* suffix or by any other means. The TP tense and aspect markers, such as *save* (habitual) and *pinis* (completive), are also not found

in PNGE (Smith 1988*b*). Even, the *bin* past marker, a recent TP innovation with a form derived from English, does not have parallel usage in PNGE.

In fact, in terms of structure, PNGE is more similar to other indigenized varieties of English than to TP. For example, it is characterized by variable grammatical marking (based on English) in the NP and VP, regularization of plurals in mass and count nouns, and the use of progressive aspect with stative verbs:

- (14) a. *I ask him to come yesterday.* (Smith 1988*a*: 303)
b. *When our homeworks were not done...* (Smith 1978: 36)
c. *Now we are knowing about the continuous tenses.* (Smith 1978: 21)

Also, there are some specific features of PNGE found in other indigenized varieties but not in TP—for example, the use of *use to* for present habitual, as in Singapore English:

- (15) a. Singapore English: *She use(d) to go to Pulau Tikus market.* (she still does) (Platt, Weber, and Ho 1984: 71)
b. PNGE: *You use to look at these things carefully, but me I don't.*
(Smith 1988*b*: 126)

9.2.5 Code alternation

Frequent code alternation between TP and English has been described by Mühlhäusler (1982, 1985*a*, 1991), Romaine (1989, 1992*b*) and Smith (2002). Code alternation is a specific type of code-switching that involves changing from one grammatical system to another (Muysken 2000), as opposed to insertion or nonce borrowing (mentioned above), which do not involve changing systems.

An example of TP-English code alternation is given below—a conversation transcribed from a documentary film, *Cowboy and Maria in Town*. As in most cases, it is easy to determine which grammatical system is being used. Here both TP (in italics) and English are given in standard orthography, ignoring phonological peculiarities. Translations of the TP are given in square brackets. As in example (4) above, English lexical items used within the TP system are written in small italic capitals. Items that could belong to either system are written in large capitals.

(16) **Speaker 1:** Government tell us they got no money. They just tell us every stories—it's nothing. You see, too many education people are here—form one up to form two, three—no job—you see.

Speaker 2: *Tumbuna bilong yu i gat nem long ples, oke yu gat graun bilong yu. Yu mas ting...yu mas save dispela.* [If your ancestors are known in the village, then you have your own land. You must think...you must know this.]

Speaker 3: (unclear) *toktok em i tru ya.* [What he said is true.]

Speaker 2: *Lukim, yumi gat, yumi gat papa gat tumbuna na yumi kamap, a? Oke, yupela tumbuna bilong mama i stap, em ples bilong yu tu, olsem papa bilong mama bilong yu. Taim yumi stap long Mosbi na lukim. Mi tu mi save pilim sampela taim. Olsem mi maritman olsem, mi gat pikinini tu, a?* [Look, we have fathers and grandfathers and then we're born, eh? Okay, there's your mother's predecessors, that's your place too, like your mother's father. We stay in Port Moresby now and look! I also feel it some time. Like, I'm a married man; I've got kids too, eh?]

Speaker 4: *Na yu tu yu maritman yu mas go long ples ya!* [And you're a married man so you should go back to the village!]

Speaker 2: *Yupela ya* you living on people's land.

Speaker 5: Oh no way, who will pay the bloody fuckin' *wanem* [what].

Speaker 2: Okay, then you see, then *yu lukim IF mi kisim ol lain Rigo na go slip long Kainantu haus lain bilong yu, bai yu tok wanem?* Get out! It's not your land. *Yumi tok ol Papua bilong sarim maus ya. Yu gat graun, yu planim kaikai, yu wok long gaden, salim long maket.* [... you see, if I take Rigo people and go and stay at your Kainantu clan's place, what will you say? Get out? It's not your land. We tell Papuans to keep quiet. You have land, you plant food, you work in the garden, sell it at the market.]

Speaker: 4: *Gavman bai i baim.* [The government will buy it.]

Speaker 2: *Ples i go DESERT nau. I no longtaim* after one hundred years time *bai yu lukim ol maunten olsem haus stanap haus stanap.* [The place is turning into a desert. It won't be long...you'll see these hills will just have houses standing on them.] So, fellows, go back home and start a garden or a coffee garden, a? (unclear dialogue)

Speaker 2: COFFEE GARDEN *i stap yu givim FERTILIZER na em nam-batu bai i kamap.* [As for the coffee garden, you give it fertilizer and it will be great.]

Conversational code alternation is common in PNG, and many examples have been recorded not only between TP and English, but between TP and other languages, such as Gapun and Buang, as in these examples:

(17) Gapun-TP (Kulick and Stroud 1990: 210, 212):

Mi maŋgawna. *Yu go pastaim.* Ndì kawo amana.
‘You go. You go then. Put that thing there.’

(18) Buang-TP (Sankoff 1976: 303):

ŋau ti ŋmodo *bai ol i kot stret long yu.*
‘If you’re the only one sitting down (i.e. doing nothing), they’ll take you straight to court.’

With regard to TP and English, Mühlhäusler (1985a: 132) points out that code-switching usually occurs at grammatical boundaries. In an earlier work (1982: 455), he concludes: ‘That code-switching can be pinpointed is an indication that one is not dealing with a post-pidgin continuum.’ This data backs up his conclusion. Since in this and later works (e.g. 1985a, 1986, 1997), Mühlhäusler refers to the post-pidgin stage of development in TP, while at the same time saying that ‘no continuum intermediate between Tok Pisin and English has yet emerged’ (1982: 454), it is clear that his definition of ‘post-pidgin’ does not necessarily involve a post-pidgin continuum. In fact, he equates post-pidgin TP to an urban sociolect (1982: 454). In this way, his definition of post-pidgin differs from that of post-creole, which clearly involves the existence of a creole continuum (DeCamp 1971: 371).

9.2.6 Intermediate varieties

While Mühlhäusler (1985a: 147) claims that ‘there is no continuum of constructions intermediate between English and Tok Pisin’, Romaine (1992b: 321) refers to ‘intermediate varieties’ of TP and English resulting from code-switching. As already mentioned, she concludes (p. 323): ‘The existence of these intermediate varieties is a sign that decreolization is already advanced in urban areas like Lae.’ However, closer examination of her examples (p. 322), reveals that they are not really intermediate varieties but utterances in which some lexical forms and structures could be either Tok Pisin or English. For example, what Romaine gives as *Who sa / husa(t) kisim brown?* ‘Who gets

the brown [crayon]?’ could have two possible interpretations, shown here with the conventions used earlier in this chapter:

- (19) a. Who *sa kisim BROWN?* (where *sa* is the abbreviated habitual marker *save*)
 b. *Husa kisim BROWN?* (where *husa* is the abbreviated interrogative *husat*)

Thus, while it is sometimes difficult to determine exactly where code alternation or insertion may be occurring, there is not necessarily mixing of grammatical forms from two systems. Also, it is noteworthy that all these examples come from schoolchildren who have recently been exposed to English and who have possibly not yet separated the codes properly.

With regard to Tok Pisin, then, there are no intermediate varieties of the type we find in typical post-pidgin/creole continua. Thus, while there may be a continuum between rural and urban sociolects within Tok Pisin, as well as a continuum within PNG English, the two systems have retained their separate identities and there is no evidence of a continuum between them, especially in grammatical areas. The extensive restructuring which normally defines post-pidgins/creoles has not occurred in PNG. While there is certainly evidence of the influence of English among educated speakers of Tok Pisin, it is mainly in the lexicon. Variation among Tok Pisin speakers has to do with the degree of bilingualism and the amount of code insertion and alternation between the systems.

9.2.7 Other Melanesian countries

English is also the official and school language of the Solomon Islands, though it is spoken by only 10–15 per cent of the population of approximately 538,000. Even then, it is spoken as a distant second language. Pijin, the Solomon Islands dialect of MP, is much more widely used as the lingua franca among speakers of the country’s more than sixty vernacular languages. But unlike Tok Pisin, Pijin is rarely found in any official contexts, though it is more widely used in national radio broadcasting. A distinct Solomon Islands English may be emerging, but it has not yet been studied (Watson-Gegeo 1987: 29).

With regard to the possibility of a continuum, Watson-Gegeo (1987: 28) mentions that urban Pijin may be decreolizing, and gives some examples of lexical differences between urban and rural varieties. However, Jourdan (1989) comes to a different conclusion. She observes (p. 33) that ‘heavy

code-switching' to English frequently occurs in the speech of bilingual urban speakers of Pijin, but it has not affected the structure of Pijin. Like Tok Pisin, the major source of syntactic expansion in Pijin is not English but its own internal resources. Using examples from texts similar to those above for TP, Jourdan clearly illustrates the following point (1989: 34): 'Code-switching is the most striking aspect of the influence of English on Pijin. The degree of code-switching varies among bilingual Pijin speakers.' She concludes that this influence 'does not mean decreolization, or development of a post-creole continuum'.

The position of English is quite different in Vanuatu, a country of approximately 205,000 people with over 100 vernacular languages. According to Article 3(1) of the constitution, the national language is Bislama, the Vanuatu dialect of MP. English is an official language, along with Bislama and French, and a principal language of education, along with French (but not Bislama). In contrast to the other Melanesian countries, English is not the main language of government in Vanuatu or of the media, having only a minor role in radio broadcasting (which is primarily in Bislama), and sharing space with French and Bislama in the country's newspapers. Also in contrast to the other Melanesian countries, English is very rarely used for daily conversation among the educated elite. Using Bislama is often a necessity because some of the elite are educated in English, and some in French, and fluent English/French bilingualism is not that common.² Thus, a distinct Vanuatu variety of English does not appear to have emerged (Crowley 1989*b*: 44).

There is also some disagreement about whether or not a continuum exists in Vanuatu. Charpentier (1979) describes the depidginization of Bislama since independence, and predicts its eventual displacement by a local variety of English. However, Tryon (1986) believes that an anglicized urban Bislama and the more conservative rural Bislama will be maintained as separate registers. On the other hand, Thomas (1990: 251) points out that Charpentier's examples are mainly of 'careless "translationese" found in the Government newspaper'. He also describes research which disconfirms the purported comprehension gap between anglicized urban and rural varieties of Bislama. Thomas summarizes the situation as follows (p. 249):

[M]y own observations would suggest a narrowing of the gap between 'rural' and 'urban' Bislama. It is undeniable that the better educated social group uses a more Anglicised form of Bislama, but it would be an over-simplification to

² Even in only English-educated company, Bislama is still preferred. Among the French-educated, the use of French is also rare, but more common than English among the English-educated.

assume that increasing contact with English will make Bislama more like English. The presence in Vanuatu of a significant minority of Bislama/French bilinguals should ensure that the conditions required for the development of a post-creole Bislama/English continuum are not met.

This observation is backed up by an examination of developments in Bislama grammar and lexicon, described by Crowley (1990a: 321–68). Grammatical expansion is again derived from the internal resources of the language, not restructuring due to pressure from English.

9.2.8 Sociocultural and political factors

Since the evidence presented so far shows that a pidgin-to-English continuum has not developed in MP, the question arises as to why this is so when continua do exist in other places with apparently similar sociolinguistic conditions. Here I try to answer this question looking at two closely related factors: the distinctiveness of MP and English in Melanesia, and the status of MP.

9.2.8.1 *Distinctiveness*

As mentioned before, in the 1970s Sankoff (1976: 308) pointed out that ‘the distinction between Tok Pisin and English is still very clear’. The reasons for this distinction have to do with the history of the functions and development of the language. Hall (1966: 135) describes how in New Guinea, ever since German rule in the late nineteenth century, ‘the government has shown little or no discrimination against Pidgin, and has been forced to admit its use, in written as well as spoken form’. The development of Tok Pisin into a written language, to be utilized by Melanesian speakers, was begun in the 1920s by Catholic missionaries, who realized that it was not merely broken English but an independent language (Siegel 1985: 518). The Catholic, Methodist, and Lutheran missions began publishing work in TP in the 1930s. During World War II, Tok Pisin was used for mass communication, when both the Japanese and the Allies used it in propaganda pamphlets dropped by airplanes all over New Guinea (p. 520).

Thus, when more widespread education in English began after the war, Tok Pisin was already established as a distinct language with its own writing system. Mühlhäusler (1985a: 131) describes how the two languages maintained their distinctiveness:

In the case of Tok Pisin and English, the fact that English was taught in most parts of Papua New Guinea after the Second World War was not a significant linguistic

influence on Tok Pisin, since the two languages remained separate, the former in the classroom and a very small set of official transactions, the latter in all other spheres of non-traditional life, with the local vernaculars continuing to be used for traditional contexts.

This distinctiveness of MP has been maintained to this day in all three Melanesian countries by a variety of factors. The first is standardization and the availability of textbooks and dictionaries in all three varieties (e.g. Mihalic 1971; Verhaar 1995; Simons and Young 1978; Jourdan 2002; Camden 1977; Crowley 2003, 2004). Second is the continued use of MP alongside English in radio broadcasting in all three countries and in newspapers and government publications in PNG and Vanuatu. Third is the continued separation in other important contexts, especially religion. Church services are generally held in MP in urban areas, and translations of the New Testament of the Bible exist in all three dialects of MP.

In addition, there has been a conscious effort by some, especially in PNG, to maintain the distinction between MP and English. For example, the policy of the Tok Pisin weekly newspaper, *Wantok*, has been to use the more conservative rural sociolect rather than the more anglicized urban sociolect (Siegel 1985: 531). In fact, many complaints about anglicized MP or the mixing of MP and English have been reported from speakers of all three varieties (Mühlhäusler 1979: 151; Romaine 1992b: 325; Jourdan 1990: 174–5; Thomas 1990: 250). Here is an example from a letter published in *Wantok* (Siegel 1983: 83):

- (20) *Planti bilong mipela bilong Papua Niugini i save gut tru long pisin, tasol i no save long tok inglis liklik. Planti taim mi save harim long redio olsem, planti man husat i bin skul long inglis i save miksim tok inglis wantaim tok pisin.* ‘A lot of us in Papua New Guinea know Tok Pisin well but don’t know English even a little. Many times I hear on the radio many people who mix English with Tok Pisin.
- Long dispela tasol, planti man long hap bilong mipela i save paul tru. Na tu planti bilong ol i no save harim na kisim gut wanem samting ol i toktok long en long redio.* ‘Because of this many people from our area get really confused. And many of them don’t understand well what they’re talking about on the radio.

Olsem na mobeta ol redio anaunsa o ol manmeri husat i bin skul long tok inglis, i tingting gut pastaim na bihain toktok long pablik ples. Sapos wanpela brata o susa i save gut long tok pisin, na tu yu save yusim ol hatpela inglis yu mas tingting gut na yu no ken paulim man neks taim.

‘So, it would be better if the radio announcers or people who have learned English think before talking in public. If you’re a brother or sister who knows Tok Pisin well and you use hard English, you should think carefully and not confuse people next time.’

9.2.8.2 Status

As already indicated, the local dialect of MP has official status only in Vanuatu, where, according to the constitution, Bislama is the national language, as well as an official language along with English and French. The Solomon Islands National Literacy Committee (1992: 3) recommended that Pijin should be adopted as the national language of the country, but that has not happened. The PNG government remains hesitant to give any official support to Tok Pisin, despite its being listed as one of the national languages in the constitution (along with Hiri Motu).

Although MP is not an official educational language in any of the three countries, its use in education is widespread. The Solomon Islands National Literacy Committee (1992: 6) notes that Pijin is the *de facto* medium of instruction in most primary schools and recommends that it should become the official medium. In Vanuatu, most people would not be in favour of making Bislama the language of primary education (Crowley 2000*b*); nevertheless it is used in primary and preschool teacher training (Crowley 1990*b*: 13–14) and has been the medium of instruction in both the Police and Marine Training Schools (Siegel 1993). Bislama has also been the subject of study and medium of instruction for a second-year level university course at the University of the South Pacific (Crowley 1990*b*: 12–13). (See also Crowley 2000*b*.)

In PNG, Tok Pisin has been widely used in church education programmes and in Tok Ples (vernacular) preschool programmes (Siegel 1993: 303–4). A total reform of the government education system in PNG began in the 1990s. This changed the six years of primary schooling in the medium of English to three years of elementary school followed by six years of primary school. The language of instruction and initial literacy in elementary school is now chosen by the community; English is introduced in the second or third year of elementary school and becomes the medium of instruction in

primary school. Although exact figures are not available, many communities, especially in urban areas, have chosen Tok Pisin for their schools. Also, in at least one rural area—the Sepik Province where the Tok Pisin pre-school programme was running (Siegel 1997*c*)—there are at least twenty-six elementary schools using Tok Pisin (Siegel 2005). Furthermore, one of the National Goals listed in PNG's current National Literacy Policy (Papua New Guinea Department of Education 2000) is: 'All Papua New Guineans must be encouraged to become print literate in their own language and one of the two national languages.' One of these is Tok Pisin.

This informal, functional status of MP both reflects and enhances the positive attitudes people have towards the language. Another source of positive attitudes is related to the role of MP as a language of unity and solidarity, as well as an important symbol of national identity in each Melanesian country. Crowley (1990*b*) describes the importance of Bislama as the language of national unity in Vanuatu. Jourdan (1990: 177) illustrates how Pijin has more recently become 'the symbol and cradle of new Melanesian aspirations and identities'. And Wurm 1985: 73 notes that many Papua New Guineans 'look upon Tok Pisin as a means for their self-identification as a language which is their own and a distinguishing feature of all that is Papua New Guinean'. (See also Kale 1990.)

9.2.9 Conclusion

The codification of the different dialects of MP and the expansion of their use into many important domains have kept them distinct from English as well as given them status as languages of national identity. These factors have prevented the development of a pidgin-to-English continuum in Melanesia.

Thus, the situation in Melanesia does not support the classic 'life-cycle' view of pidgin/creole development (Hall 1966). Even though Melanesian Pidgin continues to coexist with its lexifier, English, and its speakers have access to English through the education system, extensive depidginization (or decreolization) has not occurred. In other words, the development of a post-pidgin (or post-creole) continuum has not taken place in spite of the ideal sociolinguistic conditions for this next stage of the proposed life cycle.

The Melanesian situation may also give support to the point of view mentioned earlier that creole continua, where they exist, are not the result of decreolization but are a result of variation present in the creoles from the beginning (e.g. Alleyne 1971; Valdman 1991). According to the mixing and levelling point of view put forward throughout this work, the existence of a

creole continuum would be the result of incomplete levelling when the creole emerged. The pool of variants in such situations would have contained a wide variety of grammatical features ranging from some that had emerged via substrate transfer and reinforcement to some that had been acquired from the lexifier, with some intermediate features as well. When stabilization occurred, instead of some variants being levelled out or eliminated, they were reallocated functions as social or stylistic markers (Trudgill 1986). Thus, a good deal of variability remained, but it became regularized along a cline of social status and formality. The reason that there is no socially or stylistically marked continuum of variation in modern Melanesian Pidgin would then be explained by the fact that such variation never existed in the development of the language. This is most likely because of lack of exposure to the lexifier English when the earlier more restricted forms of the pidgin were expanding, first on the external plantations in Queensland and Samoa, and later on the internal plantations in the then New Hebrides, Solomons, and New Guinea Islands (Chapter 7). Some positive evidence of this point of view can be seen with Hawai'i Creole.

9.3 Decreolization in Hawai'i?

In contrast to the situation with Melanesian Pidgin, a creole continuum does exist in Hawai'i with Hawai'i Creole, which is called 'Pidgin' by its speakers. The language ranges from what is called 'heavy Pidgin' (the basilect) to a lighter form of the creole (the acrolect, closest to standard English). The majority of speakers speak varieties in between (the mesolects) and can switch back and forth between lighter or heavier forms of the creole as required by contextual factors such as interlocutor, topic, setting, and formality. A large proportion of speakers are also completely bilingual and can switch between the creole and a form of standard English.

This section first briefly discusses the conventional notion of decreolization with regard to Hawai'i Creole (HC). However, the main purpose is to describe a different kind of phenomenon that is occurring in the language—what I call 'covert decreolization'.

9.3.1 Conventional decreolization

There is a widespread belief that the continuum in Hawai'i is a result of a gradual change taking place in HC, resulting in it becoming more and

more like English—i.e. decreolization. For example, the past progressive construction seems to have changed from *bin stei V(-ing)* to *wen stei V(-ing)* to *waz V-ing*, as in these examples:

- (21) a. *He been stay teasing me.* ‘He was teasing me.’ (Ferreiro 1937: 10)
 b. *We wen stay wait by da tree how long?* [1951] ‘How long were we waiting by the tree?’ (Roberts 1998: 24)
- (22) a. *Rait, dei bot waz duing daet.* ‘Right, they both were doing that.’
 (KK01: S)
 b. *What you was tinkin?* [‘What were you thinking?’]
 (Kearns 2000: 21)

However, there is evidence that such variation existed from the earliest days of the language. For example, we saw in Chapter 3 that the use of *-ing* as a progressive suffix and *-s* as a plural marker occurred in the earliest stages of the language. With regard to the use of *iz (is)* and *waz (was)* as copulas and *waz (was)* as an auxiliary of past progressive—often referred to as examples of decreolization—we can also find early examples, such as the following:

- (23) *That horse is mines.* ‘That horse is mine.’
 (*Hawaii Educational Review* 1921: 15)
- (24) a. *That apple was from me.* ‘That was my apple.’
 (*Hawaii Educational Review* 1921: 15)
 b. *You was late to class.* (Ferreiro 1937: 123)
 c. *We was playing.* (Ferreiro 1937: 123)

Thus it seems that during the levelling that occurred as Hawai‘i Creole was emerging, more than one of the variants for certain grammatical functions were retained, with some of these reallocated social or stylistic functions (Trudgill 1986).

On the other hand, it is clear that language change is taking place with regard to HC, in that it is much rarer now to hear basilectal forms of the language than it was in the past. When such language change does occur in creole communities, an important question is whether it is a societal or an individual phenomenon. According to the societal point of view, decreolization is a reflection of generational changes in the speech community, as there is a gradual decline in the number of people who speak the basilect. This is the ‘quantitative model’ (Rickford and McWhorter 1997). According to the other point of view, decreolization is the result of individuals modifying their speech in their lifetimes.

The most recent work on variation and change in the HC continuum was done in the early 1990s by Sato (1991, 1993). In her research, basilectal speakers who had participated in Bickerton's (1977*a*) study fifteen years earlier (Time 1) were again interviewed (Time 2). In a preliminary analysis, Sato (1993) examined three linguistic variables (post-vocalic *r*, indefinite reference, and past tense marking) in the speech of four subjects who had experienced wide exposure to standard English between Time 1 and Time 2. If there was an increase in the percentage of standard English surface forms from Time 1 to Time 2, this was to be viewed as evidence of individual decreolization. The findings reveal some slight changes in the direction of standard English but only among some subjects. Sato concludes (p. 131) that 'extensive decreolization is not manifested in individuals during their lifetime'. The implication, then, is that the language appears to be changing towards English because of fewer and fewer people speaking the basilect.

9.3.2 Covert decreolization

In conventional decreolization, particular grammatical forms from the creole are replaced by forms from the lexifier. Therefore, the changes are easily observable. However, there are other examples in current HC, where the form of the creole remains, but its function, or the way it is used, has changed from what it was originally, and the change seems to be in the direction of the lexifier, English. I call this 'covert decreolization'. In the following subsection, I illustrate covert decreolization in HC with examples from four different linguistic areas: (a) articles; (b) the past tense marker; (c) use of the copula; and (d) the completive aspect marker. The examples are from two databases. First is a database of 44,000 words of spoken HC, collected mainly in the Honolulu area in 2002. All the speakers are bilingual in English, and use English more than HC in their daily lives. Examples from this database are followed by the identification code for the speaker used in the research project. Second is a database of written HC found in recent literature. It currently has more than 200,000 words.

9.3.2.1 *Examples of covert decreolization in Hawai'i Creole*

(a) *Articles:*

In English, the indefinite article can refer to both specific and non-specific referents:

- (25) a. A platypus lives in the creek near our cabin. [specific]
 b. I want to see a platypus. [non-specific]

But according to Bickerton (1977: 320), HC has the ‘classic’ creole system as described in Chapter 4:

NP with specific referents presupposed to be known to the hearer are marked with the definite article *da*; NP with specific referents presupposed to be unknown to the hearer are marked with *wan* or *a*; NP with no specific referents, whether generic or merely nondefinite, have no article and no marker of plurality.

Examples, repeated from Chapter 4, are:

- (26) a. *get wan wahine shi get wan data.* (Bickerton 1981: 67) [specific]
 ‘There’s a woman who has a daughter.’
 b. *Bat nobadi gon get Ø jab.* (Bickerton 1981: 24) [non-specific]
 ‘But nobody will get a job.’

Evidence that this was true of earlier HC can be seen in the following examples:

- (27) a. *I tackle one boy.* (Ferreiro 1937: 66) [specific]
 ‘I tackled a boy.’
 b. *You get Ø pin?* (Ferreiro 1937: 66) [non-specific]
 ‘Do you have a pin?’

Bickerton (1977: 320) notes that ‘decreolization, too, has very little effect on the stability of this pattern’.

However, *wan* is frequently found in contemporary literature with non-specific usage.

- (28) a. *Revenge not one good ting, brah.* (Kearns 2000: 14)
 [‘Revenge isn’t a good thing, brother.’]
 b. *You like talk like one haole?* (Kono 1998: 210)
 [‘Do you want to talk like a white person?’]

And for several speakers, the use of *wan* for non-specific referents outnumbered those for specific references. For example, speaker KR02: G had sixteen non-specific uses of *wan* and fourteen specific. Here are examples of non-specific usage:

- (29) a. *Hiz tel waz laik wan klab.* (KR02: G) [non-specific]
 ‘His tail was like a club.’
 b. *Frs yu kam wan swima, wan gud swima.* (KR02: G) [non-specific]
 ‘First you become a swimmer, a good swimmer.’

Speaker LN14: SA had twenty-four non-specific and fourteen specific:

- (30) a. *Haed wan rod awn da mauka said.* (LN14: SA) [specific]
 ‘There was a road on the mountainous side.’
 b. *Wan taim, mai fren fram lawya skul wen go weik ap leit aen rash tu kot leit witaut wan kot aen wan tai.* (LN14: SA) [non-specific]
 ‘One time, my friend from law school woke up late and rushed to court late without a coat and a tie.’

So it seems that in these examples *wan* is being used like the English indefinite article *a/an*.

(b) *Tense marking:*

As shown in Chapter 4, the past tense marker in HC was previously *bin* but is now mainly *wen* (or *haed* in the Kaua‘i dialect). Unlike past tense in English, this tense is relative (Comrie 1985: 56) in that: ‘... the reference point for location of a situation is some point in time given by the context, not necessarily the present moment’. Once the time frame is established, tense neutralization occurs (Day 1973: 150–1; Comrie 1985: 102). That is, once the past time frame is established with an adverb or a verb marked for past tense, it is not necessary to mark the subsequent verbs unless an event further in the past is referred to. This is illustrated in examples (31) and (32):

- (31) *He went wink at me and Ø tell, ‘Choo, choo, choo’ and Ø laugh backwards, you know like he Ø sucking air in, ‘Hurh, hurh, hurh’.*

(Lum 1999: 26)

[‘He winked at me and said, “Choo, choo, choo” and laughed backwards, you know like he was sucking air in, “Hurh, hurh, hurh”.]

- (32) *... da prais i bin tel mi—fo dala les, yu no, wan yad. so ai Ø figa ai nid—hundred samting yad. aes fo hundred samting dala a kaen seiv if hi go get am fo mi. so a Ø figa a go fiks am ap, aftawadz, yu no—teik am dina aen staf laidaet. so a Ø sei wen yu go get am fo mi den? Ø sei, arait, arait, a get am fo yu. a Ø weit—tu aen a haef mants, a Ø weit, so ai Ø tink wai da hel da бага no kam in? so baimbai wi Ø stei jrink tishima—da gai stei go dea, yu no, da gai hi Ø sei stei ada am fo mi nau. so a Ø tawk tu am.* (Bickerton 1977a: 336)

‘... the price he told me was four dollars a yard less, you know. So I figured I needed a hundred and something yards, that’s four hundred and something dollars I could save if he got it for me, So I figured I’d fix him up afterwards, you know, take him to dinner and that kind of thing. So I said, “When will you get it for me then?” He said, “It’s

alright, I'll get it for you.[?]" I waited—I waited for two and a half months, so I was wondering why the hell the buggger didn't come in. Then later on we were drinking at Teshima's—the guy used to go there [you know], the guy he said [*sic*] was ordering it for me. So I talked to him.' (Bickerton 1977a: 337)

But what is happening now is that some speakers and writers are using past tense marking more like in English, where all finite verbs must be marked. This can be seen in examples (33) and (34):

- (33) a. *Dat time nobody wen bodda da peopo dat wen come togedda for church all ova Judea, Galilee an Samaria. Dey wen trus God mo an mor and God's Spesho Spirit wen kokua dem.* (Da Jesus Book 2000: 337).

['At that time nobody bothered the people that came together for church all over Judea, Galilee and Samaria. They trusted God more and more and God's Special Spirit helped them.']

- (34) *Waz wan dauntaun skul aen den ai wen mit dis grl aet dis daens. Aen am... ai wen si hr aen shi wen si mi aen a... a... aen ai ges wi wen kainda lawk aiz e wan taim so waz kainda dak, ai neva no, so shi wen luk OK. Aen am... so ai Ø go aes hr aut aen den wi wen aut aen aefta daet wi wen deit fo litl wail aen waz going priti gud.* (LN06: BL)

['There was a downtown school and then I met this girl at this dance. And um... I saw her and she saw me and a... a... and I guess we kind of locked eyes eh one time so it was kind of dark, I didn't know, so she looked OK. And um... so I go ask her out and then we went out and after that we dated for a little while and it was going pretty good.']

(c) *Copula:*

As shown in Chapter 4, HC has a copula *stei* (*ste*, *stay*) which is used for locative sentences, and sometimes used for adjectives when they indicate a temporary state. Previously, a copula was not normally used in equational sentences (Cheng 1969: 105–6; Day 1973: 21; Perlman 1973: 120), as illustrated by these examples:

- (35) a. *Da gai odea Ø mai angko.* (Cheng 1969: 106)
 ['The guy over there is my uncle.']
 b. *Ai Ø wan studen.* (Cheng 1969: 106)
 ['I'm a student.']

But nowadays, *stei* is being used for equational sentences as well as locative and adjectival sentences:

- (36) a. *Now I... already stay one sophomore.* (Kearns 2000: 20).
 ['Now I'm already a sophomore.']
 b. *God in da sky stay King hea now.* (Matthew 1997: 8)
 ['God in heaven is King here now.']
 c. *Masumoto ste da ticha.* (Kent Sakoda, p.c., June 2003)
 ['Masumoto is the teacher.']
 d. *Ai ste da koch fo mai datrz saka tim.* (RS05: EM)
 ['I'm the coach for my daughter's soccer team.']

So, it seems the HC copula *stei* is now being used in all the same contexts as the English copula *to be*.

(d) *Completive aspect marking:*

The Hawaiian word *pau* 'finished' became grammaticalized to become a preverbal completive aspect marker in HC (Chapter 4). Roberts (1998: 25) says that in the 1920–49 period, 'it is clear that this feature had become well established among native-born speakers'. Here are some examples:

- (37) a. *He pau draw his map.* (Ferreiro 1937: 57)
 ['He finished drawing his map.']
 b. *Wen Pilipo been pau talk, me I feel gul [good] insi.* [1946] (Roberts 1998: 26)
 ['When Pilipo had talked to me, I felt good inside.']

However, in the written database of current HC, only two out of fifty-seven uses of *pau* are as a preverbal aspect marker; in the others, it is used as a verb or adjective:

- (38) a. *I jess wen pau when Faye come back.* (Kearns 2000: 31)
 ['I had just finished when Faye came back,']
 b. *But by den da fireworks all pau already...* (Lum 1998: 231)
 ['But by then the fireworks were all finished already.']

In the spoken database, one out of thirteen uses of *pau* are as a preverbal aspect marker; again the others are as a verb or adjective:

- (39) a. *wi yustu pau fram wrk, aen mai graema yustu mek, a, poi.*
 (BW01: M)
 'We used to finish from work and my grandma used to make poi.'
 b. *No Uncle you not pau yet.* (KK02: KK)
 'No, Uncle, you're not finished yet.'

So, it seems that HC *pau* is being degrammaticalized to function as a verb or adjective, corresponding to *finish* or *finished* in English, rather than functioning as an aspect marker.

9.3.2.2 Discussion

The examples just presented illustrate four areas where HC forms have remained but have become closer to their English counterparts in function. From the perspective of HC, three of these show overgeneralization. First, the tense marker *wen* is not used only for relative past and there is no neutralization. For some speakers it is interpreted as simple past and marked on all finite verbs. Second, the copula *stei* is not restricted to predicate locatives and adjectives, but now is used with NPs in equational sentences. The article *wan* is not restricted to NPs with specific asserted reference, but is used for NPs with non-specific reference as well.

Similar overgeneralization is known to occur in second language acquisition and second dialect acquisition as well. For example, Baugh (1992) analyses the African American Vernacular English (AAVE) spoken by African-Americans whose first dialect is standard English and approximations of AAVE by some whites. Some examples illustrate the phenomenon of 'hypocorrection'—'linguistic over-compensation beyond the nonstandard linguistic target' (p. 317)—for example:

(40) They *dones* blow them brothers away. (Baugh 1992: 322)

In AAVE *-s* can occur with the habitual *be* as in *He be(s) on my case*, but it never occurs with the perfect *done*.

However, in each of the cases of overgeneralization in HC described above, as well as in the degrammaticalization of *pau*, the patterns of use appear to be motivated by the properties of corresponding features in English. Thus, they may be the result of language transfer: the carrying over of patterns from one language to another, or, as described in earlier chapters, expressing L1 functions with L2 forms. If this were true, English would have to be the L1 and HC the L2. This would be a reversal of the usual involvement of transfer in decreolization (Winford 1997), where the creole is the L1 and the lexifier is the L2.

The difference here is that the examples I have given illustrate decreolization by speakers who use English more than HC—in other words, by English-dominant speakers—as opposed to the conventional decreolization

by creole-dominant speakers. But the processes involved (including transfer) may be the same. This was pointed out by Corne (2000: 295), talking about Tayo (Chapter 8):

It would appear to be the case that, in Tayo genesis as in many (all?) other similar contact-induced vernaculars, L1 and L2 are sometimes reversible, depending on who is speaking and who listening. A French speaker producing an analogue of [the causative construction] provides a Kanak [indigenous New Caledonian] speaker with a string interpretable in terms of that speaker's L1, and the reverse is also true. If this is so, then clearly *decreolisation* is exactly the same phenomenon, in terms of the linguistic processes involved, as creolisation. The same principles and constraints on transfer and (possibly) retention that gave Tayo its causative construction in the first place are also operating today to Frenchify that construction.

If this is true, the question arises as to why so many English-dominant speakers are trying to speak HC?

HC, like other English-lexified creoles, is stigmatized as 'broken English', by society in general and by its speakers as well, as evidenced in their name for the language: Pidgin. It is almost universally considered an obstacle to success in education and business. Because of such attitudes, many speakers who worked their way up to the middle class learned standard English. When these people had families, a significant proportion of them then used only English to speak to their children, and many also sent their children to private schools, where there were large numbers of *haoles* ('whites') who did not speak Pidgin. Furthermore, the presence of outsiders drastically increased after Hawai'i became a state in 1960. Thus, a large number of locally born people, especially in the 1970s and 1980s, grew up with English, not HC, as their first language. However, many of them have later learned (or tried to learn) HC. Some evidence for this was revealed at a conference held in Hawai'i in 1999, titled: 'Wat, Bada yu? Voices Heard and Unheard: Pidgin, Local Identities, and Strategies for Multicultural Learning'. There, several speakers remarked that they first learned Pidgin (i.e. HC) in high school.

Why would speakers want to learn such a stigmatized language variety? The answer, as discussed in Chapter 5, is that HC is still an important marker of local identity (Sato 1985, 1991, 1993; Eades *et al.* 2006), as it was during its development. Therefore it still has its own covert prestige. As Tamura (1996: 439–40) points out:

Moreover, using nonstandard English [i.e. HC] symbolizes their solidarity within a social group. Such peer-group loyalty is especially strong among youths. As an intermediate school girl noted, 'If we speak good English, our friends usually say, 'Oh you're trying to be hybolic (acting superior by using big words) yeah?!'

This is backed up by the report of a recent survey on language attitudes in Hawai'i (Leong 2000: 20):

Seventeen out of twenty-three participants acknowledge HCE [=Hawai'i Creole English] as being a special language unique to Hawai'i, belonging to the locals; they also found that an advantage of speaking HCE is that it lets one bond with other locals. Maka [one of the participants] said 'Pidgin is an integral part of the local culture. We all need to belong and in Hawai'i, Pidgin is the glue that binds us together.' (Leong 2000: 20)

The report continues (p. 25): 'Several people said they find that at times using Pidgin is necessary so they won't be seen as someone who is *high makamaka* [a person who tries to act high and mighty].'

In summary, many English-dominant speakers have learned HC and now use it because of its covert prestige. Therefore, they would aim to use salient markers of the language, such as *wan*, *wen*, *stei*, and *pau*. The continued use of these markers as opposed to English forms, then, makes it appear that change in the direction of English is not occurring. However, beneath the surface, change towards English is taking place with regard to the functions of these markers.

Similarly, speakers of HC who learned English and have now shifted to it as their dominant language may also unconsciously be transferring some of its functional features into HC. Because of the covert prestige of HC, Sato (1993: 136) noted:

Hawai'i may have entered a phase described by Rickford (1983) as an intermediate stage of decreolization which may be maintained for generations because of sociopsychological factors favouring creole maintenance, even by speakers who have added an acrolectal variety to their repertoire.

This optimistic outlook may be true with regard to the conventional, overt decreolization. However, the not so obvious change towards standard English may still be occurring because of the covert decreolization I have described here.

9.4 Conclusions

This chapter has portrayed two very different situations with regard to decreolization and the pidgin/creole continuum. Little if any decreolization (or depidginization) has occurred in Melanesian Pidgin, and there is little if any evidence of a post-pidgin/creole continuum. In contrast, there is a typical creole continuum for HC, but this is unlikely to be the result of conventional decreolization, since the variation in the continuum appears to have been around since the very beginning of the language.

What are some reasons for the different situations that have developed in Melanesia and Hawai'i? Both MP and HC are important in the construction of identity, so this is probably not a distinguishing factor. However, the factors of distinctiveness and status do seem to be important. While most speakers of MP consider it to be a language separate from English, most speakers of HC think of it as an incorrect form of English—i.e. at best a non-standard dialect and at worst broken English. MP has had its own orthography for many years, and it is normally used to write the language. HC has only recently acquired its own writing system (the Odo orthography), but it is rarely used; most common are various English-based etymological orthographies, as seen in examples from literature through this book. MP is used in a wide variety of functions—including parliamentary debates, newspapers, radio broadcasting, and religion, HC is now found in comedy routines, literature, and recently in a translation of the New Testament, but otherwise it is rarely used other than in informal conversation. Finally, MP has some recognized status as a national language or potential national language, while HC again is not generally recognized as a distinct language.

But of course, this is a bit of a chicken-and-egg situation: Are the lack of distinctiveness and status of HC the reason why there is a creole continuum, or is the existence of the creole continuum the reason for its lack of distinctiveness and status? This is even more difficult to answer since a continuum appears to have existed when HC emerged, but there is no evidence of any continuum in the history of MP.

With regard to decreolization, neither language provides evidence of conventional decreolization in which the surface forms of the pidgin or creole grammar change in the direction of the lexifier as a consequence of individuals changing their speech. However, there is evidence of quantitative or community-level decreolization in Hawai'i, as the basilectal forms of

HC become rarer. Evidence of covert decreolization in the HC of English-dominant speakers has also been presented, but whether or not it affects the language on the community level remains to be seen. Whether covert decreolization occurs with regard to MP has not been studied. However, since the proportion of English-dominant speakers of MP is so low, if it does occur, it would be unlikely to affect the language.

10 Conclusion

This brief chapter begins with a summary of the findings regarding the emergence of pidgins and creoles as presented in the preceding chapters, and then goes on to review their implications for various other approaches.

10.1 Summary

In the initial stages of learning a second language (L2), speakers target the perceptually salient forms of the L2 that they can connect with some meaning, and string these forms together in the order of corresponding forms of their own language. These perceptually salient forms are generally lexical or content morphemes, rather than grammatical morphemes, and therefore early interlanguage, such as the Basic Variety, has no grammatical morphology. Thus, no abstract mental structures are needed to account for the initial morphological simplicity of this interlanguage. If individual interlanguages are used for communication between people in groups who have no other common language, certain conventions may emerge, and this means of communication becomes a restricted pidgin, with the L2 being the lexifier.

A restricted pidgin is adequate for very limited communication and may continue to be used in this way for a long time—an example being Pidgin Fijian. But if there is an increase in interaction between people of different language groups, the pidgin will be needed for wider purposes, and this creates a need for linguistic expansion—i.e. the development of grammatical morphemes. Again, no abstract mental structures or innate knowledge need to be posited, as there are several sources a restricted pidgin can turn to for its expanded morphology. It can adopt morphemes from the lexifier via further language learning, or morphemes from other contact languages. It can also adopt morphemes from the first languages of its speakers, the substrate languages. But more commonly, the expanding pidgin begins to take lexical morphemes originating from the lexifier and use them as grammatical morphemes with functions originating from corresponding morphemes in the substrate languages. This is via the process of language transfer—specifically, what I have called functional transfer.

The evidence shows that the most common context for the occurrence of this kind of transfer is L2 use, rather than L2 acquisition or bilingual L1 acquisition. The context of L2 use also provides a logical motivation for this transfer. The L2 is no longer the lexifier, but rather the expanding pidgin itself. While the lexifier may continue to be a source for lexical expansion, it is not a target for grammatical expansion. Functional transfer from the L1 is a strategy employed when the L2 needs to be used for wider purposes but its current linguistic apparatus cannot cope. In such circumstances, speakers fall back on the L1 to supplement the grammar of the L2. Since in this case the L2 is the pidgin, which by definition has very little grammatical morphology, significant functional transfer would be expected.

As the pidgin is expanding, morphologically simple features (i.e. lexical rather than grammatical morphemes) are used alongside the morphologically more complex features from the various sources—the lexifier, the substrate language and other contact languages. All of these make up the pool of variants that are used for communication. Some levelling may occur along the way so that some features are eliminated, while others are retained. Meanwhile, the expanding pidgin may become so widely used that some speakers shift to it as their primary language, which they then use to speak to their children. This ultimate extension of use requires even greater grammatical expansion, which most likely means even more functional transfer. The most rapid and comprehensive levelling then occurs when the pool of variants becomes the primary linguistic data for children's first language acquisition. Children retain and regularize some variants, but not others, and these form the grammar of the creole.

The variants most likely to be retained are those that are reinforced by being most frequently used. Thus, with regard to transferred features, the languages whose speakers first shift to the expanding pidgin in large numbers will have the most influence on the creole (the 'Shifter Principle'). The reason that some creoles appear to be more similar to the substrate languages than the preceding pidgin is that a large degree of transfer occurs when speakers shift to the pidgin as their primary language, and this happens just before the creole emerges. Features in the pool from other sources (the lexifier or other contact varieties) may also be reinforced by the presence of corresponding features in the dominant substrate languages.

However, the functions of only a subset of the substrate grammatical morphemes are transferred to the expanding pidgin. There are constraints on transfer, and thus on the availability of some of the features. The most important availability constraint appears to be somewhere to transfer

to—i.e. the existence of a perceptually salient morpheme in the expanding pidgin (usually originating from the lexifier) that is similar in both function or meaning and surface syntactic position to a grammatical morpheme in the substrate. Using a combination of the reinforcement principles (especially frequency) and the availability constraints (especially somewhere to transfer to) can provide a principled account of which features of the dominant substrate languages end up in a creole and which do not.

Finally, while this work may seem to support the classical pidgin-to-creole life cycle, not all pidgins and creoles go through all stages of this cycle. As mentioned earlier, some pidgins remain as restricted pidgins, and some expanded pidgins are not nativized to become creoles. Similarly, not all expanded pidgins and creoles have a typical continuum of variation from basilect to acrolect, and of those that do, the continuum may have been present when the creole emerged, rather than being a result of decreolization from increased exposure to the lexifier. However, when decreolization occurs, it involves L2 use, and so strategies of transfer may once again be involved, whether the L2 is the lexifier (overt decreolization) or the creole (covert decreolization).

10.2 Implications for other approaches

10.2.1 Superstratist position

The superstratist position is that creoles are versions of their lexifier that developed gradually as a result of conventional processes of language change, without any break in transmission—i.e. without any pidgin predecessor or any significant influence from the substrate languages (e.g. Chaudenson 2001, 2003; Mufwene 2001). The information presented in earlier chapters clearly does not support this position. First of all, Melanesian Pidgin, Hawai'i Creole, and Roper Kriol each did have a restricted pidgin predecessor. Second, it is clear that transfer of features from substrate languages occurred, not just reinforcement of existing features of the lexifier by the substrate languages. Third, the existence of some morphology from the lexifier—e.g. in Hawai'i Creole—does not necessarily mean continuous transmission, as the lexifier could have been one of the sources of features in the morphological expansion of the preceding pidgin. Fourth, the comparative formal simplicity and kinds of grammaticalization found in Hawai'i Creole and Roper Kriol emerged in one or two generations—much more comprehensively and rapidly than in conventional language change.

On the other hand, the superstratist position has been developed on the basis of French-lexifier creoles, so it might be, as speculated by Alleyne (2000), that these creoles have developed differently from English-lexifier creoles. However, then there is Tayo, a French-lexifier creole. While the oral evidence of Tayo having a stable pidgin predecessor may not be convincing, it clearly has features resulting from transfer from its substrate languages, and it emerged rapidly in two generations.

Could it be then that the superstratist position holds only for French-lexifier creoles of the Caribbean and Indian Ocean? But again, there are still problems. As shown in Chapter 3, although the superstratists say that these French-lexifier creoles do not have a stable pidgin predecessor, they acknowledge the importance of SLA and resulting interlanguage such as the Basic Variety, which has features virtually identical to those of restricted pidgins. Therefore, the ‘approximations of approximations of the lexifier’ (Chaudenson 2001: 305) that they say lead to creole formation are characterized by extreme formal simplicity resulting from early SLA. It is difficult, then, to understand how the passing on of these approximations of approximations can be considered normal language transmission.

10.2.2 Contact-induced grammaticalization

Heine and Kuteva (2003, 2005) propose that a process which they call contact-induced grammaticalization is responsible for the expanded morphology found in creoles. However, as I noted in Chapter 5, they do not distinguish between grammaticalization as a process and as a result. It is clear that the result of grammaticalization in its conventional meaning has occurred prior to the emergence of creoles in that lexical items have taken on new grammatical functions—for example: *stay* becoming a preverbal marker of progressive aspect in Hawai’i Creole. On the other hand, the process of grammaticalization in its conventional meaning has not occurred. This is because the end result emerged almost instantaneously, rather than going through the normal subprocesses such as gradual desemantization and phonological reduction that generally take much longer periods of time. So it seems that with regard to an explanation for the process involved in the grammatical expansion that leads to creole features, Heine and Kuteva have changed the fundamental meaning of the process of grammaticalization to be basically the same as that of functional transfer. Heine and Kuteva also attempt to provide motivation for contact-induced grammaticalization—i.e. functional transfer. For example, they mention ‘to make the categories

existing in the languages [in contact] mutually compatible, and more readily intertranslatable'; and 'to talk to one's neighbours for social, political, psychological, economic, or other means' (Heine and Kuteva 2003: 561). However, these do not seem very relevant to the pidgin and creole context. On the other hand, one of their explanations of motivation—although not generally accepted as a reason for conventional grammaticalization—converges with that of L2 use—that is, functional gap-filling. Nevertheless, while Heine and Kuteva have provided many examples of the results of language contact relevant to the emergence of pidgins and creoles, their explanations do not go beyond those of the Compensatory Transfer approach.

10.2.3 Relexification Hypothesis

According to the Relexification Hypothesis (Lefebvre 1998, 2004; Lumsden 1999), the morphological features of creoles are the result of the mental process of relexification. This occurs when the lexical entries of a substrate language are copied and then their phonological representations are replaced (or relabelled) with phonological representations of semantically related items from the lexifier. It is assumed that all lexical entries, including functional ones, are copied in relexification, but those that have no semantic content or no appropriate lexifier form for relabelling are assigned a null form (Lefebvre 1998: 37, 44).

This point of view has contributed a great deal to the study of pidgin and creole genesis by providing a testable hypothesis and a strict methodology. It also makes it clear that relexification is an individual psycholinguistic process, and that different substrate languages may lead to different individual results. Of these individual results, only some end up in the creole because of the social process of 'dialect levelling' (Lefebvre 1998: 47), basically the same as the levelling described at various places in this book.

However, as described in earlier chapters, the predications of the Relexification Hypothesis appear too strong to account for the data. First, it appears to be the creole equivalent of full transfer views of second language acquisition, in that the complete grammar of the substrate is copied and is thus the initial state for the development of a creole, as the L1 is claimed to be for L2 acquisition. Thus, the copying of substrate features appears to be unconstrained. However, as seen in Chapter 5, there is little if any evidence of the use of L2 lexical items with L1 grammatical properties in

early L2 acquisition, and not all substrate grammatical properties are found in creole grammars. And as seen in Chapter 6, it is difficult to prove the view that abstract null forms of functional properties from the substrate exist in the creole, as opposed to the possibility that these properties were simply not copied. According to the view presented in this book, the L1 is not considered the initial state, and therefore there is no full transfer. Rather, the L1 is considered to be a resource that language users can fall back on to compensate for perceived shortcomings in the L2. Thus, only a subset of L2 features will be transferred.

Second, according to the notion of copying and relabelling of the L1 lexical entry that occurs in relexification, all the properties of an L1 feature would be replicated. This does not seem to allow for the partial transfer or contraction of L1 features that we find in expanded pidgins and creoles. As we saw in Chapter 5, Lefebvre (e.g. 1998: 137–9) explains such cases using the notion of dialect levelling—that the relexified version of a substrate language with a subset of properties of a particular feature is retained in the creole, but the version of a substrate language with the full set is levelled out. However, this explanation raises questions about whether a substrate language with contracted properties always exists and even if it does, why its properties should end up in the creole when the majority of other properties come from a different substrate language. On the other hand, the process of functional transfer does allow for the partial replication of substrate features.

Another problem with the hypothesis is that the motivation for relexification is supposed to be L2 acquisition—i.e. that it is a tool for acquiring the lexifier language. However, as mentioned several times, there is little if any evidence in studies of SLA of results of the kind of relexification that is supposed to have led to, for example, the Haitian Creole TMA markers. Thus, if relexification is not a process involved in second language learning, the motivation for it occurring is not clear.

As noted in Chapter 5, relexification is defined as a particular kind of transfer. But while its results are sometimes similar to what I have been calling functional transfer, it is not consistent with the general notion of language transfer, as described by van Coetsem (1998, 2000) and others, because of its strong predictions regarding total copying. In contrast, the Compensatory Transfer view put forward here provides both an explanation and a motivation for the emergence of the grammatical morphology of expanded pidgin and creole languages without having to propose a different psycholinguistic process.

10.2.4 Two Targets model

The goal of Myers-Scotton's (2001, 2002) Two Targets model of creole formation (discussed in Chapter 5) is to 'identify mechanisms for outcomes' (2001: 222). In other words, it aims to explain what mental processes are responsible for lexical morphemes from the lexifier being used in creoles with functions of corresponding grammatical morphemes in the substrate languages. Myers-Scotton uses Levelt's (1989) model of speech production (see Chapter 2) which consists of abstract lemmas and a formulator, along with other components. The lemmas underlie morphemes and contain information about their semantic and syntactic properties. The formulator 'assembles surface-level constituents based on directions it receives from lemmas' (Myers-Scotton 2001: 217). Specifically with regard to creole formation, the view is that there are two targets. The first is a composite of the substrate languages; this serves as the morphosyntactic frame for constructing utterances in the formulator. (According to Myers-Scotton's Matrix Language Frame model, there is always a single morphosyntactic frame every clause even though it may contain morphemes from more than one language.) The second target is the lexifier (which Myers-Scotton refers to as the superstrate); it provides the morphemes that are assembled by the formulator. The lexifier cannot be the target by itself because speakers do not know all the abstract properties (i.e. the lemmas) of its morphemes. According to the model, the semantic and syntactic properties of these morphemes of the lexifier are reconfigured to meet the requirements of the substrate grammatical frame. This reconfiguration is allowable according to the Abstract Level model (Myers-Scotton 2001, 2002), which stipulates that lemmas are composed of three levels of abstract lexical structure, and that these can be split and combined so that a lemma may have properties from more than one language.

Since the premise of the model as a whole is that these mental processes occur in the speech production of bilinguals, it has two advantages over the Relexification Hypothesis. First, no special processes need to be proposed for creole genesis, and second, the processes are attributed to second language use rather than second language acquisition. Another advantage is that it proposes more specific constraints on which morphemes from the lexifier can be used in the creole. However, there are some problems with this model, as discussed in Chapters 2 and 5.

The main problems have to do with the targets. With regard to the substrate target, Myers-Scotton (2001: 241) says that it is 'a composite of the

substrate speakers' own languages'. But since the model of speech production concerns individuals, it is difficult to conceive of how one person can have access to the abstract properties of all the substrate languages to use as their morphosyntactic frame. Myers-Scotton (2002: 290) later suggests that levelling occurs among the substrate languages before creole formation, but, as mentioned before, no evidence is provided, and furthermore there seems to be no rationale for such a phenomenon.

The constraints on morphemes from the lexifier are made on the basis of the 4-M Model, described here in Chapter 2. Late system morphemes (such as possessive suffixes and agreement markers), as opposed to content and early system morphemes, are not available because the lemmas underlying them are not salient in the early stages of speech production and are activated only at the level of the formulator (Myers-Scotton 2001: 256). The problem here is: how do speakers of the substrate languages know which morphemes of the lexifier are late system morphemes as opposed to content and early system morphemes if, as Myers-Scotton says, they do not know the abstract properties of the language? An alternative reason for particular morphemes not being available, as pointed out in Chapters 2 and 5, has to do with their perceptual salience, not their abstract properties. With regard to which content morphemes are selected, Myers-Scotton's model agrees with the other accounts in requiring some match between their function or meaning and those of the corresponding morphemes of the substrate language (2001: 220, 248). However, like the Relexification Hypothesis, there appear to be no constraints on which substrate features can come into a creole.

Finally, Myers-Scotton (2001: 222) states that 'the major motivation for fashioning a creole at all was... simply to end up with a viable means of intergroup communication'. However, this view does not really account for the emergence of creoles in the situations described in this book. First, a viable means of intergroup communication already existed in the form of the pidgin language that preceded the creole. The important question is why this pidgin expanded grammatically, and Myers-Scotton's model is actually aiming to provide an explanation of the mechanisms for this expansion. Furthermore, a creole by definition is not used for intergroup communication, since it is the mother tongue of a newly formed community. Therefore the motivation for expansion seems to be more connected with meeting the needs of a language that is becoming the primary means of intragroup communication.

In conclusion, many of the problems with Myers-Scotton's model stem from the fact that it was originally constructed to account for code-switching

among bilinguals. Her claim that ‘creoles *are* a type of bilingual speech’ (2001: 222, italics in original) cannot be supported because by definition when creoles emerge, their speakers are monolingual in the creole. Even in earlier stages of development, speakers were not bilingual in the purported two targets, the substrate and the lexifier; otherwise, there would have been no need to develop a new contact language. Furthermore, Myers-Scotton needs to justify her equating Levelt’s model of speech production and her own models, with the ‘innate architecture’ of speech production (2001: 264). Do the complex structures and processes she describes really occur in people’s minds when they speak, or are they merely models, as their names suggest?

10.2.5 Language Bioprogram Hypothesis

Bickerton’s influential Language Bioprogram Hypothesis (LBH) (e.g. 1977a, 1981, 1984a, 1988, 1999a) was discussed in Chapters 4 and 5. There it was shown that recent research on Hawai’i Creole, a language pivotal to his hypothesis, does not support its basic premises.

The first premise is that creoles were created in one generation as the result of first language acquisition with restricted input. The primary linguistic data available to the first generation of locally born children of imported plantation labourers or slaves was from a highly variable and undeveloped pidgin, rather than from their parents’ ancestral languages. As this rudimentary pidgin lacked the features of a fully developed language, the children had to go beyond the input and fall back on their innate linguistic capacity (the language bioprogram) to fill in the gaps. Thus the creole of the first locally born generation contains many features not found in the preceding pidgin, and these are attributed to the bioprogram.

However, we have seen that research by Roberts (1998, 2000, 2005) shows the majority of the first locally born generation (G2) did acquire their parents’ languages. While the original generation of immigrants (G1) learned each others’ languages and/or Hawaiian for intergroup communication rather than depending on the rudimentary pidgin, the G2 started using the pidgin more widely from the mid-1890s because of a large influx of immigrant workers speaking other languages, including Japanese, Korean, and Spanish. Further expansion occurred as labourers moved off the plantations and into urban areas. With this wider use, the pidgin began to expand to become Hawai’i Pidgin English (HPE). The expanded pidgin

spoken in Honolulu, not on the plantations, already had many of the features attributed to the bioprogram.

From the early 1900s, many in the G2 shifted to the expanded HPE as their primary language, and their children acquired this as their first language. Thus it was the children in the second locally born generation (G3), not the G2, who were the original speakers of the creole. These children did have a model in their input for a significant number of the purported bioprogram features because they were already found in the existing expanded pidgin.¹

A second premise of the LBH is that widely distributed creole languages are virtually identical in particular grammatical devices and semantic characteristics, such as the tense, modality, and aspect (TMA) system, adjectives as a subclass of verbs, the copula, and sentential complementation. The similarity among creole features is explained by universal characteristics of human linguistic endowment—i.e. of the bioprogram—that emerge because of the restricted input available to children born on the plantations. Hawai'i Creole was especially important in Bickerton's hypothesis because it is geographically distant from other creoles in the Atlantic and Caribbean regions. However, recent analyses of Hawai'i Creole (Siegel 2000; Velupillai 2003) have shown that it does not actually conform to the set of bioprogram features. Bickerton admits that the features found in his Hawai'i data do not always match the predictions of the bioprogram, but explains (1977*a*, 1981) that these features have been contaminated by the process of decreolization. However, as detailed in Chapter 4, historical evidence from the period when Hawai'i Creole first emerged shows that the language never did conform to the bioprogram prototype with regard to these features.

Another premise of the LBH is that creole features did not come from the ancestral languages of its speakers (the substrate languages)—and therefore they must have been created by children according to their inborn linguistic knowledge. Again, Hawai'i Creole is important as it contrasts with the majority of other creoles, which have West African substrate languages. Bickerton's initial claim that the first locally born generation (G2) did not acquire their parents' languages made it difficult to argue that they had a major influence on the creole. Although he has now dropped this claim with regard to Hawai'i, he still maintains his position about the lack of substrate influence.

Bickerton's arguments are based mainly on comparisons of Hawai'i Creole with Japanese and Filipino languages. However, speakers of these languages arrived comparatively late on the scene. Of the first locally born generation

¹ See also Lightfoot (2006), which unfortunately was not accessed until after this book was finished.

(G2), it was speakers of Portuguese, Cantonese, and Hawaiian who first shifted to HPE and who were numerically dominant when Hawai'i Creole emerged. Detailed comparisons demonstrate that these languages could have provided models for many of the purported bioprogram features of Hawai'i Creole, and for others of its features as well. Since the G2 used HPE as a second language, it was likely that functional transfer led to these features being used for communication when HPE was expanding. As these features were part of the input for children of the G3 acquiring their first language, there is no need to invoke innate knowledge to explain their origins.

10.3 Concluding remarks

The Language Bioprogram Hypothesis has certainly stimulated the study of pidgins and creoles, but the genesis of these languages does not provide evidence for universal grammar or any other kind of innate specific linguistic knowledge. Instead, from what I have described in this book, the development of pidgins and creoles shows language to be a multifaceted, ever-changing system of communication that is highly adaptive to the requirements of its use and to the environment it is used in. In a recent volume on language emergence in applied linguistics, Ellis and Larsen-Freeman (2006: 578) write that the development of language in second language learners 'can be seen not as the unfolding of some prearranged plan, but rather as their adapting to a changing context, in which their language resources themselves are transformed through use'. I see this as applying to linguistic development in the individuals whose collective language use led to the emergence of pidgins and creoles.

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