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THE GENESIS OF THE CREOLE LANGUAGES OF SURINAM

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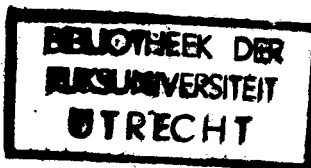
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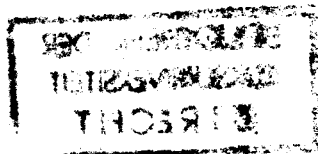
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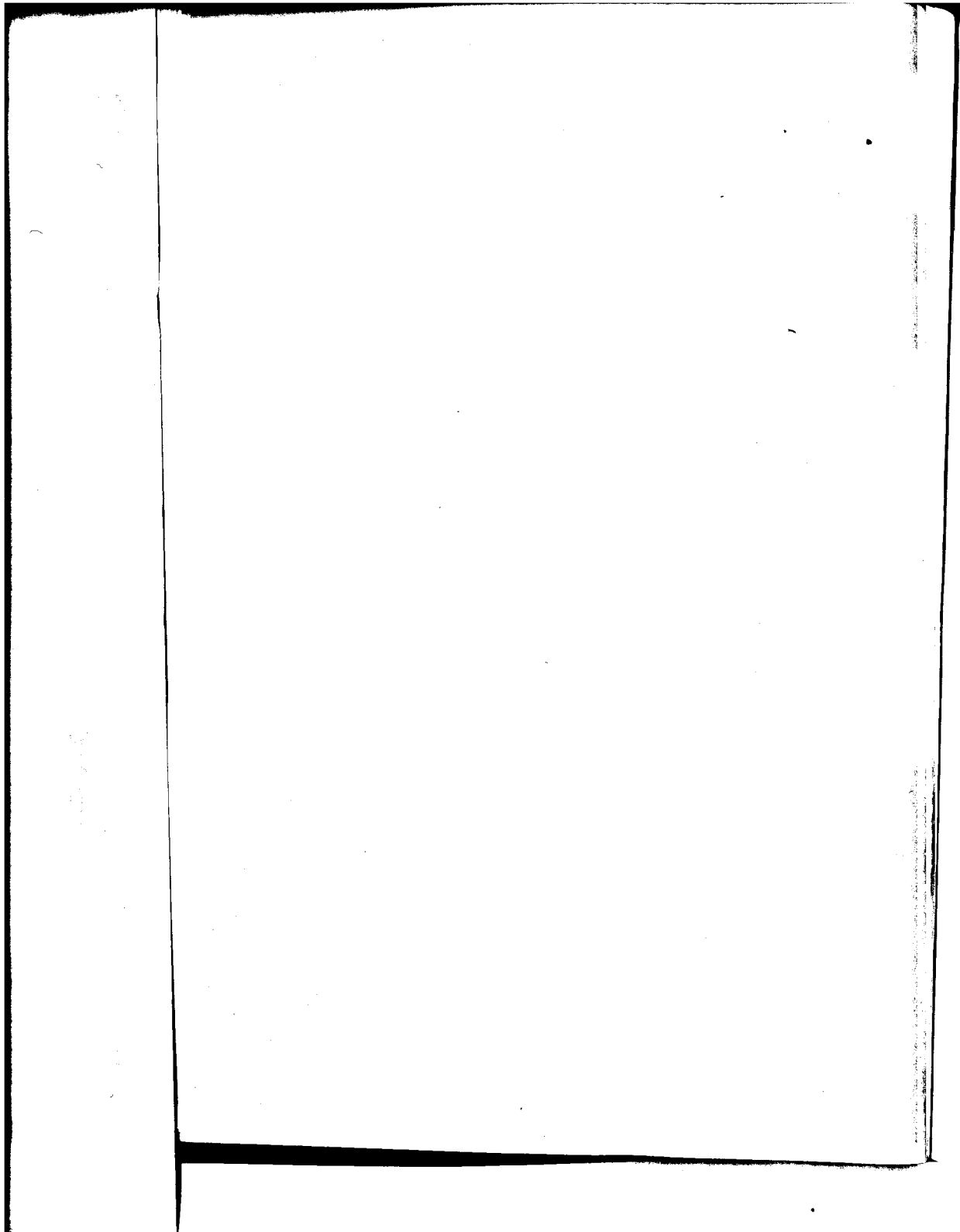
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FOREWORD

This book is yet another example of a thesis that took too long to write. The reasons for this are manifold. Two of these reasons are perhaps defensible. Firstly, creole studies have developed considerably, both quantitatively and qualitatively, since I embarked on this enterprise. The incorporation of new insights is a time-consuming business. Secondly, despite the fact that I do not provide what could be described as a traditional historical phonology of the Surinam creole languages, even the more limited goal of describing the phonological developments from English and Portuguese to the Surinam creoles has proved to be a larger task than I had at first anticipated.

I would like to express my appreciation of the task undertaken by my supervisor and colleague, Professor Simon Dik of the Institute for General Linguistics of the University of Amsterdam. His critical faculties were an invaluable asset during the writing of this thesis. He has been a source of constant encouragement, and has cheerfully put up with innumerable invasions of his time over the years.

It is a matter of great regret to me that my erstwhile co-supervisor, Professor Jan Voorhoeve of the Department of African Languages at the State University of Leyden, did not live to see the completion of this work. His enthusiasm for the study of the creole languages and culture of Surinam has infected me permanently.

I am grateful to my colleagues and fellow creolists Pieter Muysken, Greg Benton, and Hans den Besten for their interest and many suggestions. Many other creolists have been of assistance in one way or another. I must mention first Ian Hancock. The stream of articles he thought might be of interest to me was extremely useful. I would also like to mention particularly Mervyn Alleyne, Glenn Gilbert, Ian Robertson, George Huttar and Frank Byrne.

Although not directly concerned with the main theme of this work, Kay Williamson of the University of Port Harcourt has indirectly been of great assistance. The members of the Department of African Languages at Leyden have also provided

assistance on many an occasion, in particular John Stewart, Tom Cook, Maarten Mous and Thilo Schadeberg. Domingo Prieto provided welcome assistance with Portuguese.

Although involved in quite different fields, my former colleagues Catherine Snow and Henk van Riemsdijk also deserve mention here for various kinds of assistance in the past. To Nick Clements thanks are due for help with sources of information on Gbe, whose significance for the creole languages of Surinam is underrated.

A few words require to be said on the subject of my collaboration with Harry van der Hulst of the Department of General Linguistics of the State University of Leyden. Our joint efforts take place in the context of theoretical phonology, far removed from creole studies. However, the stimulating nature of our association has, I am sure, had a catalytic effect on the creole side of my activities, for which I would like to express my gratitude.

I am grateful also to the Netherlands Institute for Advanced Studies, Wassenaar, and its director and deputy director Professor H.A.J.F. Misset and Dr. H.C. Cassee for making it possible for me to devote the academic year 1985/1986 solely to research. This contributed in no small way to the completion of this thesis. Thanks are also due to the Institute for General Linguistics for releasing me from my duties for this year.

I owe an important debt to Saskia Lepelaar, Corrie Overdiep, Anne Simpson and Marina Voerman of NIAS for typing out this large and complicated thesis so well. This despite the unfamiliar nature of the content.

I would like to express my gratitude to my parents for encouraging my linguistic interests from an early age. It is a matter of deep regret to me that my father did not live to see the completion of this book, but at least I have the consolation of knowing that he knew that it was largely finished.

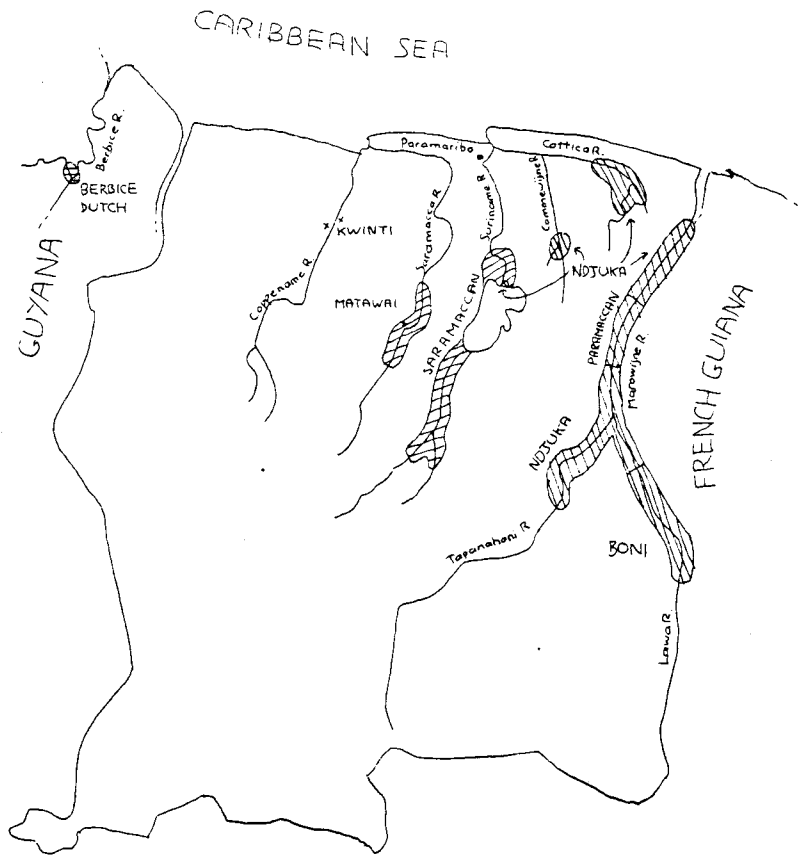
Last but by no means least, I owe a deep debt to my family, who have been living with this thesis for a long time - in the case of my children, for their whole lives. My wife Marieke has been a constant stimulus and support, in what must have seemed to her at times to be a never-ending task.

ABBREVIATIONS

B:	Boni; Barlavento Cape Verde creole
BC:	Barbadian (Bajan) creole
BG:	Guyanese creole
c.:	circa
CV:	Cape Verde creole
CV Barl.:	Barlavento Cape Verde creole
CV Sot.:	Sotavento Cape Verde creole
D:	Dutch
DG/DeG:	de Groot (1977)
DT:	Djutongo
E:	English
EME:	Early Modern English
ESE:	English Standard English
F:	Fermin (1765)
GPE:	Guinea Pidgin English
H/Hut:	Huttar
IE:	Indo-European
IPA:	International Phonetic Alphabet
LB:	Language Bioprogram
LBH:	Language Bioprogram Hypothesis
lge:	language
LGPE:	Lower Guinea Pidgin English
Li:	Golio dialect of Saramaccan
Lo:	Lombe dialect of Saramaccan
LS:	Lower Suriname River dialect of Saramaccan
LSE:	Linguistic Survey of England
MCC:	Miskito Coast creole
ME:	Middle English
ms.:	manuscript
MSL:	Jamaican Maroon Spirit Possession Language
N:	Nepveu (1765)
obs.:	obsolete

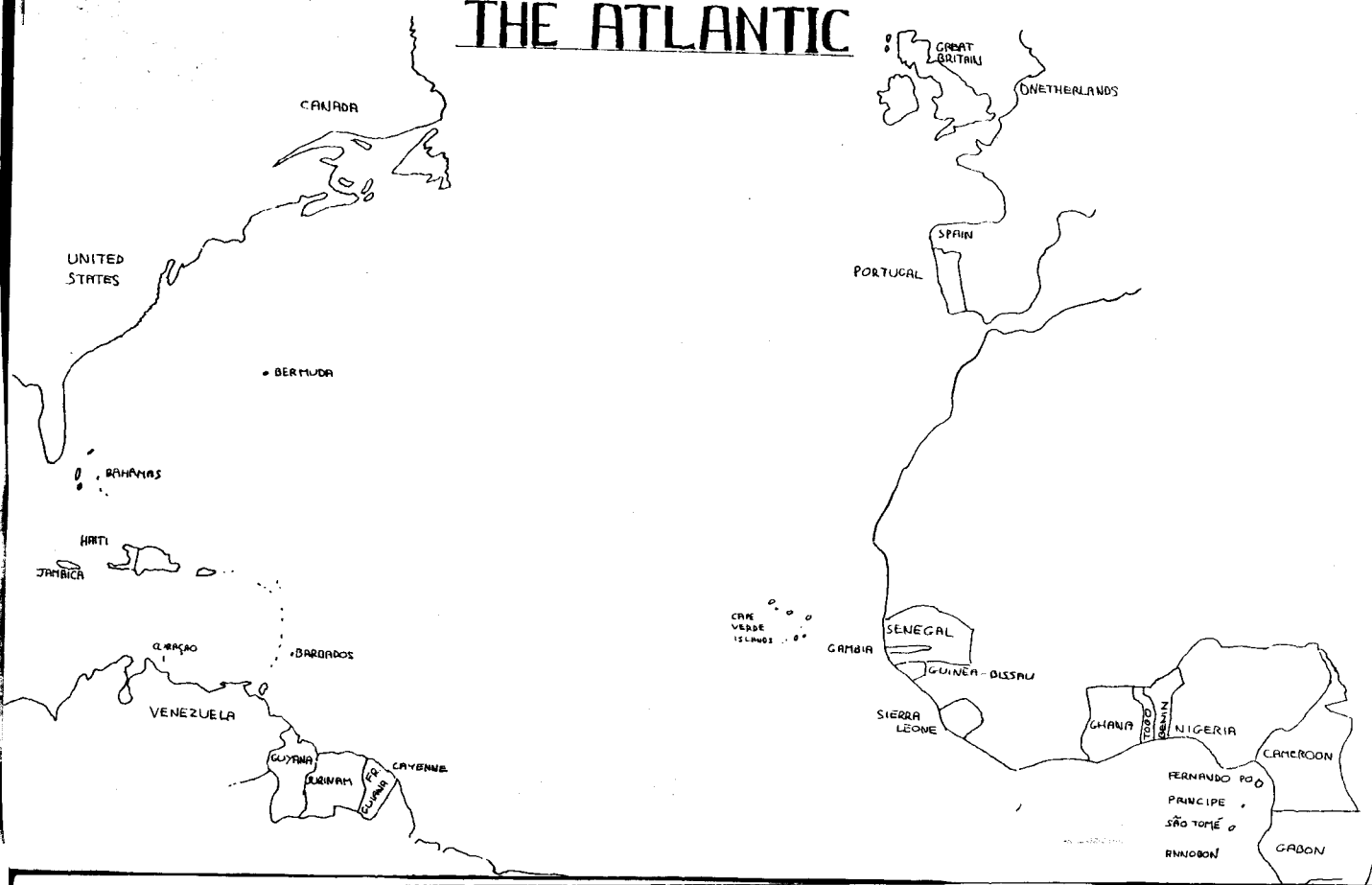
OE:	Old English
OED:	Oxford English Dictionary
OPtg.:	Old Portuguese
Pap.:	Papiamentu
PGC:	Guine creole (Portuguese)
Prin.:	Principense creole
Ptg.:	Portuguese
S:	Sotavento Cape Verde creole
s:	Joint State University of Leyden - Summer Institute of Linguistics - Surinam Ministry of Education Surinam Creole Etymological Dictionary Project
Sara.:	Saramaccan
SE:	Standard English
SIL:	Summer Institute of Linguistics
SPC:	Suriname River Portuguese creole
Sran.:	Sranan
ST:	Sao Tomense creole
U:	Upper Suriname River dialect of Saramaccan
UGCC:	Upper Guinea Coastal Creole
UGPE:	Upper Guinea Pidgin English
US:	Upper Suriname River dialect of Saramaccan
U.S.:	United States of America
WAPE:	West African Pidgin English
WAPP:	West African Pidgin Portuguese
3PPS:	Third person present singular

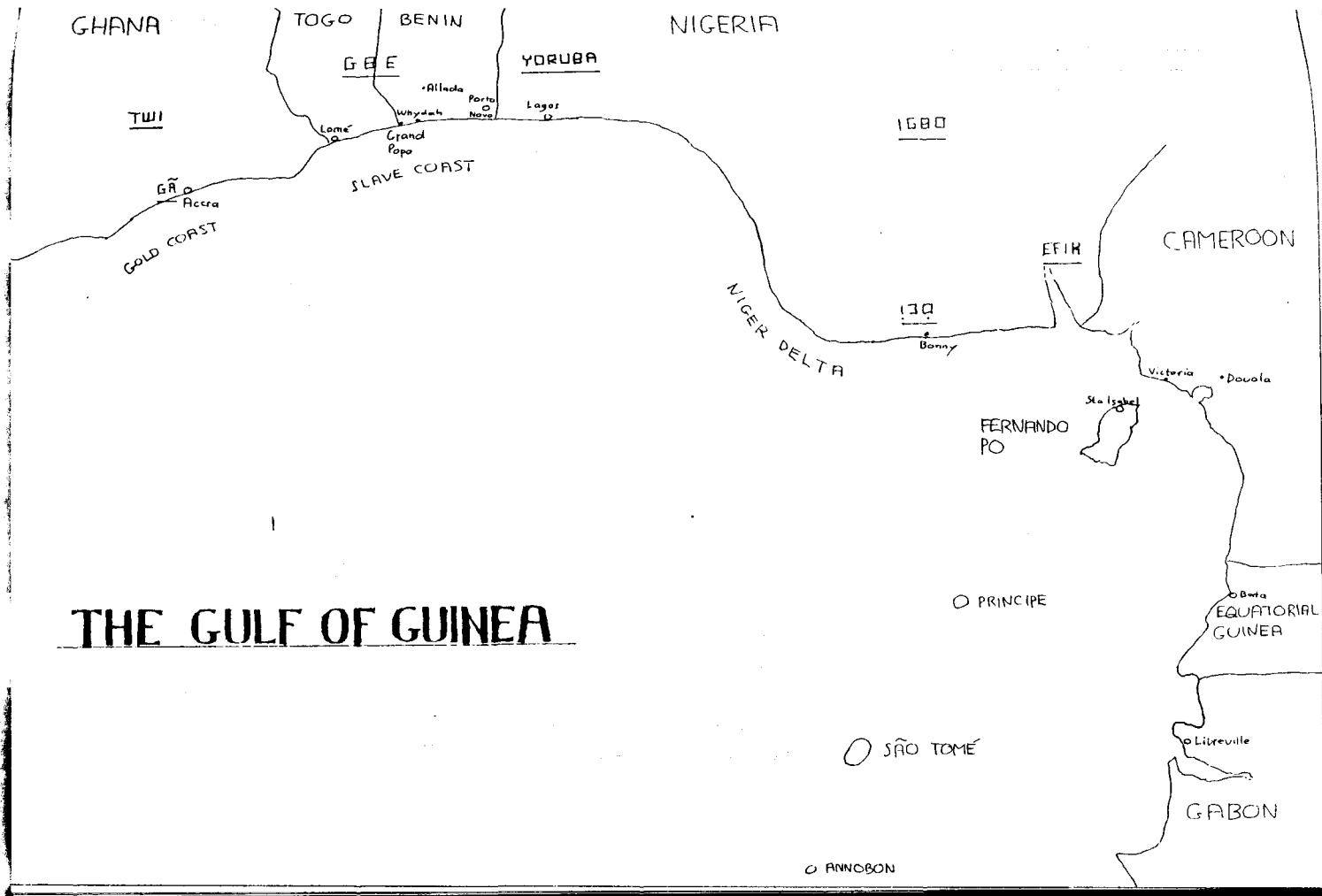
SURINAM



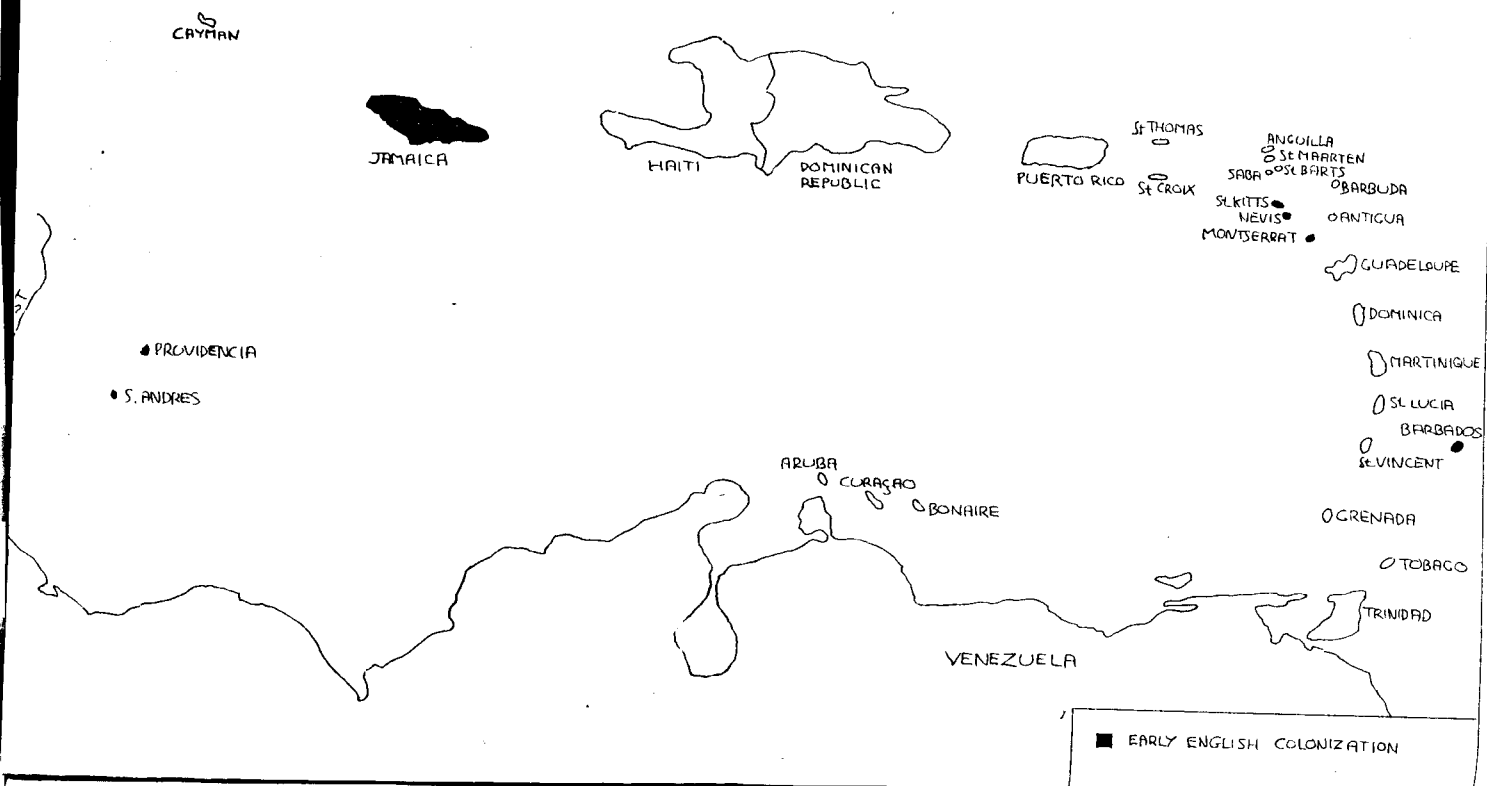
- ⊗ SARAMACCAN
MATAWAI
- ⊗ NDUKA
PARAMACCAN
BONI
- ⊗ KWINTI
- ⊗ BERBICE DUTCH

THE ATLANTIC





THE SOUTHERN CARIBBEAN



PART ONE
CHAPTER ONE
Preliminaries

Aims and Method

Our basic aim in this volume is to provide a new hypothesis regarding the genesis of the creole languages of Surinam - Sranan, Saramaccan, Matawai, Ndjuka (Auka), Paramaccan, Boni (Aluku) and Kwinti.

This is an extremely complex question, and we do not pretend to be able to cover it exhaustively. What we will do is attack the available linguistic data from an angle that has hitherto been neglected - that of historical phonology. We have not chosen to utilize this method as an end in itself, although the application of the techniques of historical phonology to the data of the Surinam creoles clarifies many questions which have been dealt with unsatisfactorily in the past, such as the question of the establishment of the source language of lexical items in these languages. We employ the techniques of historical phonology rather as a tool for extracting new evidence with a potential bearing on the linguistic interrelationships in the earliest period of the colony of Surinam, and thereby of relevance for the controversial topic of this work - the genesis of the Surinam creole languages.

This new evidence we set next to the relevant evidence garnered by other workers in the field of creole studies in general, and of the Surinam creoles in particular. This existing evidence is not as rich as it could have been because of the relatively underdeveloped state of the field of creole studies - or creolistics as some creolists have recently suggested it be called. While clearly a subpart of linguistics as such, it has extensive relations with other disciplines - in particular history, anthropology, and sociology. Within linguistics too, its position is clearly inter(sub)disciplinary. At least the various branches of theoretical linguistics, as well as sociolinguistics and the study of the acquisition of language are relevant.

It is probably by reason of the complex nature of creole studies that the field has frequently been the victim of a somewhat dilettantist approach. This is also partly due to the fact that the primary inspiration of most work in creole studies in the

seventies was sociolinguistic in character. This is not to suggest that the sociolinguistic dimension is superfluous in creole studies. Nothing could be further from the truth, as a moment's consideration of the socially deviant nature of the context of the genesis of most creole languages will tell us - on this more below - but the imbalance in favour of sociolinguistic methods, and the concomitant lack of descriptive and theoretical linguistic work, led to potentially important arguments being overlooked.

- Surinam and the Language Bioprogram

In the last few years, modern work in theoretical syntax has provided present-day creolists with a great deal of food for thought. The work of Derek Bickerton has had a catalytic effect in this respect. His Language Bioprogram Hypothesis, in its various forms, represents the result of the application of generative syntactic theory to creole languages. This hypothesis now dominates the debate on creologensis, in the sense that a deal of ink is devoted to either supporting it or attacking it.

In a sense the Language Bioprogram Hypothesis is tangential to this work. It is not our purpose to argue either for or against this hypothesis, so we will not present any evidence either way. In another sense, however, recent work by Bickerton and his associate Frank Byrne is of direct significance in the context of our hypothesis regarding the genesis of the creole languages of Surinam, in that Saramaccan - one of the so-called Bush Negro languages, is given special prominence with respect to the Language Bioprogram Hypothesis (LBH). It is claimed by Bickerton and Byrne (Bickerton, 1984; Byrne, 1986a,b; Bickerton and Byrne, ms.) that Saramaccan, by reason of the history of its speakers, represents the closest approximation to the prototypical creole, derived via the Language Bioprogram (LB).

We are persuaded of the fundamental correctness of the LB, but will claim that whether it is in fact correct or not is irrelevant as far as the genesis of the Surinam creoles is concerned, in the sense that any operation of the LB was, in our opinion, external to Surinam. In other words we do not agree with the position adopted by Bickerton and Byrne, that Saramaccan (and the other creole languages of Surinam) was created in Surinam by means of the LB.

- The creole languages of Surinam

Before we proceed any further it is incumbent on us to say something about the languages we will be primarily discussing - the creole languages spoken in Surinam.

These fall into two categories by reason of the history and geographical location of their speakers. In terms of these factors one language - Sranan - stands out in contrast to the other six. This language - historically the language of the slaves inhabiting the plantation zone of the coast and the lower reaches of the major river - was adopted as a second language by other population groups who arrived in Surinam following the abolition of slavery in 1863, and is now the official language of the country (officially the Republic of Surinam). It has about 500,000 speakers, of whom approximately one-third are resident in the Netherlands. 1/300

The other six languages represent the forms of speech developed by the six Bush Negro tribes, historically descended from Maroons, or runaway slaves. For a general account of the history of these groups see Price (1976). Linguistically, these six tribes can be classified into three groups:

- a) Saramaccan, Matawai
- b) Ndjuka, Paramaccan, Boni
- c) Kwinti

The most significant distinction is that between group a) and the rest. Saramaccan and Matawai are distinguished from the other Bush Negro languages by reason of the high proportion of Portuguese-derived items in their basic vocabulary (around thirty per cent).

The geographical situation and number of speakers of these languages is as follows:

- Saramaccan is primarily spoken on the Suriname River and its tributaries, and has around 20,000 speakers.
- Matawai is primarily spoken on the Saramacca River, and has around 2000 speakers.
- Ndjuka is spoken in five main areas: the lower Marowijne River; the area at

the junction of the Tapanahony, Lawa, and Marowijne Rivers; the upper Cottica River; the upper Commewijne River; and on the Sara Creek, a tributary of the Suriname River (now displaced by the artificial Lake Brokopondo). The number of speakers is approximately 20,000.

- Paramaccan is spoken on the middle reaches of the Marowijne River by about 2000 speakers.
- Boni is spoken on the Lawa River by about 2000 speakers, the majority of whom live on the French Guyana side of the river.
- Kwinti - the least studied of the Surinam languages - is spoken in two villages on the Coppename River, and in one village in the Matawai area on the Saramacca River. The total number of speakers is probably less than 500, according to Price (1976).

Strictly speaking the differences between Saramaccan and Matawai, and those among Ndjuka, Paramaccan and Boni are only of a dialectal nature.

Taken overall the linguistic relationships among the creoles of Surinam may be represented as follows:

- a) Saramaccan-Matawai
- b) i. Sranan
- ii. Ndjuka-Paramaccan-Boni
- iii. Kwinti

↓
- The early history of Surinam in brief

By 1650 the sugar industry in Barbados was running short of land for sugar plantations. In 1651 Francis Lord Willoughby, newly appointed Governor of Barbados, sent an expedition to Surinam to found a colony there. During the next fifteen years the English population of the new colony grew to around 1500, coming largely from Barbados, St. Kitts, Nevis and Montserrat.

In 1665 a group of around 200 Portuguese Jews were given permission to settle in Surinam as planters (Voorhoeve, 1983). Rens (1982) has examined the probable

antecedents of the Jews in Surinam on the basis of the extant records and comes to the conclusion that prior to 1665 there can have been no more than about thirty in the country, In 1665/6 he estimates that around a hundred arrived from Cayenne, and conceivably fifty from Essequibo and Pomeroon (now in Guyana). The Jews from Cayenne hailed partly from Brazil, and partly from Leghorn in Italy, while those from Essequibo and Pomeroon would be partly from Brazil, and partly in turn from Cayenne.

In February 1667 the Dutch captured Surinam, only to lose possession of it back to the English in October of the same year. It was April 1668 before Dutch control was restored (Rens, 1982). Four official emigrations of the English and their slaves (those acquired up to 1667) are recorded - in 1668, 1671, 1675 and 1680, after which there were only 39 English left in Surinam.

- The definition of a creole language

There is not yet any accepted linguistic definition as such of a "creole language". Attempts to provide one (e.g. Taylor, 1971) have not succeeded in producing a definition that would not encompass many languages not considered to be "creoles". It is only in the light of a detailed knowledge of developments in the history of a language or language family, that we can detect cases involving breaks in the natural development of languages. A creole represents a language-form with a more or less precisely datable starting point.

For instance, to take a clear case of a creole we are certain developed in the country it is now spoken in - Berbice Dutch - we know fairly precisely what seventeenth century Dutch was like, and we can form a fair idea what present-day Berbice Dutch is like. It is quite clear that there can have been no smooth transition from seventeenth century Dutch to modern Berbice Dutch. At some point in the seventeenth century we have to assume massive simultaneous changes involving lexicon, phonology, morphology, syntax and semantics, such that there could have been no question of the operation of the familiar processes of historical linguistics.

In other words, a detailed knowledge of the historical linguistic situation is essential for the identification of creole languages. There must be many more creolized languages than we are aware of at the present. This is at least in part the reason why most creoles recognized as such are lexically based on the Indo-European languages, in particular on English, Dutch, French, Portuguese and Spanish.

Of course, part - and presumably a large part - of the reason for this must be sought in the social conditions obtaining in many of the areas colonized by the English, the Dutch, the French, the Portuguese, and the Spanish - the major colonizing nations from the fifteenth to the nineteenth centuries.

- More on method

Where this work differs from previous comparative phonological studies of creole languages is that we proceed from two known situations - seventeenth century English and Portuguese, and the modern Surinam creoles - and attempt to relate these. This is different from work such as Johnson (1974) and Gilman (1978) who attempt to reconstruct Proto-creoles on the basis of synchronic data, in the first case by taking nine of the better-known Atlantic English-based creoles into account, and in the second case by comparing Jamaican Creole and Cameroonian Pidgin. Quite apart from the different method adopted by us, we believe that comparison has to begin in a less ambitious fashion than that attempted by Johnson who utilizes widely differing forms of English-based creoles. We are of the opinion that greater success will be attained by first comparing creoles that are more obviously closely related than those utilized by Johnson. Our quarrel with Gilman lies in the complete lack of motivation for the selection of Jamaican and Cameroonian for an initial comparison. It would be difficult to find two more different creoles to attempt a comparison with. While the relationship is obviously much closer than any two Indo-European languages chosen at random, a comparison between Hittite and Sinhalese would be in a sense parallel in that one would be creating unnecessary problems that could be avoided by attacking the tree - assuming the usefulness of the family-tree model in a methodological sense rather than its absolute truth - from the twigs downward, rather than engaging in inter-branch comparisons.

Firstly, we wish to extract any evidence present in the Surinam creoles concerning differences in the developments of English and Portuguese sounds. In other words we would like to find out whether the English and Portuguese elements in the Surinam creoles share the same history, or have separate histories. Our conclusion in this respect will be that the English element in the Surinam creoles does not share the same history as the Portuguese element.

The second purpose of our historical comparison follows logically from the first. If the English and Portuguese elements in the Surinam creoles did not share the same history - did not interact with the resultant creoles in terms of the same geographical location, and/or the same historical timespan - there are three logical possibilities in terms of which these interactions might have taken place. The first is that the interaction with English took place in Surinam, while the interaction with Portuguese took place elsewhere. The second is that the interaction with Portuguese took place in Surinam, while the interaction with English took place elsewhere. The third is that neither interaction took place in Surinam. We ignore here the time aspect in view of the brief fourteen-year period between the arrival of the English in Surinam, and that of the Portuguese. With this purpose in mind then, we look for relationships between the creoles of Surinam, or their English and Portuguese components, and the English-based and Portuguese-based creoles of the Atlantic region. We restrict our examination to the Atlantic region in view of the West African origin of the slaves taken to Surinam.

- The structure of this work

The general structure of Part One is as follows. Chapter One contains three further sections. The first of these is devoted to a brief study of the factors we regard as being most important in respect of creologesis, or the creation of creole languages - the question of the social context of creologesis, which splits into two sub-questions concerning the sociohistorical situation, and the social need for a new language, and the question of the linguistic mechanisms by which creologesis takes place, which we consider to be the operation of the Language Bioprogram, and Relexification.

The second section is concerned with methodological aspects of assigning the words in the lexica of the Surinam creole languages to one or other European language. Occasionally it is doubtful whether a particular item is to be assigned to Portuguese or English. A much greater problem, however, concerns the closely related languages English and Dutch. This problem is compounded by the fact that the seventeenth century was a period of considerable flux as regards the vowels of Standard English. It is vitally important to filter out clearly Dutch cases, as well as those that are indeterminate, as at least some of the phonological adaptations involved differ as between Dutch-based and English-based words. By reason of the history of Surinam, we can be certain that English and Portuguese in whatever form had fairly short periods of direct interaction with the prototypes of the Surinam creoles, and that these periods of interaction were overlapping; on the other hand Dutch items have been entering these creoles for some 300 years. Of course English is once again influencing the Surinam creoles, but it is in general not difficult to distinguish modern loanwords from English from the original seventeenth century vocabulary.

The third section is devoted principally to a brief discussion of the various sources we utilize in this study. Here we also discuss certain questions of transcription.

Chapter Two consists of a summary of the phonological evidence we have discovered on the basis of our comparison of the development of English and Portuguese sounds (see Part Two). We have already mentioned above the two kinds of evidence we regard as relevant, and will not go into this further for the moment.

Chapter Three falls into three parts. The first two parts are concerned respectively with the external relations of the English and Portuguese elements in the creoles of Surinam. Partly this is evidence of a phonological nature, and noted by us, and partly it consists of evidence from other sources that confirms or is complementary to the phonological evidence. The third part is a discussion on the implications of the existence of what we refer to as mixed creoles, i.e. creoles with a substantial lexical input from more than a single source, both in content words and function words. This is atypical, as the average creole involves only one major lexifier language, and all the function words in such creoles tend to be from this major lexifier language.

The discussion of the various strands of evidence in Chapter Three leads us to develop the following scenario in Chapter Four. This scenario involves two different linguistic situations in early Surinam. The ancestor of Sranan and the Bush Negro languages basically descending from it - on the one hand Ndjuka, Boni, and Paramaccan, and on the other hand Kwinti (on the basis of the evidence provided in Huttar (1982)) - was not modeled directly on (standard) English in confrontation with numerous African languages, but on two forms of English, firstly an English-based pidgin/creole brought from Barbados, St. Kitts, Nevis, and Montserrat, assuming that the first slaves derived from all these islands - which is not of course a necessary assumption - and ultimately deriving from West Africa, and secondly (colonial) English as it was spoken in Surinam. The first would explain the numerous resemblances between the Surinam languages and Krio. The second would be spoken by settlers of varying provenance, thus would as nearly all forms of colonial English do, basically reflect London English pronunciation of the period, with however numerous regionalisms in vocabulary. The resemblances of this approach to Hancock's Componential Hypothesis (Hancock, 1986a) are obvious.

Of the numerous languages of Africa - more than a thousand according to some counts - only two or three are likely to have been of any significance as first or second languages among the slave population in the early period. We will try and demonstrate later that these were Gbe (Ewe-Fon), spoken on the aptly named Slave Coast, Kikongo, spoken in the west of the Congo, as well as in Northern Angola, and to a lesser extent Twi, spoken on the Gold Coast.

We see Sranan then as having two main strands: an English-based pidgin/creole deriving directly from Barbados and the other colonizing islands, and indirectly from the Lower Guinea area of West Africa, centred on the Slave Coast, and secondly the standard English spoken by the whites in Surinam, also deriving directly from Barbados, and the other islands. Other strands are formed by the above-mentioned three African languages, whose input has mainly been of a lexical and phonological nature. We differ from a number of other researchers in that we do not regard the basic final open syllable structure typical of the Surinam creoles to have once been typical of all forms of English-based creole in the Atlantic area (eg. Alleyne, 1980), but to have been a pattern imposed on the form of West

African Pidgin English (WAPE) brought to Surinam (and expanded there and/or in Barbados etc. with elements of colonial standard English) in conformity with the patterns of the two languages assumed to have been spoken by the majority of the slaves - Gbe and Kikongo - neither of which admits final consonants.

Saramaccan, on the other hand, we see as a new creole formed in Surinam, on the basis of Early Sranan - Proto-Sranan as it were - and a Portuguese-based creole spoken by the original slaves of the Portuguese Jewish planters who arrived in Surinam 14 years after the foundation of the colony. This last group was concentrated on the Suriname River. We assume that the language later known as Djutongo ("Jews' language") developed on the Suriname River by the partial relexification of Proto-Sranan to the Portuguese creole. The run-aways who came to form the nucleus of the Saramaccan and Matawai tribes of Bush Negroes took a form of Djutongo with them. Djutongo died out on the plantations during the eighteenth century, its only remaining effect being a small number of items of Portuguese origin in Sranan, and the other creoles descended from this last language.

Note that we do not consider Bickerton's Language Bioprogram to have been directly operative in the formation of either of Proto-Sranan or of Saramaccan. Proto-Sranan was a more or less stable pidgin - possibly even a creole for some speakers - when it was brought to Surinam. Originally the Language Bioprogram had been operative at the beginning of the history of its ancestor - Hancock's Upper Guinea Coastal Creole (Hancock (1986a) - but after its initial creation as a creole language, it spread along the coast of West Africa as an expanded pidgin. In Surinam linguistic change in the initial period would largely be limited to lexical expansion/replacement and adaptation to the phonological patterns of the languages spoken by the slaves. Saramaccan we consider to have been derived, not by the Language Bioprogram, as claimed by Bickerton and Byrne (ms.), but by another mechanism of creolization - Relexification.

Factors relevant to creologenesi

It is not our intention to provide here an account of the various directions taken

and hypotheses posited in the study of the strictly creolist as against the general linguistic study of creole language. What we will do is delineate the various factors that must be borne in mind by the creolist when considering the problem of creologogenesis, or the creation of creole languages. In doing this we will make mention of the various relevant approaches and their proponents.

There are various aspects of the debate about creologogenesis that have dominated the discussion from time to time, so that one might be forgiven for thinking on occasion that the question is in fact simpler than it really is.

The most important questions that may be asked in this connection boil down to the following two: i) what is the social context of creologogenesis?

ii) what are the linguistic mechanisms of creologogenesis?

Some theories take account only of the first question, others only of the second. However, they are, it seems to us, of equal importance. There must be a reason for the creation of a new language, and such a reason must be sought clearly in social factors. Equally the new language does not arise out of the blue, and so strictly linguistic factors play a role too.

- The social context of creologogenesis

The first question, that of the social context of creologogenesis, is one that again can be divided into two separate questions:

- i) what are the relevant sociohistorical factors pertaining at the moment of genesis of a creole language?
- ii) what social function does the new language fulfill? That is, why did it come to exist?

The first of these sub-questions has received a fair amount of attention, although nothing like the necessary research has been carried out in the case of most creoles. An early example of a study of this type is Rens (1953) on the Surinam languages, in particular Sranan, and to a lesser extent Saramaccan. More recent studies dealing with Surinam, include Price (1976), Voorhoeve (1984), and Byrne (1986a). For Jamaican we have De Camp (1961). A plea for more work along these

lines is to be found in Chaudenson (1977). Students of the Indian Ocean French-based creoles have been particularly active in this respect; we may mention in particular the work of Baker and Corne (Baker & Corne (1982; 1985), Baker (1984)).

Much less ink has been spilt in looking for an answer to the second sub-question - that concerning the social function of the new language.

One common assumption is that creoles develop out of pidgins, in the sense of "emergency" languages utilized between groups lacking a common language. Ferraz (1975) says:

"a pidgin is an emergency language which evolves rapidly to make communication possible between people of diverse tongues, and rapidly develops into a creole when it becomes a mother tongue"

This, on the face of it, simple answer to the question "Why..?", is when examined more closely, not quite so obvious. Let us examine the case of the Gulf of Guinea creoles, discussed by Ferraz in the article quoted.

- The case of São Tomense, Principense and Annobonese

The major population groups in early times on the Gulf of Guinea islands - São Tomé, Príncipe, and Annobon - are assumed to have been the Portuguese (in particular a large number of convicts), a couple of thousand Spanish Jewish children who had been separated from their parents in Portugal, and African slaves, whom Ferraz concludes were largely Bini and Kongo speakers. An important feature was a rapid integration of the various racial components of the population - King John II ordered that each convict be supplied with a female slave in order to increase the population. On São Tomé, which was settled first, and from which the other two islands were settled, there were about 1000 Portuguese citizens in 1506 according to Ferraz, about 600 out of 2000 Jewish children sent there 13 years previously, and 2000 slaves. Ferraz does not quantify the number of convicts, other than as "many", unless these are included in the total of 1000 citizens, which

included, "voluntary settlers, traders, their employees, sugar planters, and ship-builders."

It is not made clear why the populations of these three islands ended up speaking three very similar creoles, São Tomense, Principense, and Annobonese, with lexica based primarily on Portuguese, with significant Bini and Kongo components, and incorporating syntactic features from Kongo, such as the disjunctive negative. Why was there a social necessity to develop a new language or languages rather than simply adopt Portuguese? Note that the relative isolation from European linguistic models adduced by Alleyne (1961) to explain the imperfect acquisition of European languages would not seem to be applicable in this case, as there was in fact a large-scale integration and intermarriage of black and white populations from the beginning. So Portuguese models would have been widely available, encouraging the rapid learning of this language.

- The case of Angolar

Another case where Ferraz supplies a less than satisfactory answer, concerns the language of the Angolares, another creole-speaking group on São Tomé. According to Ferraz the Angolares represent a maroon population, originally consisting of runaways from the plantations in the first half of the 16th century. Now Angolar - the language of the Angolares - differs principally from São Tomense in that it possesses a substantial element in its lexicon that can be traced to the Bantu language Kimbundu, which is spoken in Angola. Ferraz concludes reasonably that a large proportion of the original Angolares were Bantu speakers from Angola, and not from the Congo, which would obviously explain their name. He does not answer the question why this group do not just speak São Tomense, as he states that they originally spoke this language at the time they left the plantations. This opinion is confirmed by the large-scale parallels between Angolar and São Tomense. In other words the question we are claiming Ferraz provides no answer to in these two cases comes down to:

"Why did this particular mix of elements emerge in this case?"

He answers reasonably our question concerning the pertinent sociohistorical data at the time of creologensis, but fails to answer our question regarding the social function of the newly created language.

We regard this as in fact the more important part of our original question regarding the relevant social factors. No new language emerges without there being a clear social function for it. It does not merely emerge just because the component parts happen to be present.

- The factor of ethnicity

The answer to this question is we think to be sought in terms of the creation of a new ethnic identity. The mixed African-Portuguese-Jewish majority community of the three Gulf of Guinea islands did not represent either a Portuguese community, or an African community, but a mixture of these, in terms of intermarriage, low social status, and comparative isolation. Due to external pressures and internal solidarity a new set of common sociocultural patterns emerged, and as a function of these, a new language, which would form the linguistic expression of these sociocultural patterns. In short a new ethnic group was created requiring a new set of linguistic patterns. This new group would presumably be a function of consciously felt feelings of solidarity.

Similarly the Angolares could have continued to speak São Tomense, or could have adopted Kimbundu as their group language. Assuming that the Kimbundu speakers did not form the only component among the Angolares, which seems only reasonable, then we may well be seeing the result of the creation of another new ethnic group, with its own sociocultural behaviour patterns. In fact in view of the resemblances between Angolar and São Tomense we can assume that there were at least two groups involved - Kimbundu speakers, and São Tomense speakers - which were presumably not mutually exclusive. Being escaped slaves there would be more of an African element than among the general population, which in addition to their liberated status would be sufficient to require a new means of expression, in other words a new language.

The first suggestions in this direction were made by Alleyne who says (Alleyne, 1971):

"The argument then is 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. Sociocultural factors everywhere determined the degree of interference, from one territory to another and also within any single territory. This resulted in linguistic variation and instability which is characteristic of any dynamic acculturative process. Because field slaves constituted the greatest numbers and were in effective contact only with themselves, the linguistic medium, commonly referred to as 'creole', appears to have become crystallized within that group. At the beginning of the process, this creole was in fact everywhere only a major segment of a continuum of variation and marked the first stage in the process of adaptation to a cultural model".

Alleyne stresses the 'group consciousness' of the field slaves (Alleyne, 1971), and emphasizes the 'Afro-American' culture of the speakers of creoles (Alleyne, 1980). He sees the development of a strong ethnic identity by the slaves, as a result of "the most extreme form of oppression" and the lack of significant external social interaction (cf. 1980, p.220), and as we have seen associates the rise of the creole language with social isolation, i.e. lack of social interaction as well. However, he sees the development of the creole in terms of physical non-interaction with English or French models, rather than as an expression of the new ethnicity as such. In fact it is to be doubted whether the question of non-interaction with the European language model is a necessary factor, presumably on São Tomé there was no obvious social isolation from Portuguese as such - there would be isolation from the top layer of Portuguese speakers, but the mixed Portuguese-Jewish-African ethnic group also included many Portuguese (and Spanish) speakers. In other words for Alleyne external influences lead both to the development of a new ethnic identity, and to the development of the creole languages, whereas we would suggest that if social factors lead to the creation of a new ethnicity, then this

requires that a means of expressing this identity develops. The fact that creole languages exist at all is therefore for Alleyne a function of the incomplete acculturation of the slaves, and where the process of acculturation has not been broken off by political or cultural marronage (Alleyne, 1980, p.221) it is still in progress.

The significance of ethnicity for the creation of new languages is suggested in Muysken (1981) in his discussion of the reasons for the creation of Media Lengua - basically a language constructed from Spanish lexical material embedded in a Quechua grammatical structure.

He hypothesizes that the acculturated Indians who make up the Media Lengua-speaking community could not identify with either rural Quechua culture, nor with the urban Spanish culture. It was not communicative needs that led to the development of Media Lengua, as the community under study was originally monolingually Quechua-speaking, and at least at the present day possesses many fluent Spanish speakers, but expressive needs. Ethnic self-identification is assigned crucial importance. The new language was created to allow the community to articulate its sense of cultural identity. Muysken draws the moral for the study of the genesis of Caribbean creoles that pidgins originally used for inter-group communication were adopted to express "their new problematic cultural identity". He sees the mechanism in question as primarily relexification, but we will return to this question later. The idea of "mixed languages" as the expression of a new ethnicity seems to us to be of prime importance in explaining creologogenesis, and will be examined with respect to Surinam in the third and fourth chapters.

- The linguistic mechanisms of creologogenesis

We will now turn to an examination of what we defined as the second main question in creologogenesis - the question of the linguistic mechanisms involved in the production of creole languages. The first subquestion we have to address is the question whether there is anything special about the processes involved in the development of creoles as distinct from the normal processes arising from various types of symbiosis between languages. It is perfectly normal for languages in

contact to influence each other, in lexical, phonological, morphological, and even syntactic patterns - to order these influences in terms of the degree of likelihood of occurrence. Are the phenomena encountered in creolization different in kind, or just in degree from those encountered in "normal" cases of linguistic contact? We suggest that the first alternative is correct, in other words that creolization is different in kind in that it involves the creation of a new language, not just the modification of an existing one.

There are a number of theories concerning the linguistic mechanisms involved in creologogenesis, and the consideration of these is the more important subpart of the linguistic as distinct from the social question regarding creologogenesis. The significant theories are four in number:

- 1) creoles develop from pidgins by "expansion"
- 2) creoles are the result of prematurely terminated linguistic acculturation
- 3) creoles are developed in the language-learning situation in the face of a lack of an adequate linguistic input and with the concomitant operation of universal principles
- 4) creoles are the result of relexification by a language of inferior status to a language of superior status

- The pidgin origin hypothesis

Before we address the first hypothesis about creologogenesis, we would like to make the proviso that we do not require or intend to get enmeshed in the debate on pidgin genesis. We will restrict ourselves to discussing the assumed passage from pidgin to creole status. Before going on to this however, it is useful to consider first that all pidgins are not the same. We have on the one hand contact jargons with little stability in structure, such as is illustrated in the Hawaiian material adduced by Bickerton (1981). Another example would perhaps be Chinook Jargon (Silverstein, 1972), and also Tày Bôi (Reinecke, 1971). On the other hand we have more expanded pidgins, such as Tok Pisin of New Guinea, and West African Pidgin English in its various forms. There is such a world of difference between these two types that we may reasonably ask the question whether we are dealing with entities

of the same kind. In cases of the first kind, what results is conditioned to a large extent by the linguistic background of the speaker. This is well illustrated by Bickerton's Hawaii material where the structural patterning imposed by Japanese, Korean, or the Philippine languages is clearly visible in the output produced by native speakers of those languages.

What an examination of the stable type of pidgin reveals is that it is certainly not necessary for a language to have native speakers to be able to have a creole type structure. Note that the claim that West African Pidgin English derives originally from a creole developed in the Sierra Leone area around 1600 (Hancock, 1986a,b) does not detract from the value of the evidence in that case. Cameroonian Pidgin English is one of the main modern offshoots of WAPE, and was at least until recently without native speakers. The lack of native speakers has not affected the structure of this language in any noticeable way. No more so has the recent acquisition of native speakers by Cameroonian Pidgin English or Tok Pisin made any significant differences to the structures of these languages. Recent developments in these languages are similar to those deriving from normal processes of historical change, although proceeding fairly rapidly in the case of Tok Pisin (Mühlhäusler, 1986).

We must conclude that a pidgin does not need to acquire native speakers to have an expanded structure. If languages without native speakers are defined as pidgins then any language created by individuals possessing native languages will be a pidgin. If, however, it is possible for languages of this type to possess an expanded structure, then the distinction between pidgin and creoles becomes vacuous. In other words, if the passage of Cameroonian Pidgin English and Tok Pisin from languages having the status of pidgins to languages having the status of creoles makes no difference to the languages themselves, the distinction is either meaningless, or at least wrongly drawn.

Hancock (1980) considers stabilization more important than nativization in the creation of a creole, and we strongly suspect that he is correct - at least for certain types of creole formation.

A consideration of the speech situations involved in the use of "pidgins" can probably tell us a lot about the different types of pidgins. There seem to be, globally speaking two kinds of pidgins with respect to the speech situation also.

- pidgins that indeed have the function of emergency languages, utilized by people performing certain very specific purposes that require them to engage in limited linguistic interactions outwith their "home" societal situation - traders, fishermen, sailors, etc. For such users the pidgin has a strictly temporary function.
- pidgins that fulfill a function at the (more or less) permanent interface between two or more societies. Such pidgins can in no way be termed "emergency languages", as many speakers will be utilizing them on a daily basis.

Pidgins of the first type will tend to have an unstable structure, while those of the second type will tend to be of the stable and expanded variety.

The initial situation in the slave-based plantation societies - including that of Surinam - might be assumed to have been a typical emergency language situation, until at least a stable pidgin of the second type had emerged, were it not for two facts. The first is that most of the English colonies were not primary but secondary colonies, colonized from other colonies, so that it would rarely be the case that some means of communication among slaves had not already been developed prior to the event of colonization. The second fact is that, as we will see in Chapter Three, there is evidence to suggest that a form of West African Pidgin English was familiar to at least a part of the slave population, and played a role in the development of the English-based creole languages spoken by them. Surinam was founded in 1651 by settlers from Barbados (1627), St. Kitts (1624), Nevis (1627) and Montserrat (1633). Of those, Montserrat and Nevis were founded from St. Kitts. To this day St. Kitts creole is virtually identical with that of Nevis. This means that the slaves that the first settlers would have brought with them, would probably already have had exposure to a stable pidgin of the second type, if not to a creole. Surinam was founded a generation later than its parent colonies so that it is possible that some of the slaves brought by the planters would be creole-

speakers, although it is as we have claimed above unclear whether there would be any significant difference between stable pidgin and creole in this case or not.

In the case of the slaves presumably brought to Surinam in 1665 by the Portuguese Jews, there is also evidence, as we shall see, that a Portuguese-based creole would have been spoken by them.

To return to the initial statement of this first hypothesis, we can now see that it is hedged round with problems. "Expansion" does not apparently require native speakers. In newly created societies, like those in the slave colonies, the "emergency" pidgin phase, if it existed at all, can be assumed to have been very brief.

- The prematurely terminated acculturation hypothesis

We will now turn to the second hypothesis regarding the linguistic mechanism involved in creologesis - that associated with Alleyne and expressing the thesis that creoles are the result of prematurely terminated linguistic acculturation.

In terms of this hypothesis it is assumed that the degree of contact with Europeans was correlated with the degree of acculturation. Individuals who had close contact with the whites would attain a closer approximation of European culture, including the linguistic aspects of this. Individuals who had little contact with the whites, and who lacked the opportunity to learn their language, would as a result produce a version of English or French with a great deal of substrate interference, that is interference from the linguistic structures of their native languages. Alleyne assumes that the West African languages spoken by the first slaves displayed many common structural features - features also to be found in many creole languages. On the plantations the field slaves were furthest removed from European culture, and were largely restricted to in-group contacts. Therefore, in such situations the forms of creole most divergent from the colonial languages would arise. If the model of the European matrix language continued to exist side by side with the creole, there would be continuous pressure towards modification in the direction of the matrix language.

The weakest aspect of this hypothesis is that, insofar as the English and French-based creoles of the circum-Caribbean are concerned, it assumes the presence of the influence of a general West African type of linguistic structure. Even if we restrict things to those languages known to have been widely represented among the earlier slaves, there is quite a typological variety among - to take the languages that were probably most important for Surinam - Gbe (Ewe-Fon), Twi and Kikongo, especially as between the first two - belonging to the Kwa group - and the last - belonging to the Bantu group.

An original feature of this hypothesis is that no pidgin is involved. The creole is the result of imperfect learning of the matrix language. However, because this hypothesis, like the previous one, has been insufficiently developed, we will ignore it in the further discussion.

- The Language Bioprogram Hypothesis

The hypothesis that creoles are created by children in the language-learning situation who are faced with inadequate linguistic input is associated with the name of Bickerton (1981; 1984). His theory - the Language Bioprogram Hypothesis, henceforth the LBH - assumes that the classical creoles arose under special social conditions such that children being born into the typical slave community - which he assumes would involve a plethora of African languages - would not have had much access to the colonial language. Bickerton assumes that a pidgin based on the colonial language would serve as virtually the only means of communication among the earliest adult slaves. To allow the development of a pidgin demographic factors should disfavour the learning of the colonial language by the slaves - the proportion of slaves to Europeans must be unfavourable, or should reach an unfavourable level fairly rapidly. Marronage and an early switch in the colonial language are two more factors propitious to the development of creoles.

Assuming that one or more of these factors is present, what will happen? The children of the slaves will naturally attempt to learn the language they have most contact with. Bickerton assumes that the African mother tongues of the slaves will not be suitable, as with so many African languages represented, none of them will

be capable of fulfilling general communicative functions within the community. The only "language" with any kind of general use in the community would be the unstable and imperfect pidgin. The children would then try to learn this as if it was a full-scale language. The Language Bioprogram will then fill the gap created by the lack of interpretable input by - in one interpretation of the LBH (see Bickerton, 1984) - establishing the set of morphosyntactic parameters as defined by Universal Grammar (UG) for the "new" language in their unmarked setting.

Bickerton (basing himself on work by Byrne (e.g. Byrne, 1986b)) sees Saramaccan as the creole that comes closest to the ideal, due to its brief exposure to European influences. He quotes Price (1976) for the opinion that the original Saramaccans were all born in Africa, and that two-thirds of these were less than ten years removed from their African homeland. This last fact hinges on the opinion expressed by Price in 1976, that the Saramaccan tribe must have been founded around 1680. However in Price (1983) it is made clear that the date of foundation of the Saramaccan tribe was more like 1690.

Because of this "brief encounter" with English (and Portuguese post-1665), the pre-Saramaccan had not time to "acquire more than a smattering of English and Portuguese words". It will become clear, below, that we do not accept this position.

- The relexification hypothesis

The theory of relexification - first conceived by Adam (1882) - was first applied to a concrete example by Sylvain (1936), who claimed that Haitian creole (French-based) was basically just a relexified Ewe. Lefebvre (1986) claims that there is indeed a large degree of syntactic influence in Haitian creole from Fon - like Ewe, a Gbe dialect.

That relexification is one mechanism by which creoles can be formed is illustrated by the case referred to above of Media Lengua (Muysken, 1981). In this case the explanation is clearly that two languages were in confrontation. To express the new ethnicity the original Quechua speakers had adopted, a new language was required. This was formed, to express things very generally, by combining Quechua grammar

and phonology, with the Spanish lexicon. Muysken suggests in his 1981 article that his findings have wider relevance for creologensis.

Another clear case of relexification involves Anglo-romani, created according to Hancock (1984), probably as the result of the contact between Gypsies in England, in the sixteenth century, and the numerous population of beggars then existing. The native language of this latter group was of course various forms of English. Because of the shared socio-cultural patterns of the two groups, an inter-group means of communication was developed. The Gypsies spoke natively a dialect of the same highly inflected Romani still spoken by their fellows in various parts of Europe and the Middle East. The resultant language of intercommunication was English in grammar and phonology, with a variable Romani-derived lexicon of around 300-800 items (at least in present Anglo-romani).

We reject here the theory that all known creoles are derived by relexification to various languages, from a presumably stable West African Portuguese Pidgin - the so-called *mono-genetic theory* - (Whinnom, 1965; Thompson, 1961; Taylor, 1961; Voorhoeve, 1973). The only really significant evidence for this is provided by the Surinam creoles, and here the Portuguese lexical contribution is best explained in other ways (see Chapter Four for discussion on this point). The large percentage of basic vocabulary derived from Portuguese displayed by Saramaccan (34.88% of traceable forms according to our calculation) was to be explained by the incompletely relexified state of this language at the early period at which the founders of this tribe escaped from their plantations. Price (1983) dates the formation of the tribe to around 1690, which means that in terms of the relexification theory, the partial relexification "observable" in Saramaccan would have been the result of around 25 years relexification.

One wonders how monogeneticists would explain the facts of Berbice Dutch, which has 27 per cent Eastern Ijò-derived basic vocabulary (see Smith, Robertson and Williamson, 1987), but no Portuguese derived basic vocabulary at all. If this language had been relexified from a Portuguese Pidgin, with presumably a large Eastern Ijò element, one is mystified by the fact that the one element brought across the Atlantic is still present, while the other has vanished as snow before the sun.

Of course a less extreme theory is possible whereby not all creoles have to be derived from the African Portuguese Pidgin. This too is deprived of all its support when the Portuguese element in Saramaccan is more satisfactorily explained as being the result of the immigration of Portuguese Jews to Surinam in 1665 (see further Chapter Three).

This concludes our discussion of the factors we consider relevant to creologenesis. We consider, then, that there is no single method by which creoles are created. Which method in fact applies - the Language Bioprogram or Relexification - depends basically on the number of languages involved, as we will explain in more detail below.

Methodological Preliminaries to the Study of the Phonological Development of the Sounds of the Surinam Creoles

One of the thorny problems in the study of the historical phonology of the Surinam Creole languages concerns the question whether an English or a Dutch item has served as the model for the particular word. This problem is of course greater in some parts of the vocabulary than in others. That is, if the normal development of a particular Dutch phoneme is different in the Surinam Creoles from the development of the English phoneme whose realisation most resembles it phonetically, then we have basically no problem, at least insofar as the Dutch and English cognates correspond phonetically. We have generally no problem if the Dutch and English cognates are quite different phonetically either. In the cases where Dutch and English cognates resemble each other phonetically and they are represented in Surinam by the same phoneme we have serious problems. Sometimes where the Dutch and English congeners have taken on different meanings we can appeal to semantic factors. Otherwise there is normally no linguistic means of resolving the problem unless the word is a member of a family of items, such as the personal pronouns. If a very basic item of vocabulary is involved we could claim that it was inconceivable for the word not to have existed during the English period, but we shall eschew such arguments as non-linguistic and regard the word as ambiguous in such a case.

We shall illustrate the problem by studying ambiguities presented by the vowel structure of words. Mostly we will be comparing Dutch and English items with similar phonetics - sometimes items with quite different phonetic representation in Dutch and English which might, however, be expected to give the same result in Surinam. Cases that are not problematic will not be mentioned in this section. We will mostly concentrate on Sranan as this is the language with the largest number of items modeled on Dutch or English words.

Let us start with words with final /i/ in Dutch or English. These both give /i/ in Sranan as we can see from the following table:

<u>Sranan</u>	<u>English</u>	<u>Dutch</u>	<u>Origin:</u>	<u>E</u>	<u>E/D</u>	<u>D</u>
kindí	knee	knie			x	
si	see	zien			x	
-tri	tree	-		x		
dri	three	drie			x	o

An "x" in the columns to the right of this table indicates that the item concerned is respectively clearly English (E), ambiguous as between English and Dutch (E/D), or clearly Dutch (D). An "o" indicates a probable origin.

Here we see that two of these items cannot be assigned with certainty to one or other donor language. We might compare /kindí/, which is /k(i)ní/ in earlier Sranan sources as well as /kiní/ in the other Surinam creoles, and obviously represents a model [*kni], with /nákí/ which corresponds to English knock, with loss of initial /k/, and conclude that /kindí/ must be based on a Dutch model because of the retention of initial /k/, but this conclusion would not be justified. In the first place we cannot assume that the English spoken in Surinam during the short period of English occupation and the equally short period after the Dutch takeover when the English remained the dominant linguistic influence in the colony was in any sense uniform. We must assume that the overseer class whom the slaves would have been most in contact with would have spoken a variety of English dialects. We must also take account of older English influences deriving from W. African Pidgin English (WAPE), and dating back to c. 1600. The seventeenth century was the period when

English /kn/, at least in the standard dialect, was giving way to /hn/. If a mixture of accents was present then [kni] and [hnak] or [hnɔk] might well have provided the models for Sranan. Note that Cameroonian Pidgin English (as representative of WAPE) has /kini/ for knee. Our conclusion must be that /kindi/ remains a doubtful case.

The question of /si/ is equally doubtful. One might ask whether the Dutch zien would not result in /sin/ in Sranan. In general Dutch verbs are taken over in their stem form. This happens without question in the case of verbs with infinitives in /-ən/. There are no certain parallels among the small group of verbs with infinitives in /-n/, but it seems most likely that all verbs would be borrowed in their bare stem form, without suffixes. This is the form that occurs in the first person singular present, and in the imperative.

In the last case, that of /dri/, we cannot of course draw any conclusions from the vowel. In this case consonantal developments allow us to assign this item to a Dutch origin. English initial /θ/ is represented by /t/ in Sranan, under normal circumstances. It is less likely that this represents a Western English dialect form /dri:/ ([dʁi:]), deriving from the English of the important port of Bristol.

In the other cases where the vowel does not clearly represent a vowel from one of the languages, it is the lack of a congener in the one language that permits us to assign an unambiguous source.

In the seventeenth century the shift of Dutch words spelled with ij from a pronunciation [i:] to a pronunciation [ɛi] was not complete, as it is not yet in many dialects. This gives us a greater problem when we take Sranan forms in /i/ into account.

<u>Sranan</u>	<u>English</u>	<u>Dutch</u>	<u>Origin:</u>	<u>E</u>	<u>E/D</u>	<u>D</u>
fri	free	vrij			x	
mi	me	mij		o	x	
wi	we	wij		o	x	
ji	ye	jij		o	x	
sedri (1855)	celery	selderij/ selderie		x		o
prati	party	partij		x		o

Of course one could claim that personal pronouns would have to be present in a language from its inception, and that this would mean that three of the forms in this table that are marked as doubtful would be clearly English. We would reply that this cannot be proved for each pronoun taken separately. We do not know that the personal pronouns in pre-Dutch Sranan had these forms. It is conceivable though not very likely that there were different pronouns at this period. In fact forms derived from me, we, and ye occur in other English-based creoles, although the last of these is quite rare.

We must conclude that on phonological grounds we can say nothing definite about each individual form taken on its own. However if we look at the personal pronouns as a system then it is possible to say more about these forms.

On the following page we have illustrated 22 English-based systems with the common factor of an African-derived second person plural - usually something like unu or una. We have divided these into seven groups on the basis of the particular forms or the phonological guise these appear in. Despite these variations we can see that there is an essential unity among the systems - the main difference being between systems with third person singular /a/ and /i/. Other differences are probably mainly due to pressure from Standard English (e.g. first person singular /a/ instead of /mi/).

The three Dutch-based creole pronoun systems we illustrate at the top of page 29 display a quite different picture. The first person singular is derived from Dutch ik, the first person plural from Dutch ons, and the second person plural is derived from a complex form incorporating Dutch anderen "others". We give finally the nominative and accusative Afrikaans pronouns to illustrate the type of Dutch that might have given rise to these forms.

From all this it seems as if we can safely draw the conclusion that the pronoun systems of the Surinam creoles are to be ascribed to an English basis rather than a Dutch one.

English-based Creole Pronoun Systems with African second person plural

	1S	1P	2S	2P	3S (weak)	3S (strong)	3P
A							
Saramaccan	mi	wi/u	ju/i	un(u)	a	(h)ɛn	de
Matawai	mi	wi/u	ju/i	un(u)	a	en	den
Sranan	mi	wi/u/un	ju/i	u(n(u))	a	en	den
Ndjuka	mi	wi/u	ju/i	u(n(u))	a	en	den
B							
Paramaccan	mi	u	i	u	a	en	de(n)
Boni	mi	wi/u	ju/i	wun/wi de	a	en	den
Kwinti	mi	u	ju	unu	a	en	de(n)
B							
MSL	mi	wi	ju/u/i		a/o/i	am	
C							
Krio	a/mi	wi	ju	(w)una/unu ina	i	am	dɛm
Cameroon	a/mi	wi	ju	(w)una	(h)i	am	dem
Nigerian	a/mi	wi	ju	(w)una	(h)i	am	dem
Fernando Po	a/mi	wi	ju	una/ju	i	am	dem
D							
Jamaican	mi	wi	ju	unu	im	-	de(m)
Providencia	mi	wi	ju	unu	(h)im	-	dem
San Andres	mi	wi	ju	unu	ɪ	-	dem
E							
Gullah	a/mi	βi	ju/i	(w)unə hənə	i (ʒi)	hɪm	dɛm
Afro-Seminole	a	wi	ju	hənə	i	hi	dɛn
Bahamian	mi	wi	ju	jinə/ona	i ʒi	im	dɛ
F							
Barbadian	ai	wi	ju	(w)unə	(h)i ʒi	ɔm	dɛm
G							
Belizean	a	wi	ju	unu	i	am	dɛm
MisquitoCC	mi	wi	ju	unu	i	am	dɛm
Caymanian	mi	wi	jʌ	unʌ	i	am	de

NB. The above groupings have been made solely in terms of the various pronominal forms. They do not necessarily have implications for the classification of the various Atlantic creoles, although this may well be the case.

Dutch-based Creole Pronoun Systems

	1S	1P	2S	2P	3S wk	3S str	3P
Virgin Is.(1870)	mi	ɔns	ju	jɛndɛ		am	sɛndɛ
Essequibo	ɛk	ɔns		ɛndɛ		ɛm	
Berbice	ɛkɛ	ensi	ju	jɛndɛ	a/ɔ	ori	eni
Afrikaans n.	ek	} ons	jy	} julle		hysy	} hulle
Afrikaans a.	my		jou		hom:haar		
Dutch nom	ik	wij	jij	} jullie		hij:zij	zij
Dutch acc.	mij	ons	jou		hem:haar	hun	

In the case of the last two items in the table on page 26, these are obviously Dutch. In the case of sedri we do not know from this form what the stress pattern was, but the presence of a d makes it obvious that we have a Dutch-derived form here. In /prati/ the stress is final as it is in Dutch.

With words with this same vowel in Dutch or English but with a final consonant the problems happen to be much less serious despite the fact that such words are much more numerous in Sranan. The following are however doubtful:

<u>Sranan</u>	<u>English</u>	<u>Dutch</u>	<u>Origin:</u>	<u>E</u>	<u>E/D</u>	<u>D</u>
dípi	deep	diep			x	
wiri	wheel	wiel			x	

The apparently doubtful cases:

<u>Sranan</u>	<u>English</u>	<u>Dutch</u>
díri	dear	duur
bíri	beer	bier

where we know that Dutch /y:/ also can result in Sranan /i/, might seem to be of probable Dutch origin when compared with the following two tables:

<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>
deer	díá	-	dí(j)a
here	dja	-	dja/ja
overseer	hía (1855)		
beard	basjá	basíá	basía
	-	bía	-

<u>Dutch</u>	<u>Sranan</u>
nier	níri
manier	maníri
mortier	montíri
brigadier	bregadíri
postuur	postíri

On the other hand we shall see that the English element in Sranan consists of a mixture of r-less and r-full dialects.

<u>English</u>	<u>Sranan</u>	<u>English</u>	<u>Sranan</u>
swear	swéri	more	móro
square	kwéri	shore	sjóro
wear	wéri	sore	sóro

but:

care	ke	four	fo
there	de	before	bifó

So that on this point there can be no certainty.

Where /i/ occurs there is generally no problem, as English items give Sranan /i/, while Dutch items give /e/. Problematic cases only arise when English /i/ corresponds to a Dutch vowel that results in Sranan /i/. Two such cases are:

<u>Sranan</u>	<u>English</u>	<u>Dutch</u>	<u>Origin:</u>	<u>E</u>	<u>E/D</u>	<u>D</u>
príti	split	splijten			x	
síki	sick	ziek			x	

Some potential English items with /i/ preceding a nasal are a problem however.

<u>Sranan</u>	<u>English</u>	<u>Dutch</u>	<u>Origin:</u>	<u>E</u>	<u>E/D</u>	<u>D</u>
maléjri	malinge	malenger			x	o
énki	ink	inkt			x	o
ben	been [bɪn]	-		x		
en	him	hem		o	x	

Since a large number of obvious English-derived words with this structure have

Sranan /i/, that is clearly the normal development of English /i/. However, /ben/ is definitely the representative of English been. It might be of significance that in English this word is normally unstressed. We might then conclude that unstressed /i/ in isolation develops instead to Sranan /e/. In that case /en/ could be from either language, as far as the phonological evidence is concerned. However, as we have just seen, it is likely that the pronominal system with the exception of the 2 pl. must be from English, so that we can claim definite English origin for /en/. The first two forms have /e/ in the position of the stress in the corresponding English item. They are probably then to be assigned to Dutch etyma. There is in each case an additional reason for so thinking. In the case of /maléŋri/ the sense is not that of the English "malinge". In Sranan the meaning is rather "sickly, crippled, to be ailing" (Stichting Volkslectuur, 1980). This is much closer to the meaning of Dutch malengeren. /énki/ shows the preservation of the nasal cluster /nk/ which is abnormal in English-derived words. It should have been /ŋ/. This last would not in isolation be a hundred per cent guarantee of Dutch origin, since we now recognize that sound-laws are not always exceptionless and there are other clearly English cases e.g. monkey /monkimónki/. All the vocabulary susceptible to a given change does not undergo it simultaneously.

More frequently used items will tend to undergo a change first, less frequently used items will tend to undergo a change later, or even not at all. In other words a linguistic change will sometimes lose its force before it has applied to all the relevant forms. However, the preservation of the voiceless stop in the nasal cluster, together with the unusual (for English) development of the stressed vowel make it fairly certain that this item had a Dutch model.

The words in Sranan corresponding to Dutch models with /e:/ ([e:, ei]) as stressed vowel are mostly unproblematic. These have Sranan /-é(Ci)/ or /-éjCi/. Conceivably problematic are the following:

<u>Sranan</u>	<u>English</u>	<u>Dutch</u>	<u>Origin:</u>	<u>E</u>	<u>E/D</u>	<u>D</u>
te	tea	thee		x		
se	sea	zee		x	(o)	
séjbi	seven	zeven		x		o

The first two examples represent a significant problem as the digraph ea - pronounced in modern Standard English as [i:] - had two major reflexes around 1650. The standard pronunciation was [e:], while substandard London speech had [i:], which was later to become the normal pronunciation in most words. It was precisely in this period that the two pronunciations came to be in competition with each other, and we get reflexes of both in Sranan. To return to the examples at issue, it is obvious that the Sranan items could represent the standard seventeenth century pronunciation. This is found in such words as /ben/ (Saramaccan) and /dren/ corresponding to English beam and dream. However /se/ is ze (1855) and zee (1856). Focke (1855) does not say what the phonetic value of z is, but Wullschlägel (1856) says it is equivalent to a soft [s]. This last is also the most normal Dutch pronunciation of z, i.e. [z]. Present Sranan does not distinguish two alveolar fricatives, having only /s/. The problem is to what extent do Focke and Wullschlägel give the pure Sranan pronunciation, and to what extent are they influenced by a variety of Sranan - termed "Church Creole" by Voorhoeve (1971) - that used to be fashionable among certain strata of the population, a variety where Dutch-derived items had their pronunciation modified in the direction of Dutch. More significant it might seem is the fact that Saramaccan has the form /zɛ/ (Huttar, 1972), as Saramaccan distinguishes /s/ and /z/. However, the fact of this word having /z/ initially merely suggests that it is a recent loan in Saramaccan, as Dutch /z/ is usually represented by /s/ in this language. So this word must remain doubtful, with a slight preference for Dutch origin on account of the nineteenth century forms. /te/ remains a problem.

With regard to /séjbi/ we can introduce a new sort of reasoning. Clearly English words never have /-ɛjCi/, while clearly Dutch words frequently do - i.e. those with Dutch /e:/ and /ɛi/.

<u>Sranan</u>	<u>English</u>	<u>Dutch</u>	<u>Origin:</u>	<u>E</u>	<u>E/D</u>	<u>D</u>
fɛjri	file	vijl		x	o	
fɛjfi	five	vijf		x	o	
ɛjsi	hoist	hijzen		x	o	
alɛjsi	rice	rijst		x	o	
pɛjpi	pipe	pijp		x	o	

<u>Sranan</u>	<u>English</u>	<u>Dutch</u>	<u>Origin:</u>	<u>E</u>	<u>E/D</u>	<u>D</u>
aptéjti	appetite	appetijt			x	o
séjri	sail	zeil			x	o
éjgi	-	eigen				x
dréjgi	-	dreigen				x
dwéjri	-	dweilen				x
kréjti	-	krijt				x
béjri	-	bijl				x
péjri	-	pijl				x

In such a situation we propose allowing the clear cases to decide the issue. We would point out that the Sranan /b/ proves nothing. While English /v/ becomes Sranan /b/, Dutch /v/ has two intervocalic reflexes in Sranan - /b/ and /f/. We will illustrate the above point regarding /ɛj/ with some examples:

The clear cases corresponding to modern English /ai/ and /ei/ - seventeenth century /əi/ and /e:/ - all show /e/ in Sranan and not /ej/ non-finally. Sranan items with /-éjCi/ of which the above table contains a representative sample are all either definitely of Dutch origin or doubtful.

The opposite case is demonstrated in the following table:

<u>Sranan</u>	<u>English</u>	<u>Dutch</u>	<u>Origin:</u>	<u>E</u>	<u>E/D</u>	<u>D</u>
béti	bite	bijten		o	x	
lépi	ripe	rijp		o	x	
wéfi	wife	wijf		o	x	
féti	fight	-		x		
léti	light	-		x		
néfi	knife	-		x		
kwéti	quite	-		x		

Here we can follow the same strategy of allowing the clear cases to decide the origin of the problematic forms. Observe that there are no clearly Dutch items with /ɛi/ which give Sranan forms in /-éCi/. On the other hand there are plenty of English items which possessed the 17th century diphthong /əi/ (according to Dobson, 1957). On the basis of this we therefore assign all the problematic forms in this table to an English source.

A more difficult problem arises in the case of Dutch words with /i/ with English cognates in /ai/ (henceforth we shall not specify that the pronunciation implied by this diphthong corresponds to the seventeenth century standard /əi/). The following are examples:

<u>Sranan</u>	<u>English</u>	<u>Dutch</u>	<u>Origin:</u>	<u>E</u>	<u>E/D</u>	<u>D</u>
wéti	white	wit			x	
snépi	snipe	snip			x	
bréni	blind	blind		o	x	
féni	find	vinden		o	x	
weni (1856)	wind	winden		o	x	

In terms of their vowel patterns there is nothing to be said that could in any way resolve the problem. However, as we shall see later the development of the nasal cluster in the last three items suggests that these are in fact derived from English.

Problematic are a few words in /-ej/.

<u>Sranan</u>	<u>English</u>	<u>Dutch</u>	<u>Origin:</u>	<u>E</u>	<u>E/D</u>	<u>D</u>
krej	cry	schreien			x	
drej	dry	-		x		
frej	fly	-		x		
ej	high	-		x		
klei-(1855)		clay	klei		x	
dej	day	-		x		
prej	play	-		x		
uréj	hooray	-		x		
brej	-	breien				x
kej	-	kei				x
sej	-	zij (silk)				x
sej	(side)	zij			x	

Here there is no way of resolving the doubtful cases. /-ej/ is a possible reflex of seventeenth century English /əi/ and /ai/, and of Dutch /ɛi/. The case of /sej/ side is peculiar. There would be no doubt of the Dutch affinity of this word were it not for the existence of d-less forms in other Atlantic English-based Creoles. Compare Cameroonian /say/ "side". Dutch influence in these cases would seem unlikely to say the least. This is a puzzling problem.

A number of words with /e/ in both English and Dutch are problematic. Some of them can be assigned to one or other language on account of consonantal developments.

<u>Sranan</u>	<u>English</u>	<u>Dutch</u>	<u>Origin:</u>	<u>E</u>	<u>E/D</u>	<u>D</u>
néti (1855)	net	net			x	
néki	neck	nek			x	
lespéki	respect	respect			x	
bédi	bed	bed		o	x	
bési	best	best			x	
nési	nest	nest			x	
ténti	tent	tent			x	
séni	send	zenden		o	x	
wésti	west	west			x	o

/bédi/ can be safely assigned to English, since it does not display the effects of Dutch final devoicing which is fairly consistently reflected in words of Dutch origin. These are always borrowed in their bare stem form, so that the consonant in Sranan corresponding to the stem-final consonant in Dutch appears in a voiceless form. There are two systematic exceptions to this. The first concerns the fricatives /v/ and /ɣ/. These are often reflected in Sranan, as /b/ and /g/. The other concerns nasal clusters. These can be assumed to have been originally voiceless-ending, e.g. /nt/. This then changes in some cases to /nd/.

/séni/ can be assumed to be English, as there is no clear evidence for post-stress /nt/ changing to /n/ in Sranan in Dutch words. On the other hand /wésti/ can be assumed to be Dutch, as this cluster seems always to reduce to /s/ in post-stress position in words of English origin.

Another problematic group of words is formed by words in /a/. There is little difference between the treatment of Dutch and English words of this group in Sranan, and what apparent differences there are are of no help in deciding the origin of the doubtful items. These include the following:

<u>Sranan</u>	<u>English</u>	<u>Dutch</u>	<u>Origin:</u>	<u>E</u>	<u>E/D</u>	<u>D</u>
práŋa	plank	plank			x	
krási	scratch	krassen		o	x	
grási	grass	gras			x	
grási	glass	glas			x	
fási	fasten	vast			x	
mási	mast	mast			x	
práni	plant	plant		o	x	
trápu	trap	trap			x	
grábu	grab	grabbelen		o	x	
krábu	crab	krab		o	x	
krábu	crab	krabb(el)en			x	o
kámpu	camp	kamp			x	
krámpu	cramp	kramp			x	
krámpu	clamp	klamp			x	
lámpu	lamp	lamp			x	

In some of these cases we can make an assignment to the one language or the other on the basis of semantic differences. By the semantic criterion /krási/ and /grábu/ are to be assigned to English models. /krábu/ would seem to be more probably of Dutch origin, but in that case could not for phonological reasons be derived from krabben as we would expect /*krápu/ from this. Krabbelen with dissimilation of the second liquid would however provide a possible model. The question is whether this would provide a close enough semantic match.

Phonological reasons would favour the assignment of /práni/ too to English. As we have already stated, there is no evidence for the development of /nt/ to /n/ in immediate poststress position in clear Dutch items. The other items remain unclear.

With English and Dutch words having as stressed vowel /o:/ there is a greater difference. English-derived items generally have the epithetic vowel /-o/ while Dutch-derived items have either /-óCo/, /-óCu/ or /-ówCu/. There is thus a potential problem with Dutch items of the first category which could be identical with the corresponding English item.

<u>Sranan</u>	<u>English</u>	<u>Dutch</u>	<u>Origin:</u>	<u>E</u>	<u>E/D</u>	<u>D</u>
bóro	bore	boren			x	
bóto	boat	boot			x	
ópo	open	open			x	
so	so	zo			x	

There are a number of potentially ambiguous words with a short /o/ in the one language and long /o:/ in the other. Cases with /o:/ in the Dutch item and /ɔ/ in the corresponding English-item are not in fact doubtful, being disambiguated by the fact that such English items have /a/ in Sranan, e.g.

<u>Sranan</u>	<u>English</u>	<u>Dutch</u>	<u>Origin:</u>	<u>E</u>	<u>E/D</u>	<u>D</u>
sórtu	sort	soort		x		o
prasóro	parasol	parasol		x		o
fórkú	fork	vork		x		o

In fact Dutch origin is suggested for /sórtu/ and /fórkú/ by the epithetic vowel /-u/ and also for /sórtu/ by reason of the preservation of the liquid before /t/. Cases where we have /o:/ in English and /ɔ/ in Dutch are more difficult. We have the following:

<u>Sranan</u>	<u>English</u>	<u>Dutch</u>	<u>Origin:</u>	<u>E</u>	<u>E/D</u>	<u>D</u>
tróto	throat	strot			x	
fóto	fort	fort		o	x	

On the first item there is little we can say. It could be from either language. The loss of the initial /s/ would be an indication of an older transference from Dutch, as would the /-óCo/ pattern. This of course says nothing about the origin of this word. /fóto/, however, is presumably English, because of the loss of /r/ before the dental stop.

In the case of English words with /ʌ/ as the stressed vowel, these often correspond to Dutch words with /o/ or /o:/. This gives rise to a number of problematic cases. /ʌ/ appears in Sranan also as /u/ - or rather its antecedent in English, /u/, does - but only the cases where we get /o/ are of relevance here. The epithetic vowel varies, being normally /-i/ after alveolars/dentals and in other environments: /-o/. /u/ does occur in clear English words too, i.e. in /kófu/ where it is perhaps a relic form representing a former stage when Sranan had the same epithetic vowel as in the other creoles (cf. Smith, 1977a). However, Sranan forms like /sjóbu/ shove and similar forms in other Surinam creoles raise the question whether the occurrence of forms with epithetic /-u/ were not more widespread in earlier Sranan, possibly

after sounds corresponding to fricatives in the model.

<u>Sranan</u>	<u>English</u>	<u>Dutch</u>	<u>Origin:</u>	<u>E</u>	<u>E/D</u>	<u>D</u>
póndo	punt	pont		x		
póntu	punt	pont		x		o
skróbu	scrub	schrobben		x		o
spónsu	sponge	spons		x		o
jónu	young	jong		x		o
afróntu	affront	affront		x		o
pómpu	pump	pomp		x		o
nóto	nut	noot		x		o
ónfu	oven	oven		x		o
bokobóko	buck	bok		x		
tónu	tongue	tong		x		
tómpu	stump	stomp		x		

According to what we assume is the regular epithetic vowel in cases of /ʌ/ followed by alveolars/dentals we could assign all the words whose last consonant is /t/ or /s/ to Dutch. If we leave aside the question of words like /sjóbu/ until later, we can provisionally assign these words to Dutch. It is certainly true that there are many more clear Dutch cases in /-óCu/ so that it is at least more likely that these words are Dutch. The cases in /-óCo/ must remain doubtful. /ónfu/ can also be assigned to Dutch because of the development of /v/ to /f/.

English /ʌ/ sometimes corresponds to Dutch /y/. As both vowels are partially represented by /o/ in Sranan ambiguity as to the source is a possibility. There are not many examples:

<u>Sranan</u>	<u>English</u>	<u>Dutch</u>	<u>Origin:</u>	<u>E</u>	<u>E/D</u>	<u>D</u>
króru	curl	krul		x		o
pónsu (Para)	punch	punch		x		o

Semantically /króru/ is closer to the Dutch range of meanings. The meaning of this word is "curl (v/n), shavings". The latter meaning is one of those assigned to Dutch krul. /pónsu/ more probably entered Sranan through Dutch - the Dutch word is of course a loan from English itself - as the epithetic vowel is not the /-i/ that would be expected in that case (see above). We therefore assign these items to a Dutch source.

A number of items that clearly correspond to English /ʌ/ have /u/ in Sranan. One case could also be due to Dutch /y/. This is /músu/ which could also conceivably represent either English mutch (itself a Dutch loan) or Dutch mutts. However there are no clear cases of Sranan /u/ derived from Dutch /y/, so that we will assign this word to an English etymon. Other such words correspond to Dutch words with /u/.

<u>Sranan</u>	<u>English</u>	<u>Dutch</u>	<u>Origin:</u>	<u>E</u>	<u>E/D</u>	<u>D</u>
brúdu	blood	bloed		o	x	
frúdu	flood	vloed		o	x	

The voiced /d/ in these examples tells us that this is an example of English /ʌ/ corresponding to /u/ in Sranan. The vowels themselves are not a disambiguating factor, in other words. The normal development of Dutch bloed can be seen in the compounds /brutbére/ "black pudding" (Dutch bloedbeuling) - in 1855 /brutu-bére/ - and /brutkrára/ "red coral" (Dutch bloedkoraal), with devoicing of the last consonant.

There are a number of corresponding words in the two languages with /u(:)/. Once again the vowel structure of these words tells us precisely nothing about their source, insofar at least as it comprises the accented vowel plus the epithetic vowel.

<u>Sranan</u>	<u>English</u>	<u>Dutch</u>	<u>Origin:</u>	<u>E</u>	<u>E/D</u>	<u>D</u>
gúdu	goods	goed(eren)/gegoede			x	
du	do	doen			x	
njun	new	nieuw			x	
njúnsu	news	nieuws			x	
fútu	foot	voet			x	
búku	book	boek			x	
úku	hook	hoek			x	
súpu	soup	soep			x	
pus-púsi	puss(y)	poes(je)			x	
babún	baboon	baboen			x	

The first item /gúdu/ is a difficult case. The meaning is "dear, rich; treasure". The last meaning is presumably to be associated with the sense "possessions" of either Dutch goed or English goods. The trouble is that neither is a phonological match for

this form. Goed should give /*gútu/ which is found in Berbice Dutch with the meaning "thing" and goods probably /*gúsu/. The singular English form which would produce the correct phonological result was superseded by the plural form in the thirteenth century, and so is irrelevant for the discussion. Dutch Gegoede "rich" would probably have resulted in a form like /*kugúdu/ in Sranan. The best explanation we can give at the moment is that this form is a cross between the Dutch adjective, and either the Dutch or English noun.

As far as /du/ is concerned the same comments as were made about /si/ are applicable to this form.

/úku/ matches the semantic value of Dutch hoek better than that of English hook, including as it does the sense "angle". However, it should be remarked at this point that it is always possible that the sense "angle" was a later addition, influenced by the wider range of Dutch hoek. We can however say that the balance of probabilities suggests Dutch origin here.

Finally in our examination of final stress words, we must mention a few odd forms of interest.

<u>Sranan</u>	<u>English</u>	<u>Dutch</u>	<u>Origin:</u>	<u>E</u>	<u>E/D</u>	<u>D</u>
gróto	groats	gort/grutten			x	o
dóro	door	deur			x	
sóro	sore	zweer		o	x	

It seems more likely that the first form is to be ascribed to a form based on Dutch gort, since there is no reason to suggest that Sranan could not take over plural forms, cf. /ánsi/ "ants", /krósi/ "clothes", etc. /dóro/ is an example of a case where there is a substantial phonetic distance between Dutch and English forms, but where the normal reflex of these forms would be identical in Sranan. In this case no decision can be made as to the source. In the case of /sóro/ however, while /*we/ can develop to /o/ in the Surinam creoles - cf. Saramaccan /sói/ < /swéri/ swear - we would expect in that case an epithetic vowel consonant with a front stem vowel, i.e. /i/ or /e/. For this reason we can assign this word to an English model.

The words derived from English and Dutch forms in /-ər/ə/ deserve special attention as they have their own special problems. Items in /-iCLV/ however require no further attention here as they are all unambiguously derivable from Dutch or English models. Items with /-é-/ do pose certain problems. A number of forms follow:

	<u>Sranan</u>	<u>English</u>	<u>Dutch</u>	<u>E</u>	<u>E/D</u>	<u>D</u>
	bétre	better	beter		x	
	kétre	kettle	ketel		x	
	letre (1856)		letter		x	o
	pépre	pepper	peper		x	
	néŋre	nigger	neger		x	
	némre	never	nimmer		x	o
	maléŋre	malinge	malenger		x	o
	ésrede	yesterday	-	x		
	tigédre	together	-	x		
	mémre	remember	-	x		
	nébre	never	-	x		
	netredúku	-	neteldoek			o
	sédre	-	ceder			x
	léfre	-	lever			x
	fétre	-	veter			x
	ém(b)re	-	emmer			x
	mésre	-	metsele			x
	désre	-	dissel			x
	témre	-	timmeren			x
	néba	never	-	x		
	féda	feather	-	x		
	feba(Boni)	fever	-	x		
	dréba	driver	-	x		
	aligéta	alligator	-	x		

In this table we have not given the corresponding forms in Dutch or English if they would normally have led to a different reflex in Sranan.

We can start out by saying that the second group of forms, those with /-a/ are clearly English. Apart from the fact, not strictly represented in the table, that only one form - /féda/ - could conceivably have a Dutch basis - veder, all forms in /-a/ that are of this type, involving loss of the liquid, have a possible English etymon - which cannot be said for Dutch. Comparing the two English-derived groups, we find one group of items in /-a/, and another in /-re/. The first group can

be assigned to an r-less English model, and the second group to an r-ful one.

The first four E/D items cannot be assigned on phonetic grounds to the one language or the other. /létre/ has the restricted semantic effect of Dutch letter, i.e. "letter of the alphabet", so that this item is probably to be assigned a Dutch base. /négre/ cannot directly represent English nigger, but could theoretically indicate a form with the same vowel quality as that underlying Jamaican /niega/, i.e. /e:/. It might be remarked that if there was one word that was bound to occur in a plantation economy from the very beginning this would seem to be it, but again this is mere supposition and not a linguistically based conclusion. We have already assigned /malenre/ to a Dutch origin. The expected development of English words with /í/ would seem to be that evidenced by /ííŋ a/ which must represent English finger, as Dutch vinger would result in /féŋre/. That this would be so is demonstrated by the form /feŋrútu/ Dutch vingerhoed "thimble". /némre/ is probably also to be explained from a Dutch original. While nasalization of stops can take place to the left of the nasal consonant (cf. Smith, 1980), the same process does not seem to take place to the right. Nasalization to the right generally takes the form of nasalization of the following vowel and/or the insertion of a homorganic nasal consonant before an oral stop.

All items with the phonetic structures /-éCLi/, /-éjCLE/, and /-éjCLi/ are clearly of Dutch origin. The same appears to apply for items in /-áCLi/ and /-áCLu/. Items in /-á-a/ are not unambiguously assignable, however.

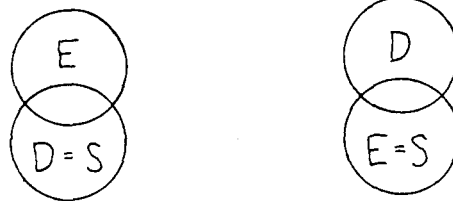
Sranan	English	Dutch	E	E/D	D
táfra	-	tafel			x
ágra	-	hagel			x
náŋ ra	-	nagel			x
kámra	-	kamer			x
spándra	-	spaander			x
makáandra	-	mekander			x
amáandra (1855)	-	amandel			x
wátra	water	water		x	
ápra	apple	appel		x	
ám(b)ra	hammer	hamer		x	
ánkra	anchor	anker		x	
básra	bastard	basterd		x	
káandra	candle	-		x	

<u>Sranan</u>	<u>English</u>	<u>Dutch</u>	<u>E</u>	<u>E/D</u>	<u>D</u>
aŋísa	"hankercher" - (handkerchief)	-	x		
másra	master	-	x		
bátra	bottle	-	x		
ábra	over	-	x		
dátra	doctor	-	x		
sápa	supper	-	x		
kápa	copper	-	x		
báda	bother	-	x		
máta	mortar	-	x		
jána	yonder	-	x		
bráda	brother	-	x		
dála	dollar	-	x		

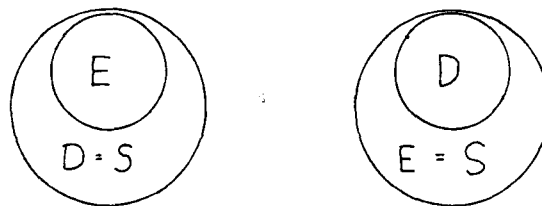
All clearly Dutch items, whether involving /l/ or /r/ display /-áCra/ in Sranan. The only English items displaying this structure consistently are those in /l/. English items in /r/ display once again a variation between form apparently based on r-ful and r-less English models. There is a group of six cases derived from English words in /-pCər/ which show a development to /-áCa/ in Sranan - i.e. with a loss of the liquid. However, we cannot simply say that these forms display loss of /r/ regularly as we have /dátra/ with preservation of the /r/. The /r/-loss in /aŋísa/ is to be explained by reason of the alveolar, before which this is normal.

Let us sum up what we have learned from the preceding. The most satisfactory criteria for distinguishing Dutch and English items appear to be phonological ones. These phonological criteria fall into three types, concerned respectively with the correspondence between the European model and the resulting creole form, and the phonological changes that have taken place within the creole languages themselves. The first of these can be further subdivided into the two questions of the "phoneme" for "phoneme" equivalence between the model and the Surinam form, and other adaptations, such as the addition of epithetic vowels etc. that result in a more "African" phonological structure. The establishment of these criteria depends essentially on the discovery of groups of items classifiable as Dutch and ambiguous, or as English and ambiguous. In such cases it seems reasonable to assign the category of ambiguous items to Dutch, or English respectively.

The question of semantic criteria is more tricky. In the case of overlapping meanings in resemblant Dutch and English items, it would seem fairly safe to assign a Sranan item which corresponded in meaning to one or another of the two to the relevant language.

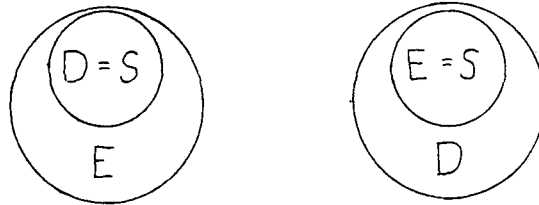


However, where the set of meanings of an item in the one European language is a subset of the set of meanings in the other European language we are confronted with a greater problem. Say Sranan possesses the larger set of meanings. Does this necessarily mean that the relevant item comes from the language displaying this



larger set? The answer to this question must be in the negative. It is equally possible, all other things being equal, that the item concerned was first adopted from the language with the smaller set of meanings, and that later, when the creole was exposed to the language where the larger set of meanings existed, the semantic range of the item concerned was added to bring it into equivalence with the latter language. What we know about the history of Sranan from external sources does mean, however, that this would only be possible if the semantically more restricted item existed in English, and the corresponding less restricted item in Dutch. The political history of Sranan caused the slaves in Surinam to be first

exposed to English for a short period, and then to Dutch for a long period. This implies that in a case where the wider meaning belongs to the English item, and the narrower meaning to the Dutch one, English origin is the only option open. However, when things are the other way round a Dutch origin is by no means the only one possible, although it could be said to be more probable, and we have adopted this position, cf. the case of /króru/ above.



When the semantic relationships of similar items in the two European languages are the same as in the previous paragraph, but the Sranan item has the same set of meanings as the more restricted European item, we are on even shakier ground. If an English item has two meanings or submeanings, one of which is expressed by a resemblant item in Dutch, while the other is expressed by a completely different form, what can we conclude if Sranan displays apparently the same distribution of forms (taking the necessary phonological adaptations into account) and meanings as Dutch. It would seem that we cannot come to any definite conclusion about the provenance of the resemblant item. There are even two possible scenarios in which English origin would be possible. The item might have come from English with only the restricted meaning in the first place, or it might have entered Sranan with the wider meaning, only to have a portion of its ground occupied by a Dutch item entering later.

If it is the Dutch item that has two meanings, while English has in one meaning a resemblant item, and in the other a completely different item, while Sranan displays two items for the same meanings, then we are in the same position. There is no inherently greater probability that the resemblant item from English is responsible for the Sranan form, than that it is the resemblant item from Dutch that is responsible.

All in all it seems safe to conclude that semantic factors should always play a subsidiary role to phonological factors in disambiguating doubtful cases. The disambiguating value of semantic criteria will be greatest when meanings or submeanings are not overlapping but disjoint.

It should be borne in mind in connection with the question of the disambiguation of the origin of a particular form, that there are forms where contamination has taken place between resemblant forms with the same meaning. A good example is quoted in Smith (1982) from Saramaccan where the form /paandí/ "to plant" appears to be a cross between /*palánti/ from English plant and /*palantá/ from Portuguese plantar. /paandí/ has the segmental development expected from the English-derived form, while the tonal pattern is that of the Portuguese-derived form. Various linguists have suggested that in cases where forms could equally well be derived from two languages the presence of resemblant forms in the sources could contribute to the adoption of a particular form by a creole language. However, it seems necessary that in such a case - which would be impossible to substantiate by other than statistical techniques - the two source languages be acting as sources simultaneously. In the case of the Dutch and English contribution to the Surinam creoles this kind of effect - which could be described as a kind of cross - would seem likely to be absent, or at least not a factor of any significance.

The Sources

In this section we will discuss the sources that we have utilized, as well as associated questions of notation and interpretation. We will not in general give full bibliographical references for the various forms we cite, but restrict ourselves to giving the date of the source. The actual source can then be found by looking up the list of dates in the following subsections concerned with the individual languages.

1) Sranan

The sources we utilize for modern Sranan are the following:

Stichting Volkslectuur (1980)
 Wooding (1972)
 Huttar (1972)
 Donicie and Voorhoeve (1963)

The nineteenth century sources we utilize are:

Wullschlaegel (1856)
 Focke (1855)
 Meyer (1850)
 van der Vegt (1844)
 Surinam Almanak (1837)
 Teenstra (1835)

and for the eighteenth century:

Weygandt (1798)
 Schumann (1783)
 van Dyk (1780)
 Stedman (1777) (published 1796)
 Fermin (1769)
 Fermin (1765F)
 Nepveu (1765N)
 Herlein (1718)

Forms from modern Sranan are given basically according to the provisional official spelling (Stichting Volkslectuur, 1980) with the following exceptions:

- i) /u/ is used instead of oe
- ii) nonpredictable long vowels are written double (cf. Seuren, 1982)
- iii) allophonic palatals before front vowels are frequently written as such instead of as corresponding velars
- iv) the velar nasal is noted as /ŋ/ and not as ng
- v) accents are indicated

Most older sources apart from Schumann (1783), who employs a German-based orthography, use an orthography based on Dutch. This has consequences in

particular for their recording of the vowels of Sranan. The Dutch **vowel** graphemes that appear most frequently are the following:

<u>ie</u>	= /i/	<u>oe</u>	= /u/
<u>ee</u>	= /e/, /ej/	<u>oo</u>	= /o/, /ow/
	<u>aa</u> = /a/		
<u>ey</u>	= /ej/	<u>ou, ouw, au</u>	= /ow/
		<u>ui</u>	= /oj/, /uj/

In Focke (1855), in addition, the grapheme i is used to denote the phoneme /e/ in closed syllables. This has in fact a phonetic value that often approximates [ɪ].

The differences in the distribution of o and u as between Schumann (1783) and modern Sranan are interpreted by some (e.g. Kramp, 1983) as representing phonological differences between eighteenth and twentieth century Sranan. In a number of these cases - those of the type fumm:/fon/; muffe:/mófo/ - this may be doubted. What we may well be seeing here is the recording of a high back mid rounded allophone of the Sranan phoneme /o/, which roughly corresponds phonetically to the realization of the lax high back rounded vowel in German - [ɔ].

The vowel noted as u would seem to represent /i/ in a labial environment. This presumably allophonic feature - cf. piri "peel" versus fúti "fit" - is not represented consistently. Only in the example dūri "dear" (Dutch: duur) is it possible that this grapheme has any phonological significance. Here it presumably represents an incompletely assimilated loan from Dutch.

As we have already mentioned, Schumann (1783) makes use of a basically German orthography. In remarking on this we refer firstly to the discussion in Kramp (1983). Of the accent marks the acute and grave are in complementary distribution, the grave being used to mark final syllable accent. The circumflex accent is interpreted by Kramp as marking a long stressed syllable. Significant length is also explicitly indicated with a final -h (cf. Kramp (1983, p. 79). Kramp interprets the use of single versus double intervocalic consonants as possibly signifying the length

versus non-length of the preceding vowel, but also admits the possibility that the function of this is to avoid homonyms.

For the distinction between sh and sj see the section on /s/ in Part Two.

As in German y and f are both used for /f/. We can see this by reason of the fact that most of the items written with y are in fact derived from English words in /f/.

<u>English</u>	<u>Sranan</u>
afraid	fredde
first	fossi
far away	varreweh
fowl	vool

The question whether Sranan distinguished /v/ and /f/ in the eighteenth century cannot be answered on the basis of English items with /v/ as these all give /b/ in the Surinam creoles (see the section on /v/ in Part Two). The Dutch contrast between /v/ and /f/ (rather a distinction in tenseness than in voicing at present) is masked by the fact that the contrast is neutralized to /f/ in Sranan (insofar as it is realized by fricatives). Dutch-derived items are then indifferently recorded with /v/ and /f/, where these both presumably indicate voicelessness. A selection of /v/-initial items in Dutch follows:

<u>Dutch</u>	<u>Sranan 1783</u>
verven	fervi
vijt	feifi
vouwen	fou
vlek	vjakka
van doen	vandu

The only words that are known to have had /v/ in the Surinam creoles are items of Portuguese, Gbe, or Kikongo origin. The only such item that appears in Schumann (1783) is the following:

<u>Portuguese</u>	<u>Sranan 1783</u>	<u>Modern</u>	<u>(Saramaccan)</u>	<u>(1778)</u>	<u>Gloss</u>
avô/avó	awò	afó	avó	awwò	grandfather/ grandmother

This item tells us the following:

- Sranan had a distinction between /v/ and /f/ in 1783
- /v/ was represented orthographically as w (as in German)
- w represented the phonemes /v/, and /w/ (in most cases).

The parallel question with respect to alveolar fricatives is much more difficult to answer. There appears to be no consistent relationship between Schumann's usage of single s or double ss and the presumed phonological values of /z/ and /s/. It is inconceivable that items such as:

<u>Sranan 1783</u>	<u>Modern</u>	<u>English</u>
fasi	fási	fashion
fesi	fési	face
hasi	hási	horse
lasi	lási	loss

could ever have had phonological /z/. We cannot draw any conclusions regarding the phonological status of items with a single intervocalic s, or any single s for that matter.

An appeal to items of Portuguese, Gbe or Kikongo origin that have /z/ in the other Surinam creoles does not resolve this question either. There are three such forms in Schumann (1783):

<u>Kikongo</u>	<u>Gbe (Fon)</u>	<u>Sranan 1783</u>	<u>Modern (Saramaccan)</u>	<u>(1778)</u>	<u>Gloss (African)</u>	
nzawu	-	asaù/isaù	asáw	zaun	sau	elephant
-	àzě	asêh	-	azé	asêh	black magic
-	logbòzò	lobosso	lobosó	-	-	rheumatism

We cannot apply the same reasoning as with Schumann (1778) for his Saramaccan word-list where the beginning and end parts are clearly /z/ and therefore the mid-point must be /z/ too, since in Sranan the end point is clearly /s/. In particular the double ss in the third case in particular would seem to indicate that this item

had /s/ in the eighteenth century too. This does not necessarily have implications for the first two items, however, in view of the following:

Kikongo	Gbe(Fon)	Sranan 1783	1855	1856	Modern	Gloss (African)
nzawu	-	asaù/isaù	azáu	azàu	asáw	elephant
-	àzě	asêh	azé	azèe	-	black magic
-	zegé	-	azegè	azegé	(a)segé	beetle species
-	logbózá	lobosso	lobosò	lobosó	lobosó	rheumatism

The nineteenth century distinction between /z/ in the first three items and s in the last is parallel to the Saramaccan - respectively /zaun/, /azé/ and /zegé/ - as against the reflex of Fon /logózá/ "tortoise" in that language -/logoso/ (1778: loggosso), so that we may infer that s in Schumann (1783) sometimes meant /z/ and sometimes /s/.

We can therefore conclude that the form of Sranan recorded by Schumann preserved a voicing contrast in both labial and alveolar fricatives, and represented this in terms of the following orthographic conventions:

/v/	=	<u>w</u>	(/w/ =	<u>w</u>)
/f/	=	<u>v, f, ff</u>		
/z/	=	<u>s</u>		
/s/	=	<u>s, ss</u>		

A final remark on the notation utilized by Schumann concerns his use of e to record "unaccented" vowels which appear in other sources with the vowels /u, o, i/. Most frequently this concerns final vowels, whether epithetic vowels in words of English and Dutch origin, or etymological vowels in words of disparate origin. This occurs most frequently in cases where modern Sranan has /u/ and to a lesser extent with /i/ and /o/. One might assume that this was indicative of a development from a state where unaccented vowels were neutralized to a situation where these vowels bear a relation to or are forecastable in terms of the vowel of the accented syllable, or the consonantal environment.

This, however, cannot be the case. Firstly, at least the Bush languages, Ndjuka,

Saramaccan, Boni, and Kwinti must be assumed to represent developments of plantation Sranan as it was spoken in the eighteenth century, in particular in the first half of that century. In the cases where Schumann gives e final spellings, these languages consistently display the same final vowel as modern Sranan, or something similar.

English	Sranan 1783	Modern Sranan	Ndjuka	Boni	Kwinti
blind	blinde	bréni	beéndi	béeni	bléndi
mouth	muffe	mófo	mófo	mófu	mófo
enough	nuffe	nófo	nófu		
coid	koure	kówru	kóo	kóo	-kolo

Our argument would be that these Bush Negro languages bear witness to a stage of Sranan prior to that recorded by Schumann.

Secondly, other eighteenth century recordings of Sranan do indicate the existence of a situation reminiscent of that obtaining at present.

English	1765	1777	1780	1783	1798	Modern
blind				(blinde)	bleeni	bréni
mouth		-muffo	(moffe)	(moffe)	mofo	mófo
enough			(noefe)	(nuffe)	nofo	nófo
cold				(koure)	kouloe	kówru
old	(oule)		(ouwere)	(oure)	ouwloe	ówru
					ouwroe	

Thirdly Schumann **does** not give e-forms for items which have them in other eighteenth century sources.

English	Sranan 1718	1765	1780	1783	1798	Modern
open			ope	(hoppo)	(opo)	(ópo)
up	ope	(oppo(N))		(toppo)	(oopo)	(ópo)
tongue			tonge	(tongo)	(tongo)	(tóŋ o)
broken			brokke	(brokko)	(broko)	(bróko)
walk	wakke	(wakka)	wakke	(wakka)	(waka)	(wáka)
top	toppe	(tapoe)	tappe	(tappo)	(tapoe)	(tápu)

We would conclude that the e-forms represent an older orthographic tradition

(indicating a vowel whose nature after all was largely forecastable) which was largely abandoned by Schumann. This would agree with the remarks made in Kramp (1984) regarding the differences between the first version of Schumann's dictionary (1780/1) and the third version (1783) which Kramp edits. Compare hundre (1780/81) with hondro (1783) (reversed by Kramp).

For the interpretation of the mid-nineteenth century sources, some remarks in Wullschlägel (1856) are of use, in particular regarding the fricatives. According to this source v is pronounced as f, but a difference is indicated between z and s, in that z is to be pronounced as a "soft" s. If this is correct then Wullschlägel's dictionary must be regarded as representative to a certain degree of the so-called Church Creole (see Voorhoeve, 1971) - a style whereby Dutch-derived words were given pronunciations more reminiscent of their Dutch pronunciation than was the case in normal Sranan - in view of the following:

	<u>Dutch</u>	<u>1856</u>	<u>1783</u>
i)	zakken	saka	sakka
	zijde	sei	sei
	zonder	sondro	sondro
	zoeken	soekoe	sukku
ii)	zak	zaka	sakka
	zeil	zeili	seil
	zout	zoutoe	soutu
	zwak	zwaka	swakka

Of course Schumann's orthography does not reveal the value of s in his renditions of Dutch-derived items.

Confirmation that Wullschlägel tends to give Church Creole type pronunciations can be seen by his Sranan equivalents of the Dutch word guilder "guilder" : golde, goldoe. We can compare this with Church Creole /xölä/ and normal Sranan /kólu/ (Eersel, 1971). Wullschlägel's entries are in certain aspects intermediate between the two styles Eersel gives:

kólu - goldoe - golde - xölä

We have not attached any significance to the occurrence of doubled vowel letters, or doubled consonant letters in these sources. Whether these had any function other than the orthographic distinction of homonyms is unclear. For this reason we omit the macra occurring in Meyer (1850).

There is much more that could be said about the orthographical practices, especially of the older sources, but as this book is not meant as a philological study we will not go any further into these questions here. In the various sections dealing with the consonants in particular we will have occasion to make further remarks on aspects of the interpretation of the orthography of the various sources.

2) Saramaccan

The sources we utilize for modern Saramaccan are:

Donicie and Voorhoeve (1963)
Huttar (1972)
de Groot (1977)
Taylor (1977)

Earlier sources consulted were:

Schumann (1778)
Herrnhut Archives (1790)
Wietz (1805)

Modern Saramaccan forms are quoted basically according to the orthography of Voorhoeve (1959).

The principal older source we utilize - Schumann (1778) employs the same German-based orthography as his Sranan dictionary. The same orthography is used in Wietz (1805). A Dutch-based orthography appears in letters in the Herrnhut archives, of which we quote forms from Herrnhut Archives (1790).

For a discussion of Schumann's orthographical practice see Donicie and Voorhoeve (1963). The tones of Saramaccan are not consistently indicated. An accent mark usually correctly locates the high tone, if a word possesses only a single high tone. However the assignment of an accent mark to single high tone items is rather patchy. The recording of /kp/ ([kp~kw]) and /gb/ ([gb~gw]) is inconsistent as Donicie and Voorhoeve remark. /kp/ is given as kw (corresponding to one of its allophones) k, or p; /gb/ as bu, b, gw or kw. The mid vowels are inconsistently represented, eh usually represents /ɛ/, as does ae. e may stand for either /ɛ/ or /e/ as well as sometimes for other vowels. /ɔ/ and /o/ are not distinguished.

The items in Donicie and Voorhoeve (1963) are from the villages of Lombe and Golio. When necessary these are distinguished as Lo and Li respectively. Forms from Huttar (1972) are referred to variously as Hut, Huttar and LS (Lower Suriname river). Forms unique to de Groot (1977) are indicated as De G.

In addition examples are given distinguished by a raised "s". These hail from undated files held at the University of Leyden, and deriving from the joint State University of Leyden-Summer Institute of Linguistics-Surinam Ministry of Education Surinam Creole Etymological Dictionary Project. These files were consulted with the permission of the late Professor Jan Voorhoeve of the University of Leyden. Ultimately this source has the same provenance as Huttar (1972).

3) Ndjuka

The sources consulted for Ndjuka were:

Huttar (1972; 1981; 1982; personal communication)
"s" (see above under Saramaccan)

4) Boni

The sources consulted were:

Hurault (1952) (published as Hurault, 1983)
Huttar (1981)
Hancock (1986b)

5) Saramaccan

The sources consulted were:

Huttar (1981; personal communication)
Hancock (1986b)

6) Kwinti

The sources consulted were:

Huttar (1982)
Hancock (1986b)

7) Matawai

The sources consulted were:

de Beet and Sterman (1981)
de Beet and de Beet-Sterman (1985)

8) Krio

The sources consulted were:

Berry (1961)
Hancock (1967; 1970)

9) Cameroonian Pidgin English

The sources consulted were:

Dwyer (1967)
Hancock (1969)
Todd (1984)

10) "Broken English" of Fernando Po

The only source for this known to me - Mariano de Zarco (1938) - uses a Spanish-

based orthography that (almost certainly) seriously underdifferentiates among the phonological units. /ʒ/, /tʒ/ and /dʒ/ are not usually clearly distinguished. It is also unclear whether there is a significant difference between /ɛ/ and /e/, and /ɔ/ and /o/.

11) Nigerian Pidgin English

The source consulted was:
Barbag-Stoll (1983)

12) Jamaican Maroon Spirit Possession Language

The source consulted was:
Bilby (1983)

13) Jamaican

The sources consulted were:
Bailey (1962)
Hancock (1969)

14) Guyanese

The source consulted was:
Hancock (1969)

15) Gullah

The sources consulted were:
Turner (1949)
Hancock (1969)

16) Afro-Seminole

The source consulted was:
Hancock (1982; 1986c)

17) Bahamian

The sources consulted were:
Holm (with Shilling) (1982)
Hancock (1982)

18) Providencia/San Andres

The sources consulted were:
Edwards (1974)
Hancock (1986b)

19) Miskito Coast Creole

The source consulted was:
Holm (1978)

20) Belizean

The source consulted was:
Hancock (1986b)

21) Caymanian

The source consulted was:
Hancock (1986b)

22) Barbadian

The sources consulted were:

Burrows (1983)
Hancock (1986b)

23) St. Kitts-Nevis

The sources consulted were:

Cooper (1979)
Hancock (1986b)

24) Antiguan

The source consulted was:

Farquar (1974)

II) Dutch-based creoles1) Virgin Islands Dutch (Neger-Hollands)

The sources consulted were:

van Diggelen (1978)
Robertson (1982)

2) Berbice Dutch

The source consulted was:

Robertson (1982)

3) Essequibo (Skepi) Dutch

The source consulted was:

Robertson (1982)

III Portuguese-based creoles

1) São Tomense

The sources consulted were:

Ferraz (1975a)
Ferraz and Valkhoff (1975)
Ivens Ferraz (1979)

2) Principense

The sources consulted were:

Günther (1973)
Ferraz (1976)
Ferraz and Valkhoff (1975)
Ferraz (1975b)

3) Annobonese

The sources consulted were:

Barrena (1957)
Ivens Ferraz (1984)

4) Angolar

The sources consulted were:

Ferraz (1975a)
Ivens Ferraz (1979)

5) Cape Verde Creole

The sources consulted were:

Lopes da Silva (1957)
Ferraz and Valkhoff (1975)
Meintel (1975)

The very narrow phonetic notation employed by Lopes da Silva has been simplified to bring it more into line with the phonological distinctions obtaining in Cape Verde Creole. The notations employed by Ferraz and Valkhoff, and Meintel, although not quite identical, have been retained.

6) Guiné Creole

The source consulted was:

Wilson (1962)

7) Senegal Creole

The source consulted was:

Chataigner (1963)

8) Papiamentu

The source consulted was:

Dijkhoff (with de Jesus) (1980)

The notation used to indicate lower mid vowels in this work has been modified to conform with the IPA. We use an acute to mark stress, and a grave to indicate high tone.

IV French-based creoles

1) Seychellois

The source consulted was:

Corne (1977)

2) St. Lucian

The source consulted was:

Carrington (1982)

V. African languages

1) Kikongo

The sources consulted were:

Daeleman (1971)

Swartenbroeckx (1973)

2) Gbe

The sources consulted were:

Westermann (1928)

Segurola (1963)

Rassinoux (1974)

Capo (to appear)

3) Twi

The sources consulted were:

Christaller (1933)

Berry (1960)

VI European languages

1) Early Modern English

The sources consulted were:

Matthews (1935)

Dobson (1957)

Barber (1976)

2) Middle English

The sources consulted were:

Wyld (1927)

Fisiak (1968)

3) Cockney

The sources consulted were:

Matthews (1938)

Sivertsen (1960)

Ward (1944)

4) Modern English

The sources consulted included:

Gimson (1970)

Weissmann (1970)

The Linguistic Survey of England (Orton and Dieth) (1962-1968)

Middle English vowels were indicated as /ī, ē, ā, ō, ū/ for the short vowels, and /ī, ē, ē̄, ā, ō, ō̄, ū/ for the long vowels. The short vowels had in all probability the same values as or very similar values to those of modern English. Of the long vowels /ē̄, ō̄/ = /e:/, /, /ē̄, ō̄/ = /ɛ:/, /, while the other three would be close to the IPA values of the symbols.

Modern English high vowels are not specified in terms of tenseness/laxness - only in terms of length, as /i/, /i:/ etc. Other vowels are so distinguished, however, because this is important in connection with phonological distinctions and/or historical development.

5) Portuguese

The sources consulted included:

The Appleton Dictionary (1964)

Major (1979)

Prieto (personal communication)

Portuguese items are discussed with reference to their citation forms.

CHAPTER TWO

The Phonological Evidence for Prior Pidginization/Creolization

Assuming for a minute the correctness of the hypothesis that the genesis of the Surinam creole languages took place in Surinam itself according to the Language Bioprogram, on the basis of a confrontation between some form of noncreolized English - and for Saramaccan in particular, a variety of Portuguese in addition - and numerous African languages, there are certain things we would not expect to encounter.

Firstly, in view of the fact that the English first arrived in 1651, and the Portuguese in 1665, we would not expect to discover different phonological accommodation strategies adopted by the slaves towards English and Portuguese respectively.

The fourteen years time difference would not seem likely to produce significant differences in the adaptations of English and Portuguese lexical items to the phonological patterns of the various African languages involved. Note that, despite the undoubted differences among the sound patterns of these African languages, there were certainly common features that they possessed which were absent from the two European languages - open syllable structure (to a greater or lesser degree), the significant use of lexical and morphological tone, vowel harmony. Thus we would certainly expect a degree of adaptation of European lexical items, but we would only expect differential treatment to the extent that, for instance, Portuguese tends to have, or did have in the seventeenth century - we have of course to abstract away from modern developments in all the languages concerned - more items with an open syllable structure. Thus when we find that Portuguese syllable structure is less altered than English syllable structure, it comes as no surprise to us. There are other such examples, for instance concerning nasalization.

However, what we would not expect is the differential treatment of sounds common to English and Portuguese. Despite this such cases, though not plentiful,

do exist. In fact there seem to be more than we would expect, taking the phonological systems of the major languages involved into account. One prime example of this would be the differential treatment of /v/, despite its presence in both European languages involved (before the arrival of the Dutch), English and Portuguese, and the two African languages that apparently had the greatest influence in Surinam, Gbe and Kikongo.

Another thing we would not expect to discover is parallel phonological developments between the English elements in the Surinam creoles and other English-based creole languages spoken in the Atlantic region, whether these represent accommodation strategies in those languages, or natural phonological changes.

Note that what we mean here is shared innovations, or at least deviations from Standard English, not shared retentions. While shared innovations are not an absolute indicator of a (partially) shared phonological history, they may be regarded as very suggestive evidence, the more so the larger the number of cases that can be adduced.

Once again, however, such cases seem to exist. They seem to occur most frequently in respect of Krio (and other forms of West African English). Insofar as it is possible to refer to the Maroon Spirit Possession Language of Jamaica as a language, the resemblances are perhaps even more striking, considering the relatively small amount of information available on this system.

Similarly, we would not expect to discover parallels in phonological development between the Portuguese elements in the Surinam creoles and the Portuguese creoles spoken in the Atlantic region. Such cases again, however, seem to be not at all unusual. They seem to occur most frequently in respect of the Gulf of Guinea creoles, São Tomense, Principense, Annobonese, and Angolar - of which we have most information on the first two.

When a case of differential treatment of English and Portuguese sounds can be linked to developments in one or other group of creole languages, it will be dealt with under the latter heading.

We will now proceed to deal with these three types which will be discussed in the order given above. For fuller information we refer the reader to the relevant sections in Part Two of this book, of which this chapter forms a partial summary. The individual cases will be dealt with in the order: consonants (apart from liquids), liquids, vowels. Within these types the order of treatment in Part Two will be followed.

Differential developments in the English and Portuguese elements in the Surinam creoles.

1) Of eight clear cases involving an English model /s(C)Vp/ no less than seven provide evidence of a development from /p/ to /b/ in at least one source. Compare the following examples:

<u>English</u>	<u>Sranan</u>
sleep	sríbi
scrape	krébi

Of the three Portuguese-derived items displaying this structure none exhibits a change from /p/ to /b/.

For what it is worth we feel that we should mention in this context that there are two forms exhibiting a parallel change from /k/ to /g/ following /s/.

<u>English</u>	<u>Ndjuka</u>
six	sigísi

<u>Portuguese</u>	<u>Saramaccan</u>
escuro	sugú ^s

However, it is not clear that these isolated cases have anything to do with those mentioned above. In addition the Portuguese-derived item differs from the other cases in that a high tone/accent does not intervene between the voiced consonant and the (site of the) /s/.

2) The complex situation as regards the reflexes of /v/ is as follows:

<u>English:</u>	/b/ everywhere, except in recent loans.
<u>Portuguese:</u>	/v/ or /b/ without regard to context
<u>Dutch:</u>	/f/ (< ? /v/)
	/b/ (early, preceding /i/)
<u>Kikongo:</u>	/v/ (> /f/ in Sranan)
<u>Gbe:</u>	/v/ (> /f/ in Sranan)
	/b/ (mostly preceding /i/)

Firstly, as regards the English and Portuguese developments the situation is as follows. With the exception of the item /revensi/, which is only evidenced from the middle of the nineteenth century, we find only /b/ in items of English origin. In items of Portuguese origin, however, we find fourteen cases of /b/ as against six cases of /v/. As we stated above, in the introduction to this chapter, if the principal African languages spoken in Surinam were Gbe and Kikongo, then there would be no reason for the replacement of /v/ by /b/ in English words, as both these languages have /v/ well-integrated in their phonological structure.

The simplest explanation available is then that /b/ already existed in the model for these words, external to Surinam, and for that matter Barbados. Krio, and West African Pidgin English in general, on the other hand also exhibit /b/ for /v/. Krio in particular is in contact with languages lacking /v/ in their consonant systems, which would explain why the creolization process that gave rise to Krio also involved the replacement of English /v/ by /b/.

As far as the Portuguese-derived items are concerned, the same reasoning is applicable. Inasmuch as the major languages spoken among the slaves contained /v/, there is no obvious reason why Portuguese /v/ should be replaced by /b/ in the majority of cases. Ferraz (1979) would explain a similar situation in São Tomé creole in terms of the confusion between /b/ and /v/ in Old Portuguese, whereby "/b/ occurred as a variant of /v/, a variation which is still found dialectically in the north of Portugal." It would go beyond the scope of this book to

go further into this question here, but we would note that Bini, Kikongo and Kimbundu, the African languages that would appear to have played the greatest role in the development of the Gulf of Guinea Portuguese-based creoles, all possess a /v/ in their phonological systems, although this appears to be subject to contextual restrictions in Kimbundu (T. Schadeberg, pers. comm.).

At anyrate variation between /v/ and /b/ as the reflex of Portuguese /v/ appears to be present in all Portuguese-based creole languages of the Atlantic region.

The only other remarks we will make on the subject of /v/ concern a parallel we observe between certain developments of Dutch-derived and Gbe-derived items. We will discuss this in a postscript to this chapter.

3) Intervocalic and final /tʃ/ develops differently in Portuguese-derived and English-derived items. In Portuguese items /tʃ/ develops to /tj/, and in English items to /s/:

	<u>Portuguese</u>	<u>Saramaccan</u>
	fechar	fitjá
	bicho	bitju
	<u>English</u>	<u>Saramaccan</u>
	witch	wísi
	catch	kísi
	"hankercher" (handkerchief)	(h)angísa

Initial /tʃ/ gives /tj/ in both languages.

Here we can say that there is no reason for /tʃ/ to go to /s/ in English-derived words as both Kikongo and most forms of Gbe have intervocalic /tʃ/. The only other English creole/pidgin of the Atlantic region to display a similar distribution of reflexes, with initial /tʃ/ and intervocalic/final /s/, is Cameroonian. However, Krio may have had a similar distribution at an earlier period. There seem to be some relic forms with /s/.

<u>English</u>	<u>Krio</u>	<u>Cameroonian</u>	<u>Sranan</u>
scratch	kratʃ	kras	krási
too much	túmɔs	tumɔs	túmsi

4) Medial /g/ in Portuguese-derived words becomes /k/ in more than half the cases in Saramaccan, while this rarely occurs with medial /g/ (usually final in the model) in English-derived words. This devoicing of /g/ only occurs very sporadically in the Atlantic Portuguese-based creoles. Only once does devoicing occur in a form displaying this in Saramaccan also.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Papiamentu</u>
barriga	baíka	barika	baríka

We ascribe this feature in Saramaccan to Kikongo influence. Kikongo has intervocalic /k/ and /ng/ but no /g/, and foreign loans in Kikongo with intervocalic /g/ have this devoiced. Note in this connection that most of the slaves imported to Brazil, where the Portuguese Jews who settled on the Suriname River partly hailed from, during the seventeenth century, were Bantu-speakers from the Congo and Angola, most significantly Kikongo and Kimbundu speakers.

5) Initial /r/ is now normally represented by /l/ in all Surinam creole languages. This was not the case however in the eighteenth or even the nineteenth century. There is however an interesting difference in reflex as between words of English and Portuguese origin.

<u>Reflex</u>	<u>Sranan 1783 E</u>	<u>Saramaccan 1778 E</u>	<u>Saramaccan 1778 P</u>
l	5	3	4
l/r	9	3	-
r	-	-	-

The figures here refer to the number of items displaying these reflexes

It is not quite clear, because of the small number of cases involved, to what extent this should be considered of importance. It is the case that /l/ is the normal reflex of /r/ in São Tomense, but not however in Principense where initial /r/ is normally retained.

Parallels between the English element and the Atlantic English-based creoles

1) Postvocalic /st/ and /ft/ reduce to /s/ and /f/ as in most of the English creoles:

<u>English</u>	<u>Sranan</u>	<u>Krio</u>	<u>Jamaican</u>
soft	sáfu	saf	saaf
must	músu	mɔs	mɔs
master	másra	mas(t)a	

2) Postvocalic /ld/ reduces to /l/ as in most of the English creoles:

<u>English</u>	<u>Sranan</u>	<u>18th Century</u>	<u>Krio</u>	<u>Jamaican</u>
old	ówru	oule (1765F)	ol	uol
hold	óri	holi (1783)	oi	(h)uol

3) The sequence /i:rd/ becomes /ía/ as in West African forms of English:

<u>English</u>	<u>Saramaccan</u>	<u>Krio</u>	<u>Cameroonian</u>	<u>Nigerian</u>	<u>Fernando Po</u>
beard	bía	biyabíya	biabia	biabia	bíabía

Although there is only one such example in the Surinam creoles, it represents the combination of the effects of three rules - (i) the loss of final /d/, (ii) the development of a transition schwa between a high vocalic element and /r/, and (iii) the loss of final /r/ - operating in a certain sequence (i.e. (i) before (iii); (ii) before (iii)). Of these rules at least the first two operated in English, prior to creolization.

4) There is evidence in the eighteenth century sources for the confusion of final /n/ and /m/. In some cases the items illustrating this display the same confusion in modern Krio:

<u>English</u>	<u>Sranan</u>	<u>1780</u>	<u>1783</u>	<u>1798</u>	<u>1850</u>	<u>1855</u>	<u>1856</u>	<u>Krio</u>
lie down	didón	lydom	liddom	didon	lidom	didón	lidóm	lidɔm
							didóm	ledɔm
sit down	sdon	ziddom	siddom	sidoon	sidom	sidòn	sidóm	sidɔm
fall down	fadón	fadom	fadom	fadon	fadom	fadón	fadóm	fɔdɔm
				fadom				

Note that down is /dɔŋ/ in Krio, not /*dɔm/. The nineteenth century Sranan sources are probably archaising (see the remarks on the sources).

This confusion arises because of the competing tendency to reduce /VN/ sequences to nasalized vowels.

5) Final unstressed /-ən/ appears as /-in/ or a development of this frequently in both the Surinam creoles and the West African forms of English.

<u>English</u>	<u>Sranan</u>	<u>Krio</u>	<u>Fernando Po</u>
rotten	ratin	rɔ́tin	rotin
fashion	fási	fáʃin/fásin	fasin
fasten	fási	fásin	fasin
garden	djári	gádin	gadin
bargain	bárki	bágin	baguin

A striking case, presumably related to the above is:

<u>English</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>	<u>Fernando Po</u>	<u>Cameroon</u>
iron	ájee	aje	ájɛn	ayen (ayon)	(ajɔ́n)

6) A rounding of ME /i/ to /ü/ appears to be represented in the Surinam creoles in the word mix. This also seems to be present in Cameroonian Pidgin English:

<u>English</u>	<u>Sranan</u>	<u>Krio</u>	<u>Fernando Po</u>	<u>Nigerian</u>	<u>Cameroon</u>
mix	móksi	(miks)	(mix)	(misk)	bɔ́ks

7) ME /ui/, EME /ui/ appears frequently in the Atlantic English-based creoles as /wai/ or some development of this. In the case of the Surinam creoles the only trace of this is in the epithetic vowel /-i/, as the vowel in the preceding syllable has gone through the stages /wai/ > /we/ > /o/, according to our hypothesis:

<u>English</u>	<u>Sranan</u>	<u>Sara- maccan</u>	<u>Krio</u>	<u>Fern- ando Po</u>	<u>Jamaican</u>	<u>Limon</u>	<u>Antiguan</u>
boy	(boj)		(boj)	(boy)	bwai	bway	
boil (n.)	-	bóí		buel			
boil (v.)	bóri	bói	bweɪ	buel	bwail	bwayɪ	bwail
spoil	póri	pói	pweɪ	puel	pwail	spwayɪ	pwail
		póíi		spuel			

See for more details the relevant vowel section in Part Two.

8) A striking feature of the Surinam creoles which also shows up in the West African forms of English is the reduction of diphthongs to monophthongs in (originally) closed syllables:

<u>English</u>	<u>Sranan</u>	<u>Krio</u>	<u>Guyanese</u>	<u>Fernando Po</u>	<u>Cameroon</u>	<u>MSL</u>
1)						
bite	béti	bɛt	(bayt)	(bait)	(báyɪ)	
fight	féti	fɛt	(fayt)	fet/(fait)	(fáyɪ)	fete
light	léti	(layt)		(lait)	(láyɪ)	
night	néti	net	nɛt/(nayt)	net/(nait)	nét/(náɪt)	net
right	léti	rɛt/(rayt)		(rait)	(ráɪt)	
white	wéti	wɛt/(wayt)	wɛt/(wayt)	(uait)	(wáyɪ)	wete
like	léki	lék(ɛ)		lek(e)/(laik)	lék/(láɪk)	
ripe	lépi	rɛp	(rayp)	rep		
knife	néfi	nɛf	nɛf	nɛf	(náɪf)	indepe
wife	wéfi	wɛf	wɛf	wɛf	(wáyɪf)	
time	ten	tɛm	tɛm/(taym)	tem/(taim)	(táyɪm)	tem
blind	bréni	blɛn	(blayn)	blɛn/(blaind)	(bláyɪn)	
2)						
come out	kmóto	kɔmɔt		comot	kɔmɔt	
proud	pródo	(prawd)		(praud)	prɔt/(práwt)	
house	óso	os	os/(hows)	jos/(jaus)	hɔs/(háws)	
louse	lóso	ɫɔs	(ɫɔws)	los		
mouth	mófo	mɔt	(mɔwt)	mot	mɔí/mɔp	(moutu/mutu)

This occurs more generally in other English-based creoles with the second diphthong before nasals. Other than in this restricted case monophthongization is not general.

See also the preceding section for another case of monophthongization.

Guyanese underwent significant influence from West African forms of English last century when a large number of freed slaves came to Guyana from West Africa at a time when the replacement of Creole Dutch by Creole English was in full swing.

Parallels between the Portuguese element and the Atlantic Portuguese-based creoles

1) An irregular change of /b/ to /v/ was noted in one lexical item:

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Cape Verde</u>	<u>CV-San Antão</u>	<u>Gloss</u>
gabar	gafá	gawwà (=/gavá/)	(ŋ)gabá	(ŋ)gavá	praise

In Part Two we state that we are not arguing for a direct relationship with the San Antão dialect of Cape Verde creole. The parallel remains striking, however.

2) An irregular change of /v/ to /g/ was noted in one lexical item. This was shared widely among the Atlantic creoles:

<u>Portuguese</u>	<u>Saramaccan</u>	<u>São Tomé</u>	<u>Papiamentu</u>	<u>Cape Verde</u>	<u>CV-Fogo</u>	<u>Gloss</u>
vomitar	gumbitá	gumitá	gumitá	vumitá	gumitá	vomit

3) An irregular change of /m/ to /b/ was noted in one lexical item. This also occurs in Cape Verde creole :

<u>Portuguese</u>	<u>Saramaccan</u>	<u>Cape Verde</u>	<u>CV-Brava</u>	<u>Gloss</u>
melancia	baasía	malãsiá balãsiá	bəlanɔ́jɔ	watermelon

4) Portuguese /st/ gives /s/ except when following an initial unstressed vowel - where we find /#t-/ or /#sVt-/. This appears to be shared only with the Gulf of Guinea creoles among Portuguese-based creoles in the Atlantic area:

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>São Tomé</u>	<u>Príncipe</u>	<u>Gloss</u>
vestir	bisí	bisí besí	biší	biší	dress
	<u>Papiamentu</u>	<u>Cape Verde</u>	<u>Guiné</u>		
	bísti	pstí	bisti		

Note that the /š/ in the Gulf of Guinea creoles is an automatic consequence of the following /i/.

5) Initial structures of the type esC.. in Portuguese (pronounced [esC-isC] in Brazil) display a differential development depending on the position of the accent (high tone in Saramaccan). If the resultant Saramaccan form has the high tone directly following the post-sibilant consonant then the sibilant is retained, with an epenthetic breaking up the consonant cluster. However, if the high tone (representing the Portuguese accent) does not directly follow the post-sibilant consonant, this latter is simply lost.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>Gloss</u>
espelho	sipéi	mirror
esfregar	feegá	rub

While none of the Atlantic Portuguese-based creoles has as clear a distribution between the two types of reflex as Saramaccan, the Gulf of Guinea creoles come closest.

<u>Portuguese</u>	<u>São Tomé</u>	<u>Príncipe</u>	<u>Gloss</u>
espelho	supé	supé	mirror
esfregar	flegá	fegá	rub

In Cape Verde creoles the sibilant is virtually always retained, while in Papiamentu there is a small number of forms of the second type that drop the sibilant.

6) An abnormal development of Portuguese /dž/ appears in the lexical item fugir

"flee". Instead of the normal intervocalic reflex /dj/, a voiceless fricative makes its appearance. This appears in Guiné creole and Príncipe creole:

Portuguese	Saramaccan	Príncipe	São Tomé	Guiné	Gloss
fugir	fusí	fuží	fuží	fúusi	flee

Note that here the Gulf of Guinea creoles do not present a uniform picture, São Tomé having a voiced reflex while Príncipe has a voiceless one.

We note in Part Two that a possible explanation for the voiceless form is a derivation from the North Portuguese/Galician form fuxhir [fušír].

7) Another deviant development of /dʒ/ appears in the two related items juntar "assemble" and junto "close" in Saramaccan. Sranan and Ndjuka, however, display the regular reflex. The Gulf of Guinea creoles appear to be the only Atlantic Portuguese creoles displaying the same reflex:

Portuguese	Saramaccan	São Tomé	Príncipe	Annobon	Gloss
juntar	zuntá		zũtá	zuntá	assemble
junto	zúntu	zúntu	zũtu		close

8) Portuguese /gw/ appears to give /w/ in Saramaccan. There is only one case of this in this language, but the same development is to be found in Príncipe and Papiamentu.

Portuguese	Saramaccan	Príncipe	Papiamentu	Gloss
enxaguar	sawá	-	háwà	rinse
agua	-	áwa	áwa	water
guardar	-	wadá	wárdà	watch, keep

A parallel development, conceivably arising through a rounding of the /g/, is to be found in the item agora "now, indeed".

Portuguese	Saramaccan	Príncipe	Papiamentu	Gloss
agora	awá(a)	wá	awó/awór	now, indeed

9) Some items involving phonological structures of the type /CV₁LV₂.../ display reflexes where the pretonic or pre-high tone vowel, whether this be V₁ or V₂, appears to have been deleted in the model. In other words if the Portuguese structure is of the form /CV₁L^V₂.../ we appear to have, or have had at some stage in the historical development of the form, /CL^V₂.../. if, however, we have a Portuguese structure /CV₁LV₂C^V.../, the final or intermediate product is /CLV₁C^V.../.

Illustrating the first type we have examples such as:

Portuguese	Saramaccan 1778	São Tomé Príncipe	Papiamentu	Cape Verde		
buraco	baáku	bláku	bláku	ubáku	(buráku)	bráku
lacerar	-	lassarà	-	-	lástrà	-
amolar	maá	malà	-	-	(múlà)	(molà)
panturrija	pantéa	pantrîa	-	-	-	-

The product of this type - ignoring subsequent liquid loss - is /C(V₂)L^V₂.../. There is also an alternative explanation to the development we are suggesting here:

$$/CV_1L^V_2.../ > /CL^V_2.../ (> /CV_2L^V_2.../)$$

This is:

$$/CV_1L^V_2.../ > /CV_2L^V_2.../ (> /CL^V_2/)$$

The attractions of this are more obvious with respect to the **second type** of structure:

Portuguese	Saramaccan 1778	São Tomé Príncipe	Papiamentu	Cape Verde		
aborrecer	buusé	brussèh	blosé	-	burusídu	(burisé)
escorregar	koogá	krokka	klógá	-	-	(skoregá)

Our first explanation of the developments here is as follows:

$$/CV_1LV_2C^V.../ > /CLV_1C^V.../ (> /CV_1LV_1C^V.../)$$

Easier might appear:

/CV₁LV₂CV.../ > /CV₁LV₁CV.../ (> /CLV₁CV.../)

where the second type of explanation has the virtue that an odd kind of metathesis is avoided. The predominance of a particular vowel quality could possibly be explained in terms of metrical structures, i.e. as the dominance of a strong vowel over a weak one.

10) There are two verbs displaying an irregular nondissimilatory loss of a liquid, presumably to be explained in terms of the frequency of their occurrence.

<u>Portu- guese</u>	<u>Sara- maccan</u>	<u>1778</u>	<u>São Tomé</u>	<u>Principe</u>	<u>Annobon</u>	<u>Angolar</u>	<u>Papiamentu</u>
falar	fan	fa	fa fla	fá falá	fala	fa falá	-
querer	ké	kéh	-	-	ke	-	ke

<u>Cape Verde</u>	<u>CV Brava</u>	<u>Guiné</u>	<u>Senegal</u>	<u>Gloss</u>
falá	fla/fra	fala	falá	talk
kré	kre	kiri	keré	want

This feature is restricted to Saramaccan, Papiamentu, and the four Gulf of Guinea Portuguese-based creoles.

11) An interesting distribution of pretonic /e/ in Portuguese-derived verb stems occurs in the various languages:

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>São Tomé</u>	<u>Principe</u>	<u>Papiamentu</u>	<u>Cape Verde</u>
1) e (-ir)	i	?	i	i	i	i
2) e (-er)	ɛ(e)	e	e(ɛ)	e(ɛ)	e	e (i)
3) e (-ar)	i/e	i/e	i/ɛ(e)	i/ɛ (e)	e (i)	e/i

The greatest similarity to the Saramaccan distribution appears to be present in the Gulf of Guinea creoles, and to a slightly lesser degree, Papiamentu and Cape Verde creole in that order. Note that /i/ has in some cases been deleted by a phonological rule in Cape Verde creole.

Note that there is a striking correlation between the Gulf of Guinea creoles and modern Saramaccan as to the height of the pretonic vowel in the third group:

<u>Portuguese</u>	<u>Saramaccan</u> <u>Modern 1778</u>	<u>São Tomé</u>	<u>Príncipe</u>	<u>Papiamentu</u>	<u>Cape Verde</u>
atravessar	e e				e
penar	e e		-	e	e
apertar	e e		ɛ	e	e
pegar	e e		ɛ	e	e
entrar	e i	e	e	e	e
esfregar	e/i i	ɛ	ɛ	e	e
assentar	(i) i	-	-	i	e
negar	- i		ɛ	e	e
fechar	i i	j	j		i
chegar	i (i)	i	i	(e)	i

The situation with pretonic /o/ is less clear:

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sao Tome</u>	<u>Príncipe</u>	<u>Papiamentu</u>	<u>Cape Verde</u>
1) o (-ir)	u (o)	u	u	u (i)	u	u (o)
2) o (-er)	u (ɔ)	u(o)	u/o	?	o(u)	o/u
3) o (-ar)	o/u	o/u	?	?	o/u	o/u

There is unfortunately not sufficient evidence in respect of the Gulf of Guinea creoles.

12) In a number of items derived from Portuguese verbs in -er we find /-i/ in Saramaccan instead of the expected /-e ~ -ɛ/. This is particularly the case with verbs in /..a..ét/ in Portuguese. All verbs retaining the stem vowel

as /a/ have /i/ as second (and final) vowel in Saramaccan. The overall situation is as follows:

	<u>Saramaccan</u>	<u>1778</u>	<u>São Tomé</u>	<u>Principe</u>	<u>Papiamentu</u>	<u>Cape Verde</u> <u>(Barlavento)</u>
/i/	4	2½	1	1	3	-
/e/	-	½	1	1	1	4

The only other /...ér/ verb with a reflex in Saramaccan has extensive parallels in the Portuguese-based creoles:

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Papiamentu</u>	<u>Cape Verde</u>
lamber	lembé		lembeh	lémbè
			lémbè	lembé

The reason for the occurrence of the above given /i/ forms we would seek in the verb paradigm as it is found in Principe creole. This consists of two forms: one (usually) derived from the Portuguese infinitive, in /-á, -é, -ê, -í/; and the other, involving the suffix /-du/. Notably with /-é/ verbs with polysyllable stems, the participial form is not in /-édu/ but in /-ídu/ (as in Portuguese). We assume that some such two-member paradigm involving /-é/ and /-ídu/ lies behind the -er verbs that appear as /-í/ in Saramaccan (and the other languages). This is in itself strongly suggestive of a creole background for the Portuguese element in Saramaccan.

13) Although all the details are not clear, there seems to be a shared tendency in the Surinam creoles and in particular São Tomé to represent Portuguese unstressed final /-o/ in citation forms as a mid vowel rather than the high vowel which is the normal reflex of this sound:

<u>Portuguese</u>	<u>Saramaccan</u>	<u>Sranan</u>	<u>São Tomé</u>	<u>Principe</u>	<u>Gloss</u>
bobo	-	bóbo		bóbo	buffoon
fogo	fóogo	-	fógo (fógu)	ufógo (ufógu)	fire
torto	tóto	-	tóto	(tóto)	twisted
outro	óto	-	óto	(ótu)	other

Principense creole tends to have the high vowel reflex. This is probably to be explained as a reflection of the weaker state of the language vis-a-vis Portuguese.

Although we discuss a second environment for the occurrence of /-o/ in Saramaccan - following /í/ in the previous syllable - which does not appear in São Tomense creole, it is probable that represents a separate phenomenon. There seem to be more exceptions for one thing.

Although /-o/ is frequent in Papiamentu, is it unclear whether this is more frequent after an /o/ in the stressed syllable or not. It is also not clear to what extent the extensive Spanish influence on Papiamentu has played a role.

14) As we have demonstrated, there are significant parallels between the developments of the diphthongs in Portuguese words in Saramaccan and the Gulf of Guinea creole languages. We will first examine again the reflexes in final position.

<u>Portuguese</u>	<u>São Tomé</u>	<u>Principe</u>	<u>Annobon</u>	<u>Proto-Gulf</u>	<u>Saramaccan</u>
ai	ɛ	wɛ	aj/e	aj	ai
ãe	ẽ/ɛ	wĩ	aj/e	ãj	ai
oi	we	we			-
au	ɔ	a	a	aw	au
ão	õ	ã	ã	ãw	au(n)/a(n)

The Proto-Gulf reconstructions would seem reasonable in the light of the variation among the three Gulf creoles cited here. Note that the Principe reflexes in the first two cases follow labial consonants, which have presumably induced the change /*ai/ > /*oi/.

Preceding palatal and palato-alveolar consonants the /i/-final diphthongs display absorption of their second component in the Gulf of Guinea creoles. This also appears in Saramaccan.

<u>Portuguese</u>	<u>São Tomé</u>	<u>Principe</u>	<u>Saramaccan</u>
ai	a	a	a
oi	o	o	-
ui	u		-

Preceding other consonants we do not find the disappearance of this second element, but quite different reflexes.

<u>Portuguese</u>	<u>São Tomé</u>	<u>Principe</u>	<u>Saramaccan</u>
ai	ɛ	ɛ	-
oi	we	we	we/wɛ

The parallelism between Saramaccan and the Gulf of Guinea Creoles is striking:

- i) in final position there is evidence for diphthongal or bimoraic structures.
- ii) in preconsonantal position before palatals, absorption of an /i/-element is evidenced.
- iii) in other preconsonantal environments different reflexes appear. The similarity of the developments of Portuguese /oi/ is impressive.

Appendix: a parallel between the Dutch element and the Gbe element in the Surinam creoles

Although the normal development of Dutch /v/ is to /t/ in the Surinam creoles, possibly by way of /*v/ in Sranan, there are a small number of clear cases where (presumably early) Dutch-derived items display the reflex /b/.

<u>Dutch</u>	<u>Sranan</u>
zeven	séjbi
drijven	dríbi
stuiver	tíbri

Two other forms might owe their /b/ to crossings with English and Portuguese forms.

<u>Dutch</u>	<u>Sara-</u> <u>maccan</u>	<u>Sranan</u>	<u>Sranan</u> <u>1777</u>	<u>English</u>	<u>Portuguese</u>	<u>Gloss</u>
vanille	-	baníri	banilla	vanilla	-	vanilla
provoceren	póbósi	-	-	-	provocar	provoke

The three clearest cases of Dutch origin all involve the sequence /bi/ deriving from Dutch /və/.

Of the ten items in the Surinam creoles apparently involving Gbe-derived words containing /v/, the following display a development to /b/, rather than to /v/ or /f/.

<u>Gbe (Fon)</u>	<u>Saramaccan</u>	<u>Sranan</u>	<u>Gloss (Gbe)</u>
àvitì	(aviti)	abití	trap
ali-ví	alibí	-	kidney (dim)
hòxó-vi	hohobi	-	twin (dim)
vé	bɛ	-	red
gò-ví	-	gobí	bottle (dim)
jobó	-	jobó (1856) (secret lge)	white man

Four of these six items involve the sequence /bi/, deriving from Fon /vi/. The item /bɛ/ might represent a cross with other similar forms meaning "red" in a variety of West African languages, with an initial /b/. /jobó/ is less amenable to such an explanation.

Note however the predominance of the sequence /bi/ in the Sranan and Saramaccan items involving Gbe /v/, as also in the above-mentioned Dutch-derived items.

We explain this in Part Two as probably deriving from the Fon dialect spoken in the area of Alada - Aróhún (Capo, to appear). In this dialect /v/ optionally becomes [β] preceding /i/. We regard as not unreasonable that [β] would be interpreted as /b/ in Surinam, rather than /v/, with its bilabiality being perceived as more prominent than its (weak) fricativity.

CHAPTER THREE

The English and Portuguese Elements in the Surinam Creoles

This chapter will be concerned with the interpretation of the significance of the English and Portuguese elements present in the creole languages of Surinam. It possesses three main sections - two concerned with the external relationships of the English and Portuguese elements in these creole languages, and a third which examines the "mixed creole" status of Saramaccan, as regards the English and Portuguese items present in a) the basic vocabulary, and b) the function word *lexicon*, and attempts to demonstrate that this situation has parallels with that of another "mixed creole", Berbice Dutch, where Dutch and Eastern Jjo items are similarly distributed.

As we have seen in Chapter Two - which is distilled from the historical phonological comparisons presented in Part Two - there are certain differences in the developments of English and Portuguese sounds that cannot be explained in terms of direct derivation from these two languages. An alternative explanation involving nonidentical models - that is a dialectal model phonologically distinct from the standard language in either or both languages - is only available in a subset of these cases.

For instance this is so in the case of the development of the sound /ɔ/ in standard English and Standard Brazilian Portuguese. This appears in the Surinam creoles as /o,ɔ/ in words of Portuguese origin, but as /a/ in words of English origin. However, as we explain in Part Two, the apparent unrounding of /ɔ/ that we find in items of English origin is not to be ascribed to a sound change that occurred subsequent to the adoption of these items in the Surinam creoles, but is probably to be explained by the fact that the form of English that provided the model for these creoles had already undergone a sound change unrounding (short) /ɔ/. And, as we shall see in Part Two, pronunciations of this type are recorded in the Early Modern English of the period in question.

Once we have removed cases such as the preceding from consideration, there still remain however a small number which are not amenable to explanations such as

that given. We attach considerable importance to such cases, whose explanation, we believe, can provide important evidence to add to the existing body of facts and inferences which are employed in discussions on creole beginnings in Surinam.

The External Relationships of the English Element in the Surinam Creoles

This part of the chapter falls into four sections. Firstly there is a general introduction concerned with the question of the origin of the slaves brought to Surinam in the seventeenth century, and certain theories as to the source of the English they have been assumed to have brought with them. That (the basis of) this English has a source external to Surinam is supported by historical phonological evidence, as we claim.

The second section is concerned with the very important evidence provided by the existence of the Maroon Spirit Possession Language of Jamaica (MSL, described in Bilby (1983)). We support Bilby's conclusion that MSL - at present restricted to ritual functions, but presumably deriving from an older form of speech general among the (Eastern) Maroons - probably represents a speech form imported into Jamaica from Surinam in the 1670's when most of the English planters and their slaves left Surinam.

The third section is concerned with the precise nature of the relationship between Krio and the Surinam creoles. Krio provides evidence, both of a phonological and of a lexical nature, of a particularly close relationship to the English element in the Surinam creoles. We argue for the link between the two being a form of pidgin English spoken in the general area of the Slave Coast (i.e. the coast of Benin and Togo) in the mid-seventeenth century.

The fourth section contains our conclusions as to the nature of the relationship obtaining among the (English element in the) Surinam creoles, MSL and Krio.

- The origin of the Surinam slaves and their "English"

In connection with the following discussion it will be useful to recapitulate a number of historical facts.

The colony of Surinam was founded by the then Governor of Barbados - Francis, Lord Willoughby - in 1651. In addition to settlers from Barbados itself (settled in 1625), other settlers were drawn from the smaller islands of St. Kitts (settled in 1624), Nevis (settled in 1627), and Montserrat (settled in 1633) (Rens, 1953; Cooper, 1979; Wells, 1983). Whilst it is nowhere expressly stated that these settlers brought slaves with them, it would seem likely that this was the case.

This takes care of the question of where the first whites came from - at least, directly prior to their arrival in Surinam - and any slaves they brought with them. However, Surinam began virtually immediately to import slaves on its own account largely supplied by the Dutch (Rens, 1953). According to Price (1976) and sources quoted there (cf. in particular Postma, 1970; 1975) the following approximate percentages of slaves were imported from various areas in Africa by the Dutch between the 1640's and 1700.

Slave Coast	64%
Loango/Angola	34%
Gold Coast	2%

The Slave Coast corresponds to the coastal region of Togo and Benin. The slaves from the region from Loango to Angola - corresponding to the coast of the Popular Republic of the Congo, Zaire, Angola and Namibia - hailed in particular from the northern portion of this region. The Gold Coast corresponds to the coastal region of Ghana (Price, 1976). Being transported from a port on a particular coast does not of course necessarily imply a tribal affiliation to a coastal tribe, and Price expressly states that a significant number of the slaves brought from Slave Coast ports did not belong to the coastal Gbe-speaking people (Ewe-Fon) but to their neighbours to the east who were Yoruba. Although the Saramaccan preserve knowledge of an Anagó (a Yoruba group) component in their origins we are of the opinion that because of the scarcity of lexical items of Yoruba origin as compared to those of Gbe origin the numbers of Yoruba amongst the early slaves cannot have been very great, or that at least Gbe was the dominant language in the slave depots of the Slave Coast (cf. Goodman, 1986).

The lexical items of African origin that are to be found in the Surinam creole languages tend to confirm the approximate correctness of Price's figures for the Surinam situation. Roughly equal in size are the numbers of items derivable from the various Gbe dialects (in particular Fon) and the various Bantu languages of the Congo/Angola region (largely from various Kikongo dialects, with a smaller Kimbundu component). A collection of items of Gbe origin will appear in Smith (in prep.), while Kikongo items are discussed in Daeleman (1972) and Huttar (1985). A significantly smaller component is derived from Twi (spoken on the Gold Coast). In other words it appears that the major language spoken in each of the three "catchment" areas is represented to a significant degree in Surinam. The Twi component does not have to derive necessarily from the two per cent of Gold Coast slaves arriving during the 17th century, as this proportion rose to 29% between the years 1726-35 (Price, 1976). It is of course also possible that despite slaves from the Gold Coast playing an apparently less important role during the 17th century, Surinam received a higher percentage of such slaves during part of this period.

It is presumably no accident then that it is precisely these three languages that are represented in Surinam by secret ritual languages (see Price, 1971; 1975; 1983; etc.; Voorhoeve, 1971; Hurault, 1983; Sebba, 1982; Smith, 1983) which are referred to under various names in the literature on the various Surinam languages and cultures, including at least Papá (Saramaccan, Boni), and Fodú (Sranan) largely of Gbe origin; Luángo (Saramaccan), Púmbu (Saramaccan) largely of Kikongo origin; and Kromantí (or variants of this name) (Saramaccan, Sranan, Boni) largely of Twi origin. This fact combined with the fact of these languages' lexical contribution to the ordinary languages would seem to suggest that these languages were used for some time as ordinary means of communication in Surinam before being restricted to their present status as the vehicles of the rituals of various basically African panthea. See Smith (1982b) for the suggestion that the rule of /d/-liquefaction in Surinam had its origin in the extension and reversal of a Kikongo rule of deliquification, implying a period of Kikongo-speaking in Surinam.

All in all, the linguistic evidence seems to provide support for the figures on the seventeenth century slave trade calculated by Price and applied to Surinam. We will therefore proceed on the assumption that these represent at least a reasonable approximation to the truth.

Turning now to questions of phonology, and in particular the various developments undergone by what was historically /v/ in English, Portuguese, Gbe, and Kikongo, we saw in Chapter Two that all the English-derived items replace /v/ by /b/ in the Surinam creoles. In Portuguese-derived items, however, we get /v/ or its later development /f/, in about a third of the cases, and /b/ elsewhere. In Gbe-derived items we see that the developments in some cases to /b/ can be explained in terms of a dialectal feature (Alada), while in the other two cases of /b/ for /v/, at least one and possibly both can be explained as crossings. Otherwise Gbe-derived items too have /v/ or /f/. Lastly Kikongo-derived forms always display /v/. In view of the preservation of Kikongo and Gbe /v/ (including here those forms displaying the later Surinam-internal change to /f/), as also the very fact that most slaves in the seventeenth century would seem to have been speakers of either Gbe or Kikongo, a development of /v/ to /b/ within Surinam in those items that are of English origin would seem inexplicable. The logical conclusion of all this would seem to be that the English component of the Surinam creole languages was not formed on English models in Surinam, but was imported with slaves from elsewhere. Note that this reasoning also applies to the Portuguese-based items.

The next question to be asked is of course where from? There are two answers that have been given in the literature. On general historical grounds Cassidy (1980) and Cairo (1985) have claimed that Surinam creole English was imported from Barbados. Unfortunately Barbados Creole (henceforth BC) is one of the more decreolized forms of English spoken in the Caribbean area. Hancock (1986b) does not believe that BC was ever much more deviant from Standard English than it is now, although he does provide evidence of several earlier more deviant forms in Hancock (1986a). Possibly a more intensive study of BC phonology than that provided by Burrows (1983) would throw up more evidence, although Burrows also provides evidence from older forms of BC that this deviated more from English than it does now. The only striking feature of BC is that it is probably the most "r"-full form of English in the Caribbean. One component of Proto-Sranan is, as we make clear in Part Two, in the section on the liquids, modelled on an "r"-full form of English. BC appears not, however, to change English /v/ to /b/, even in older texts:

"Me no savy....." (Burrows, 1983)

One striking feature that BC does share with Sranan - and apparently with no other creole external to Surinam - is the use of a form incorporating the word place in the item for "where". Both languages also possess a second word with the same meaning based on side.

<u>BC</u>	<u>Sranan: 1718</u>	<u>1783</u>	<u>present</u>
wiç <u>plees</u>	oe <u>plesse</u>	hupeh	(o)pe
wiç <u>said</u>		husei	usai

It is quite conceivable that BC was never so deviant in respect of English, as Hancock argues. His principal reason for arguing that was in fact the case is concerned with the fact it was only in the 1660's - about forty years after the initial settlement - that the slaves came to outnumber the whites on Barbados (cf. Williams, 1984), so that during the formative years of BC its speakers would be exposed to much more Metropolitan English than was the case with other creoles. This reasoning, as all other such use of demographic statistics to attempt to define the social conditions under which creologenesi takes place, assumes a uniform distribution of races in any given colony - something which is well-known not to have been the case. The possibility that significant geographical variations in the distribution of blacks and whites within any given colony is therefore ignored, as is the concomitant possibility of the development - at least in the initial period - of divergent forms of slave speech.

As we stated above of course, the settlers in Surinam did not only come from Barbados. They also came from Montserrat, St. Kitts and Nevis. These islands have today more basilectal creoles than Barbados, in particular the last two which are in fact only slightly differentiated dialectal variants. St. Kitts-Nevis Creole does display the frequent replacement of /v/ by /b/ (Cooper, 1979) although this is sometimes optional. The whole question of the possible relations of the English component of the Surinam creoles with the (proto)creoles of Barbados, Montserrat, and St. Kitts-Nevis can only be adequately considered when adequate lexical-phonological descriptions are available of all these creoles. The other answer given to the question of where the slaves that spoke Proto-Sranan came from is that of Hancock (1986) who claims that what he refers to as Guinea Coast Creole English

(GCCE) was imported with slaves imported by the Dutch from the Sierra Leone/Gambia region of West Africa. Hancock explains by this means the extensive similarities between the Surinam creoles and Krio.

On the positive side this would explain of course the replacement of English /v/ by /b/ as this is quite normal in Krio. On the negative side there is an absence of evidence that slaves were imported from this region to the West Indies by the Dutch in the seventeenth century. At least in terms of Price's analysis of Postma's data (Postma, 1970; 1975; Price, 1976) this area became of significance only in the eighteenth century as a supplier of slaves. As Hancock (1986a) says, we must be cautious about drawing firm conclusions on the basis of scanty data, but on the other hand we would expect to find a significant number of lexical items from the languages of this area if it had been represented to any significant degree in the seventeenth century slave imports.

We will return to the question of the striking resemblances between Krio and the Surinam languages later on.

- The Maroon Spirit Possession Language of Jamaica

The Maroon Spirit Language of Jamaica (henceforth MSL) - first described in any detail in Bilby (1983) - is similar in status to the above-mentioned remnants of the African languages Gbe, Kikongo and Twi used by the various creole groups in Surinam as ritual languages. Among the Eastern Maroon communities of Jamaica there are three modes of communication: the everyday language, a form of Jamaican Creole; Kromanti, the ritual language of communication with the spirits of the first Maroons, who are said to have been born in Africa; and MSL, the ritual language of communication with the spirits of Maroons born in Jamaica. Bilby concludes that MSL represents a survival of an older form of Creole used among the Maroons.

The notable fact about MSL is that according to Bilby (1983) it displays a surprising number of close agreements to the creoles of Surinam, such that:

"It would be difficult to account for the specificity and the sheer number of these parallels without positing the existence of .. (a common) .. substrate"

I would go further and claim that it seems well-nigh impossible not to consider MSL (or rather Pre-MSL) and Proto-Sranan as two closely related languages. However, let us first examine the phonological similarities Bilby mentions.

He treats five phonological similarities; vowel epithesis, the treatment of liquids, the treatment of the diphthong /ai/, the metathesis of liquids, and vowel nasalization. Of these we are of the opinion that the second - the treatment of liquids - and the fifth - vowel nasalization - do not really prove anything regarding the relationships of MSL with the Surinam creoles.

a) Vowel Epithesis

<u>English</u>	<u>MSL</u>	<u>Sranan</u>	<u>Jamaican</u>
walk	waka	wáka	waak
talk	taki	táki	ta(a)k
knock	naki	náki	nak
arse	lasi	lási	ra(a)s
dead	dede	déde	ded
head	ede	éde	(h)ed
black	blaka	bláka	blak
dog	dago	dágu	da(a)g
hog	hagu	águ	hag

The fact of MSL's possessing vowel epithesis as a (fairly) regular feature - unlike any other Atlantic English-based creole outside Surinam - does not prove any special relationship with these latter creole languages. It is frequently claimed that older stages of various other creoles of the Atlantic area had more epithetic vowels than the occasional case encountered in their modern counterparts (see Alleyne, 1980; Lalla, 1984; Hancock, 1986b), although these claims do not make completely obvious the claim that the addition of an epithetic vowel was a regular rather than an occasional feature. However what is required to prove common ancestry is something more than what could be regarded as the addition of

epithetic vowels homorganic, or nearly so, with the preceding stem vowel. For instance we would regard the following cases as typical of natural epithesis (occurring for example in the accommodation of English and French loanwords in many African languages):

	<u>Stem Vowel</u>	<u>Epithetic Vowel</u>
	i	i
	u	u
	e	e/i
	o	o/u
	a + labial C	u
	a + velar C	a
	a + dental C	i

However, there are certain irregular cases not conforming to the above system in both the MSL material and that from the Surinam creoles. Such shared irregularities are, we submit, striking evidence of a historical connection between MSL and the Surinam creoles. Compare the following cases:

<u>English</u>	<u>MSL</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>
knock	naki	náki	náki	náki
talk	taki	táki	táki	táki
dog	dago	dágu	dágu	dágu
hog	hagu	águ	(h)águ	águ
hand	(h)anu	ánu	-	(ána)
broad	brada	(brádi)	(baái)	baála
man	manu	(man)	mánu	(mán)

b) Treatment of Liquids

<u>English</u>	<u>MSL</u>	<u>Sranan</u>	<u>Jamaican</u>
ugly	ogri	ógri	ogli
place	pre(s)	prési	plies
climb	krem	kren	klaim
swallo	swara	swári	swala
belly	bere	bére	beli
self	sjref	sréfi	se(l)f

In fact, as we illustrate in the section on liquids in Part Two, the earliest records of Sranan (eg. Schumann, 1783) do not have /r/ uniformly in such environments, but display a variation between /l/ and /r/. Because of the significant difference between the reflexes of the matrix-language /l/ and /r/ in such cases, we conclude that in fact Proto-Sranan had separate phonological entities /r/ and /l/. Since if MSL is historically connected with Proto-Sranan - as we think it must be (with Bilby, 1983) - the date of separation would lie in the 1670's, long before the written records begin, it is difficult to reach any other conclusion than that the change to /r/ in these forms in MSL is an independent change.

Similarly Bilby quotes forms displaying liquid loss in MSL:

<u>kill</u>	kii
<u>pull</u>	puu
<u>tell</u>	te
<u>black</u>	baka (variant form)

and suggests a connection with the loss of liquids in Ndjuka and Saramaccan. This latter is probably a nineteenth century phenomenon, as Schumann (1778) in his word-list of Saramaccan does not quote any forms illustrating the loss of liquids in any position, other than a handful of cases obviously involving dissimilation.

<u>English</u>	<u>MSL</u>	<u>Ndjuka</u>	<u>Saramaccan</u>	<u>Sara. 1778</u>
kill	kii	kíi	kíi	killi
pull	puu	púu	púu	pulu
black	baka	baáka	baáka	blakka brakka

c) /ai/ becomes /e/

<u>English</u>	<u>MSL</u>	<u>Sranan</u>	<u>Jamaican</u>	<u>Guyanese</u>	<u>Krio</u>
climb	krem	kren	klaim	klaim	klem
time	tem	ten	taim	taim/tem	tem
ride	re	(rej)	raid	raid	red
white	wete	wéti	wait	wait/wet	wet
fight	fete	féti	fait	fait	fet
night	net	néti	nait	nait/nεt	nεt

The Surinam creoles, MSL, and Krio and the various forms of West African Pidgin English (WAPE), e.g. those of Cameroon and Nigeria, are the only Atlantic creoles displaying the systematic lack of any vowel length contrast corresponding to the Early Modern English system. One aspect of this is presumably the monophthongization of the EME diphthongs to single mora vowels word-internally. EME /əi/ (or /ʌi/) becomes /e/, /ɛ /; /əu/ becomes /o/, /ɔ/. The occurrence of some monophthongal reflexes in Guyanese - as can be seen from the table - can probably be attributed to the influence of Krio (or WAPE) (Hancock, 1969). This influence is presumably to be dated to the 1840's (Cruickshank, 1916). More than 13,000 "Liberated Africans" came to British Guyana around this period. Although similar influxes also took place in Jamaica and other British Colonies at around the same time, there was probably less scope in such places for these Africans to have had any linguistic effect than in Guyana where during this period the Dutch-based creoles of Guyana were ceasing to be the normal means of communication, at least among the slaves in the coastal areas of the counties of Berbice and Essequibo (Robertson, 1977). In the third county - Demerara - English influence dated from a century before, although the linguistic effects of this are unknown. It is unlikely that there was any direct linguistic connection between Surinam and Guyana as far as the English element is concerned, at least prior to the nineteenth century, when a number of items appear to have been borrowed from Guyanese by the Surinam creoles.

d) Metathesis of Liquids

<u>English</u>	<u>MSL</u>	<u>Sranan</u>	<u>Jamaican</u>
self	sjref	sréfi	se(l)f

It is uncertain when this process of metathesis - or as we have tried to demonstrate (with Sebba, 1982) strictly speaking "pseudo-metathesis" (see the section on the liquids in Part Two) - began in the Surinam creoles. We have tried to show that it was still working its way through the lexicon at the time of the first recordings of the Surinam creoles, but this does not imply that its initiation might not have been very early. The resemblance is striking in any case. The reason for the process

being limited to one example is probably the restricted nature of the available vocabulary of MSL. It is to be hoped that a larger vocabulary will become available on the basis of recordings now held at the University of Texas (Hancock, p.c.).

e) Vowel Nasalization

<u>English</u>	<u>MSL</u>	<u>Sranan</u>	<u>Jamaican</u>
yams	nyās	njámsi	nya(a)ms
come	kō	kon [kɔ̃ (ŋ)]	kom/konj

The mere fact of the occurrence of nasalized vowels in both the creoles of Surinam and MSL is not very impressive as evidence of a historical link between the two. Furthermore we have tried to present arguments for an earlier situation in Surinam whereby final nasals were distinguished as /n/, /m/, and conceivably even /ŋ/ (see the section on nasals in Part Two). It is of course possible that the phonetic actuation of one of these phonological units in syllable final position took the form of vowel nasalization at some early stage of the language. This is however, unclear.

As a footnote it should be added that in the few items reflecting English /v/ MSL displays /b/, although this feature is also shared by Jamaica Creole, although not, however, in the items in which it occurs in MSL - very /beri/ and savvy /sabi/ which do occur in the Surinam creoles.

Bilby also discusses three non-phonological similarities he notes between MSL and the Surinam creoles. We will briefly discuss these.

f) Use of /na/

	<u>MSL</u>	<u>Sranan</u>	<u>Jamaican</u>
i) Equative copula	na	na	(d)a
ii) Locative prep.	na	na	a

As Hancock (1986a) shows, Krio is the only other Atlantic creole to employ /na/ in these two functions. However, Hancock also shows that the locative usage was also employed in other creoles at an earlier date, quoting examples from Jamaican, St. Kitts and Guyanese. Arends (1986) suggests that in fact the copular function was not present in the earliest forms of Sranan, being an extension from the prepositional function.

g) TMA-markers

	<u>MSL</u>	<u>Sranan</u>	<u>Jamaican</u>
<u>Durative</u>	e/he/a/da/de	e (older: de)	a/da/de
<u>"Future"</u>	sa/wi	sa	wi/gwain
<u>Anterior</u>	=Jamaican	ben	bin/ben/min/men/wen/en

The MSL durative aspect marker /e ~ he/ is associated by Bilby with the Sranan and Ndjuka /e/. However, this latter must derive historically from /de/, the older form of the Sranan particle, evidenced up till the twentieth century. /e/ is obviously of greater antiquity than this fact might suggest, being the only form utilized in Ndjuka, Boni, Paramaccan, and Kwinti. The variant lacking the initial consonant might first have arisen in the form of Sranan utilized on the plantations - it was here the ancestors of the Ndjuka, etc. escaped from - as against the form of Sranan used in Paramaribo which seems to have retained the initial /d/ much longer. This suggests that one possible interpretation of the situation would be that the /d/ was lost in some forms of Sranan as early as 1700. Whether we can advance this date by thirty years to the 1670's is not clear.

The future marker /sa/ is highly suggestive. It otherwise only occurs in English-based creoles spoken in areas where they have succeeded Dutch-based creoles. In St. Croix English-based creole /sa/ occurs, but this can be assumed to be a continuation of Negerhollands /sa/. Similarly, Guyanese has /sa/, but so did the two Dutch creoles (formerly) spoken in Guyana - Berbice Dutch and Skepi Dutch (Hancock, 1986a; Robertson, 1982).

h) Interrogative and Pronouns

	<u>MSL</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Saramaccan</u>	<u>Jamaican</u>	<u>Gloss</u>
a)	(h)uma suma	(o)s(u)ma s(u)ma	sama sama	ambé sɔmbɛ	hu(u) smádi smári	who? person
	(h)onti sonti	(o)san(i) saní	sán(i) sán(i)	andí sondí	wa/we	what? thing
	(h)ofa (h)ufa	(o)fa	on-fa	ún-fá	hou	how?
	(h)onti	di/odísi	ondi	ún-dí		which?
b)	o/a	a	a	a	im/in/i	he/she/it
	i/u	i/ju	i/ju	i/ju	ju	you
	am	en	en	hén	im/in/i	him/her/it

The question of the interrogative pronouns is rather more complicated than Bilby suggests (for a fuller discussion see Muysken and Smith (ms.)). The question words in the Surinam creoles are derived in general from forms of the structure: Invariant Question Element + Questioned Element (Q + QE). The Q-element takes the following forms:

<u>Sranan</u>	<u>1783</u>	<u>Ndjuka</u>	<u>Saramaccan</u>	<u>1778</u>
o/ɸ-	hu-	on-	ún-	hu-

This is presumably derived from an English Question word such as which, cf. Guyanese /wɪsald/ "where", Barbadian /wɪʃ plees/, Trinidadian /wɪʃpaat/ "id.". If we were to assume that this originally had the form /wi/, in Proto-Sranan a development to /u/ would be explicable. We ignore here the possibility of a Proto-form /hwi/, to explain the /h/ in earlier forms.

The question is to what extent analogy has played a role in MSL. The Sranan question words are derived in all probability from:

who: Q-someone
 what: Q-something
 how: Q-fashion
 which: Q-this

The only MSL from that would seem to be directly explicable in these terms is /(h)ofa, (h)ufa/. While the words for "person" and "thing" would seem to be derived as in Sranan and Ndjuka from English someone and something, the corresponding interrogatives would seem either to be analogical structures of some kind, or else derived from Q-man and Q-thing respectively.

The only forms then that are directly comparable to Sranan and Ndjuka are then the items for "person", "thing" and "how?". These are striking resemblances, however.

Schuchardt (1914) raised the question of whether the items "who?" and "what?" are to be derived from collapsing the Q-element and the following morpheme in Saramaccan, and Bilby poses virtually the same question, but in less direct terms, concerning these items in MSL.

<u>Saramaccan</u>	<u>1778</u>	<u>MSL</u>	<u>Gloss</u>
ambé	ambeh	(h)uma	who?
sámbe	sombre	suma	person
andí	ondi	(h)onti	what?
sondí	sani	sonti	thing

(1805:sondi)

This cannot be the whole explanation, however - the 1778 form for "who" would have to have been ombre if Schuchardt's theory referred to above had been correct:

hu-sombre ---> h(u)-(s)ombre ---> (h)ombre

There is no way a form ambeh could be derived in these terms.

In fact a more probable origin for the items "who?" and "what?" in Saramaccan is to be sought in Gbe:

<u>Saramaccan</u>	<u>1778</u>	<u>Gbe:</u>	<u>Fon</u>	<u>Vhe</u>	<u>Gloss</u>
ambé	ambeh		mě/mě	ameka	who?
			mě/mè	ame	someone
andí	ondi		aní		what?

Note that it is most unlikely that the eighteenth century form ondi "what?" recorded by Schumann is to be connected to modern Ndjuka /ondi/ "which?". This latter can be analysed as Q + QE: /on-di/. The Q-element in eighteenth century Saramaccan is however hu- and the precise equivalent of the Ndjuka form is provided by Saramaccan (1778) hu-di "which?".

- Krio

That there is a significant relationship between Krio and the English element in the Surinam creoles is clearly the case, not only on the basis of such shared phonological innovations as the monophthongization of diphthongs already referred to - /**əi*/ > /e,ɛ/; /**əu*/ > /o,ɔ/; /**ui*/ > /**wəi*/ > /**we*/ - but also on the basis of shared lexical and grammatical morphemes/words. Compare the following (taken from Hancock (1986b)):

i)	<u>Krio</u>	<u>Sranan</u>	<u>Gloss</u>
	bomã	aboma	boa
	brokobak	brokobaka	species of vine
	de gɛ de gɛ	degedege	shaky
	fukfuk	fukufuku	lungs
	dʒagadʒaga	djagadjaga	untidy
	dʒɔnkɔ	djonko	nod head
	lawlaw	lawlaw	foolish
	pima	pima	vulva
	sɔkisɔki	soki	copulate
ii)	wantɔm	wanten	immediately (one + time)
	sɔntɔm	sonten	perhaps (some + time)
	ɔltɔm	alaten	always (all + time)
	trade	trade	recently (tother + day)

Note that no other creole language exhibits resemblances of this nature with the Surinam creoles.

There are two hypotheses that have been proposed to explain the seeming relationship between the Surinam creoles and Krio. The first makes use of the probable fact that the Surinam creoles have acquired a descendant on Jamaica in the form of MSL. It is likely that this represents an older form of speech formerly employed by the Jamaican Maroons for everyday use, but which has only been preserved for ritual purposes, while being replaced as the everyday language by ordinary Jamaican creole (see above). Bilby (1983) discusses briefly the possibility that the Western Maroons that were taken to Sierra Leone in 1800 were basically responsible for introducing Krio to Africa. Krio would then, under one version of this widely shared assumption, not be a continuation of an earlier form of Jamaican Creole as has frequently been hypothesized, but of an earlier form of MSL. This would give us the following scenario:

Proto-Sranan	>	Pre-MSL	>	Krio
(Surinam)		(Jamaica)		(Sierra Leone)

Bilby raises one problem in connection with this hypothesis. His MSL data was gathered from the three Eastern Maroon communities and it remains a completely unsupported assumption that the Western Maroons employ(ed) a similar form of speech. It is of course conceivable, and even likely that an MSL-like form of speech was in general use in Jamaica in the 17th century, unless we are to imagine that the Maroon communities were principally derived from the slaves brought to Jamaica from Surinam, which seems unlikely as Surinam-derived slaves appear to have formed only roughly 10% of the Jamaican slave population in 1675 (Bilby 1983). The strong Twi bias observable in Maroon language and culture would seem to argue against a purely Surinam origin in view of what we have said above of the African origins of the early Surinam slaves. Much more likely is Bilby's supposition that the slaves from Surinam arrived at a linguistically critical time, during the formation of whatever the earliest form of creole English in Jamaica was like. Bilby also notes that the arrival of the Surinam slaves coincided with the early growth of the Eastern Maroons.

Hancock (1986a) would explain the relationship of Krio to the Surinam creoles (and MSL) otherwise. Towards the end of the 16th century English-speaking traders, etc. began to settle in the Gambia and Sierra Leone rivers, and neighbouring areas such as the Bullom and Sherbro coasts. These intermarried with the local population leading to a mixed population among whose leading families the surnames of some of the abovementioned early traders are still to be found. Long before the foundation of Freetown in Sierra Leone in 1787 as a haven for repatriated slaves, a large number of whom were apparently of Yoruba origin, or of the arrival of Western Maroons from Jamaica in 1800, the, admittedly sparse, records of the form of English creole/pidgin spoken in the area display numerous features present in modern Krio - syntactic, phonological and lexical. Examples are to be found in Hancock (1986a).

An important phonological example predating 1800 is the form owlwef "species of fish - old wife" (Hancock, 1986a). This form illustrates the monophthongization of Early Modern English diphthongs in closed syllables typical of modern Krio (and MSL and the Surinam creoles). This form is /ðlwɛf/ in modern Krio, and /uolwaif/ in Jamaican (Ian Hancock, p.c.). In Sranan the word appears under the guise /owruwɛfi/. It is particularly striking that the early Krio form owlwef appears to share with Sranan the diphthongal variant of the vowel in the word "old" i.e. /əul(d)/, which has apparently been replaced by a monophthong in modern Krio.

This and similar evidence appears to put paid to the idea that Krio is largely derived from Maroon speech, as a whole list of linguists cited in Hancock (1986a) suggest. There are occasional features indicative of Maroon influence, but these appear to resemble ordinary Jamaican creole rather than MSL. Cf.

<u>Krio</u>	<u>Jamaican</u>	<u>MSL</u>
wol "senile, aged" (beside ol "old")	uol "old"	
wogri "affected by an unhealthy unattractive skin condition"	uogli "ugly" ogri/ogli/hogri /ogli	

Hancock's theory is that the similarities between Krio and the Surinam Creoles are

to be explained by the presence of speakers of what he calls Upper Guinea Coast Creole English among the earliest slaves in Surinam. There are however two main drawbacks to this theory.

The first is, as we have started above, that there is no evidence for seventeenth century slave imports to Surinam from Upper Guinea. According to the figures quoted in Price (1976) this area became important only in the second half of the eighteenth century as a source of slaves in the Dutch slave trade. These figures suggest, as we have more than once had occasion to mention, that two-thirds of the slaves hailed from the Slave Coast - the coastal area of present Benin and Togo - (with 2% from the neighbouring Gold Coast - the coastal area of the present Ghana), and one-third from the Congo-Angola region. The figures used by Price are derived from Postma (1976) and are necessarily incomplete as the extant records do not cover all of the slave traffic. However, we must assume that, all other things being equal, they provide a representative picture of the state of affairs as far as slave imports were concerned.

The second problem for Hancock's theory concerns various shared aspects of the Atlantic English-based creoles. Abstracting from syntactic parallels which Bickerton (1977; 1981; 1984) has claimed do not arise as a result of a (partially) shared history, but from the very nature of the creolization process itself, we have numerous lexical similarities that cannot be explained in this way. Among these similarities are a group of lexical items deriving from various African languages. The very variety of languages involved: Wolof, Twi, Yoruba, Ibo, Kikongo and Kimbundu, and the fact that the same set does not occur as such in the Atlantic French-based, Dutch-based, or Portuguese-based creoles suggests that these items formed part of an English-based pidgin spoken along the West Coast of Africa (cf. also Goodman, 1986). These items include those illustrated on the following four pages:

- i) SOSO "only" Source: Igbo sòsò Yoruba: ʃooʃo

Sranan:	sóso	Saramaccan:	sɔsɔ	Ndjuka:	sóso
Krio:	sósó	BG:	sóso	Cameroon:	sóso
Jamaican:	súoso	Miskito Coast Creole:	so-so		
Gullah:	sóso	Bahamian:	soso		

- ii) POTOPOTO "mud" Source: Igbo: pòtòpòtò "wet, muddy"; Twi: pɔ́tɔpɔ́tɔ

Sranan:	potopóto	Saramaccan:	pɔ́tɔpɔ́tɔ	Ndjuka:	potopoto
Krio:	pɔ́tɔpɔ́tɔ	BG:	pátapáta	Cameroon:	pòtòpòtò
Jamaican:	potopóto	MCC:			
Gullah:	potápotá	Bahamian:			

- iii) PINDA "peanut" Source: Kikongo: mpínda

Sranan:	pindá	Saramaccan:	pindá	Ndjuka:	pindá
Krio:		BG:		Cameroon:	
Jamaican:	pínda	MCC:	pinda		
Gullah:	pínda	Bahamian:			

- iv) OKRA "sp. vegetable" Source: Igbo: okwùlù

Sranan:	ókro	Saramaccan:	-	Ndjuka:	ókóo
Krio:	ókro	BG:	okró	Cameroon:	ok(ɔ)rà
Jamaican:	ókro/ókra	MCC:	okra		
Gullah:	okrá	Bahamian:	okra		

- v) NJAM "eat" Source: Wolof: njam
 Sranan: njan Saramaccan: nján Ndjuka: nján
 Krio: njam BG: njam Cameroon:
 Jamaican: njam MCC: njam
 Gullah: njam Bahamian: njam
- vi) MUMU "dumb" Source: Twi: múmu; Ewe: múmũ; Mende: múmú
 Sranan: mumu Saramaccan: Boni: mumu
 Krio: mumú BG: mumú Cameroon: m̀umu
 Jamaican: mumú MCC: mumu
 Gullah: Bahamian:
- vii) KOKOBE "leprosy" Source: Twi: kokobé
 Sranan: kokobé Saramaccan: kokobé Ndjuka:
 Krio: kakabé BG: kʌkʌbé Cameroon:
 Jamaican: kokobié MCC: kuokobé
 Gullah: Bahamian: ko:ko:be

- viii) KONGKOSA "gossip" Source: Twi: ɣkɔŋkɔnsá "falsehood"
- | | | | | | |
|-----------|---------------------|-------------|-----------------|-----------|----------------------------|
| Sranan: | gongosá | Saramaccan: | gongosá | Ndjuka: | gongosáman
(person) |
| Krio: | koŋgosá | BG: | kɔŋgɔsá | Cameroon: | kòŋòsay (Dwyer) |
| Jamaican: | koŋgosé
koŋkoŋsá | MCC: | | | kuŋgusá (Hancock,
1969) |
| Gullah: | | Bahamian: | <u>conjessy</u> | | |
- ix) DJUMBI "ghost" Source: Kimbundu: nzumbi "phantom"
- | | | | | | |
|-----------|------------------|-------------|---------|-----------|--|
| Sranan: | djumbi | Saramaccan: | djombí | Ndjuka: | |
| Krio: | dʒombí | BG: | dʒám̃bi | Cameroon: | |
| Jamaican: | dʒómbi
dʒúmbi | MCC: | dʒómbi | | |
| Gullah: | | Bahamian: | dʒám̃bi | | |
- x) BAKRA "white man" Source: Efik/Igbo: mbakara
- | | | | | | |
|-----------|-----------------|-------------|------------------|-----------|---|
| Sranan: | bákra | Saramaccan: | bakáa | Ndjuka: | bakaá |
| Krio: | | BG: | bákra | Cameroon: | mùkarà
(Dwyer)
bákara (Hancock, 1969) |
| Jamaican: | bókra/
bákra | MCC: | bákra | | |
| Gullah: | bákra | Bahamian: | bákra | | |

- xi) AKARA "pancake" Source: Ewe: akɔ̃; Igbo: àkàrà; Yoruba: àkàrà
- | | | | | | |
|-----------|-------|-------------|------------|-----------|-------|
| Sranan: | | Saramaccan: | akala | Ndjuka: | |
| Krio: | akara | BG: | | Cameroon: | akára |
| Jamaican: | ákra | MCC: | | | |
| Gullah: | | Bahamian: | akára/akrá | | |

- xii) FUFU "sp. food" Source: Ewe: fufu; Yoruba: fùùfù; Twi: fufuú
- | | | | | | |
|-----------|-------|-------------|------|-----------|-------|
| Sranan: | afufu | Saramaccan: | | Ndjuka: | afufú |
| Krio: | fufú | BG: | fufú | Cameroon: | fùfu |
| Jamaican: | fufú | MCC: | fufu | | |
| Gullah: | fufú | Bahamian: | fufú | | |

- xiii) ANANSI "spider" (character in folk tale) Source: Ewe: ananse; Twi: ananse
- | | | | | | |
|-----------|--------------|-------------|----------|-----------|---------|
| Sranan: | anansí | Saramaccan: | ana(n)sí | Ndjuka: | anaínsí |
| Krio: | nansí (torí) | BG: | anánsi | Cameroon: | |
| Jamaican: | (a)nansi | MCC: | anánsi | | |
| Gullah: | (a)nánse | Bahamian: | (a)nánsi | | |

The claim that Wolof provides the source for v) NJAM might seem uncritical in view of the fact that this appears to be a widely shared item in African languages. Wolof is however the only significant language found where we have an exact phonological correspondence.

That this pidgin must have developed in the course of the extensive trafficking along the coast by English ships is also suggested by the evidence in Hancock (1969; 1976) for a significant nautical element in Krio:

cf.	gjáli	"kitchen"	(ie. galley")
	ib	"throw"	(ie. "heave")
	drif	"edge towards"	(ie. "drift")
	kjapsáj	"overturn"	(ie. "capsize")
	bambótgjal	"prostitute"	(ie. "bumboat-girl")

Other creoles have perhaps a less striking nautical element but it is **certainly still present**:

Sranan

drífi	"edge up"	(i.e. "drift")
ári	"draw"	(ie. "haul")
manwári	"warship"	(ie. "man o' war")

Although the African words quoted above come from a wide range of languages from Upper Guinea (Wolof) to Angola (Kimbundu) there is a strong emphasis on the languages of Lower Guinea - in particular with respect to Igbo and Twi, two languages for which we have little reason to suspect the presence of significant numbers of speakers in early Surinam. Uniquely Gbe (Ewe-Fon) items are absent from the above list, while there is reason to believe (see above) that speakers of this group of dialects formed the majority of seventeenth century slaves. However, more striking is the paucity of items reflecting Sierra Leone languages in creoles where there was little Krio influence (as is recorded for example for BG (see above) and Gullah). It is possibly not even necessary to explain the first of these

facts. There are a number of forms that are potentially derived from Gbe in the above list. The second fact combined with the Lower Guinea bias referred to above would be very difficult to explain in terms of a pidgin/creole developed in the Sierra Leone/Gambia region and taken from there directly to Surinam - or for that matter to Barbados and the other islands from which Surinam was colonized.

The most likely explanation of the Twi and Igbo dominance in this collection of African items common to a large number of English-based creoles is that this is a reflection of a variety of the coastal English pidgin spoken in Lower not Upper Guinea. Note that Twi is Gbe's neighbour to the west, while Yoruba and then Igbo are its neighbours to the east. This is another piece of evidence confirming the importance of the Gbe-speaking region as a source of slaves for the Caribbean region. A problem here might be thought to be fact that the English did not possess any forts or trading posts as such in the period at question - around 1650. However we have sources indicating that English was employed by Africans at this period, in this area. Hancock (1969) quotes Barbot 1732 (referring to c. 1679) as finding "good English" spoken by canoemen he met at sea near *Elmina on the Gold Coast*.

The general contact language along the coast of West Africa had been, and continued to be a Portuguese pidgin. With the advent, however, of numerous English trading ships in the seventeenth century, it is likely that an English pidgin took its place alongside the Portuguese pidgin. The precise relation between the two is difficult to recover now but it seems likely that the English pidgin would to some extent resemble the Portuguese in structure, and that the two co-existed for some length of time.

This is presumably the explanation for the presence in a large number of the English-based creoles of such Portuguese-derived items as savvy, palaver, etc.

Let us sum up the preceding discussion. We assume with Hancock (1986a) that the earliest form of pidgin English spoken on the African coast was that dating back to the period around 1600 when settlements of English-speaking traders had grown up in the general neighbourhood of the Sierra Leone and Gambia rivers. As Hancock demonstrates, Krio probably largely derives from this kind of pidgin English. Not

only do a number of Krio-speaking families date back to this early period but many features of present-day Krio can be shown on the basis of early recordings to pre-date the arrival of the Maroon group from Jamaica which is usually assumed to be largely responsible for the present form of Krio.

On various parts of the West African littoral forms of pidgin English are spoken displaying many features in common with Krio: Nigeria, Cameroon, Fernando Po, etc. While the period of introduction of pidgin English no doubt varied, and the picture has been complicated by the wide-ranging nature of the wanderings of Krios themselves, we must assume the early spread of a form of pidgin English around the coast of "Guinea". And the "good English" Barbot encountered off the Gold Coast in 1679 was presumably "good" in the sense that one could understand it, rather than "good" in the sense of "standard".

A piece of evidence suggesting a Lower Guinea dispersal point for a pidgin component represented in most of the English-based creole languages is the existence of a common core of items from an assortment of African languages in these languages contrasting with other African elements that can also be identified in these languages. For instance the Surinam languages display a Gbe component, a Kikongo component, and to a lesser a Twi component; Gullah displays a component deriving from Sierra Leone languages; while Jamaican creole displays a large Twi component. Krio displays a Yoruba component, as well as a Sierra Leone component. These components are not shared however, suggesting that they have a distinct origin from the common component of disparate origin. The languages represented in this common core are preponderantly languages of Lower Guinea rather than Upper Guinea. Igbo and Twi are the most strongly represented, which straddle the Slave coast.

As far as Surinam is concerned this fits in nicely with the fact that two-thirds of the slave imports in the first half century appear (inasmuch as the conclusions reached by Price (1976) are correct) to have originated precisely on the Slave coast.

Rather than agreeing with Hancock that the agreements between Krio and the

Surinam creole are to be explained by both these languages deriving in part from a common component of Upper Guinea Coastal Pidgin, we assume the following scenario. We recognize the historical evidence provided by Hancock (1986a) that a form of pidgin English first established itself in the Sierra Leone region. We assume that this then spread along the West African coast as the result of trade. Krio it is to be noted also shares the above-mentioned common core of predominantly Lower Guinea items (as well as possessing numerous items from local languages and Yoruba). This may mean that pidgin English, after its spread round the West African coast, possessed this common core over its whole geographical extent at some stage; alternately the common core items may have been introduced by the Yoruba speakers who were brought to Sierra Leone in large numbers as freed slaves at the end of the eighteenth century.

The first slave imports to Surinam came predominantly from the Slave coast. We assume that apart from their native Gbe, which survives to-day as a ritual language in Surinam, they also brought with them a form of pidgin English, which contained the common core items from African languages. Features which cannot be explained as a result of Gbe-English bilingualism, such as the replacement of /v/ by /b/ in items of English origin, can be explained as deriving from pidgin English as many of the coastal languages of West Africa - but crucially not Gbe, nor Kikongo - lack a /v/ in their phonological systems.

Note that we are not by any means suggesting that some form of English was spoken by all, or even a significant number of slaves imported into Surinam. Such a suggestion would be preposterous. On the other hand it is probable that an English-based pidgin was spoken to some extent along the West African coast as we discuss above. There does not seem to be any other rational explanation that could account for the presence of what we might call "Ingredient X" - the lexical items of disparate African origin shared to a large degree among most of the Atlantic English-based creoles.

We must of course provide some explanation of how "Ingredient X" came to cross the Atlantic. In this context we regard the suggestion in Goodman (1986) that the small number of slaves that would have some knowledge of West African Pidgin

English in the seventeenth century would have been at a premium on the plantations in the New World. They would have been the obvious choice as interpreters in the early plantation context. As such they would have had an importance far beyond their numbers.

We would claim then that a relatively small number of African Pidgin English speakers had a disproportionate linguistic effect on the early development of the trans-Atlantic English creoles. As well as being responsible for introducing "Ingredient X", they were responsible for introducing a presumably Krio-like form of English into the early colonies, which the later influence of Standard English (or various forms of Standard English) repressed to a greater or lesser degree. This repression was least felt in Surinam, where we find the greatest number of Krio-like features on that side of the Atlantic.

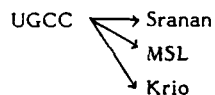
It might be argued that it would be difficult for these "interpreters" to function in a multi-lingual plantation environment. We assume, however, following Goodman (1986) that due to the length of time spent by many slaves in the African slave depots, *lingue franche* based on the coastal languages spoken in the relevant areas had been learnt by most slaves, and that these *lingue franche* were relatively few in number.

- The Surinam creoles, Krio and MSL

How is MSL to be fitted into this picture? The Bilby hypothesis (1983):

? → Proto-Sranan → Pre-MSL → Krio

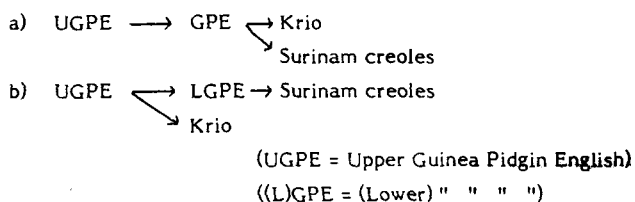
and the Hancock hypothesis (1986a):



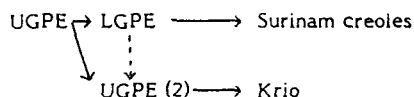
(UGCC = Upper Guinea Coastal Creole)

are both wrong in terms of our reasoning. We have allowed for two interpretations

of the relationship between Krio and the Surinam languages:

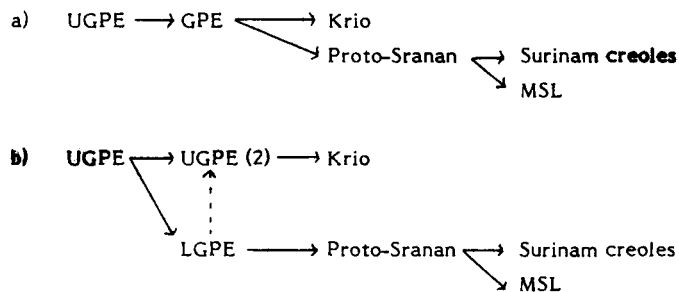


Which interpretation one chooses depends on the status of the common core items in Krio. If these were present in the common African Pidgin English component of the ancestry of Krio and the Surinam creoles then the a) variant would be implied; if their presence in Krio is the result of later Lower Guinea influence upon that language then the pure family tree representation of the situation would be as in b). If we add in transference between branches in the form of loans and so forth, then we would get the following picture of the state of affairs:



We cannot say much concerning the non-phonological relationships of MSL with the Surinam creoles, partly due to the restricted nature of our knowledge of MSL, and partly by reason of the influence of Jamaican creole on MSL as a result of the reduced state of the latter. This is comparable to that of auxiliary languages everywhere, whereby morpheme by morpheme the main and auxiliary languages are virtually parallel, with the auxiliary language exhibiting for the most part the syntactic patterns belonging to the main language. Phonologically, however, MSL exhibits a close relationship to the Surinam languages, a closer one than that which obtains between the Surinam creoles and Krio. While all three share the monophthongization of original English diphthongs, only MSL and the Surinam creoles exhibit consistent vowel-epithesis. While Krio has a number of cases of this also - more than most other English-based Atlantic creoles - there is little reason for imagining that older Krio or even Hancock's Upper Guinea Coastal Creole had

consistent vowel-epithesis. Older sources do not present us with many more cases of vowel epithesis than are visible in present-day Krio although there do seem to be some cases of hypercorrective loss of final /-i/, e.g. /ker/ "carry". We must assume, I think, that the consistent vowel epithesis present in the Surinam languages derives from the confrontation of Pidgin English with the two substrate languages Gbe and Kikongo in Surinam, neither of these languages allowing syllable-final consonants. The third language involved in Surinam - Twi - does allow final nasals, which as we have seen were probably present in earlier forms of Surinam creole, albeit possibly in variation with vowel nasality. In other words it is probably the particular combination of languages spoken by the early slaves in Surinam, and possibly the relative proportions of English and slaves that is responsible for the rise of vowel epithesis. The occurrence of epithesis as such in MSL does not have to imply more than that the early slaves in Jamaica also spoke languages that did not allow syllable-final consonants. However, the fact of the presence of the same irregular cases of epithesis in MSL and the Surinam languages argues for a historical relationship, which can only mean that the common ancestor of MSL and the Surinam creoles were located in one place, either Jamaica or Surinam. As there is no historical record of a movement of slaves from Jamaica to Surinam, while the reverse movement is well-documented, our conclusion would seem to have to be that MSL is, as Bilby suggests, indeed the result of the transportation of slaves from Surinam to Jamaica in the period 1668-1680. The overall picture of the relationships between the Surinam creoles, Krio and MSL would then be in terms of one of the following two diagrams:



((UGPE = (Upper) Guinea Pidgin English; LGPE = Lower Guinea Pidgin English)

We have ignored the possible influence of the Western Maroons on Krio for two reasons. It is uncertain whether the Western Maroons ever spoke anything like MSL, and in the second place what influence can (at the moment) be demonstrated to be derived from Jamaica is more reminiscent of ordinary Jamaican creole. We have also ignored for the moment whatever lies between LGPE and Proto-Sranan, most likely a combination of Barbadian and St. Kitts-Nevis "pidgins" and/or creoles.

The source of the Portuguese element in Surinam

This part of the chapter consists of four sections. The first section comprises a general survey of the discussion in the literature as to the origins of the Portuguese element in Saramaccan. There are basically two viewpoints on this. The first is that it derives from the Portuguese pidgin known to have been spoken on the coast of Western Africa, which was brought to Surinam directly by slaves imported from that region. The second, which represents the position supported in this work, is that the Portuguese element in Saramaccan derives from a Portuguese creole spoken in Brazil and brought to Surinam along with the slaves of the Portuguese Jews who came to Surinam in 1665.

The second section consists of a survey of the items in Schumann's 1783 manuscript of Sranan that are referred to as Djutongo - literally "Jew language". There are two viewpoints on the status of this term. One is that Djutongo is a term with the same reference as Saramaccan. The other, which is the one we favour, is the position we interpret as that of Schumann - that Djutongo applies to a mixed language that arose on the Suriname River plantations in the seventeenth century, and was therefore the language taken to the bush by the ancestors of the Saramaccans. In fact the items qualified by Schumann as Djutongo do not all prove to be Saramaccan - at least Saramaccan as recorded by him in Schumann (1778).

The third section consists of a short study of two sentences, totalling seven words in all, that may be presumed to be written in the Portuguese creole brought to Surinam by the slaves of the Portuguese Jews, and spoken for some time at least on Jewish-owned plantations.

The fourth section is devoted to a study of the provenance of this Portuguese creole. This falls into two parts. Firstly we examine certain conclusions reached in Goodman (1986) concerning the linguistic and historical links between Surinam, Curaçao and Brazil, and in Holm (1986) concerning the vexed question of the existence or not of a Portuguese-based creole in Brazil. Given the historical link between São Tomé and Brazil, in particular in the context of sugar plantations, we assume that a linguistic link must exist between Saramaccan (and Papiamentu) and the Gulf of Guinea creoles, mediated by a Portuguese creole spoken in (N.E.) Brazil and exported, however briefly, to Surinam.

- Theories as to the origin of the Portuguese element in Saramaccan

A question of vital importance for the study of the early linguistic history of Surinam is that of where the Portuguese element present in Saramaccan, and also to a lesser extent in the other Surinam creole languages came from. The study of this question involves two aspects, one linguistic and one historical. Before proceeding to discuss the linguistic aspect we will first consider the historical aspect of the question. In particular we will rely to a great extent on recent work by two scholars - the anthropologist Richard Price, and the creolist Morris Goodman.

Price (1983) is essentially a work collating the available historical evidence with the so-called "First Time" knowledge, i.e. traditional knowledge about people and events ante-dating the peace treaty with the Dutch of 1762. This fund of knowledge is not common knowledge, but is partially known to various older men who function as tradition-bearers, and pass on snippets of their knowledge to suitable younger men over an extended period. Despite this piece-meal method of transfer, First Time knowledge has frequently been proved to conform to what "historical" facts are available through various European historical records and archives. This gives us confidence about the general validity of First Time knowledge that is not backed up by the documentary record.

We are particularly interested here in the foundation stories associated with the

various Saramaccan clans - especially those whose foundation is dated by Price to before 1700 - and their involvement with the Portuguese Jews. All the facts mentioned hereunder, unless otherwise specified, are from Price (1983).

The senior clan - the Matjáú clan - claim that the first large-scale breakout from a plantation took place a plantation on the Cassewinica Creek, a tributary of the Commewijne River. This breakout was stimulated by a group of escaped slaves hailing from the Waterland plantation on the Suriname River. In Nassy (1788) a revolt on a plantation on Cassewinica Creek (about twenty miles from the Jewish "capital" - Jews' Savannah) is recorded as having taken place in 1690. The plantation concerned belonged to a Jew called Immanuel Machado. Price observes that the Matjau get their name from the surname Machado. This is confirmed by the fact that the Saramaccan word for "axe" is also /matjáú/ from Portuguese machado "idem".

Another important Saramaccan clan are the Nasís. Price dates their foundation to the 1690's. They derive their name from the most prominent Jewish family in Surinam, the Nassys. The particular plantation the first slaves of this clan escaped from was on the Cassipora Creek, at the mouth of which Jews' Savannah is situated, where it joins the Suriname River.

The small(er) clan the Biítu is closely associated with the Nasís. Price does not provide an estimate of when the Biítus escaped, but they came from a plantation owned by the Portuguese Jewish Britto family, near the home plantation of the Nasis.

The beginning of the Awaná clan are also dated by Price to the 1690's. The Awaná and the Bákapau - who have always been associated according to Price - came from neighbouring plantations. The source plantation of the Bákapau clan is identified by Price as Touluy Fait on the west bank of the Suriname River below the mouth of the Para River. The plantation the Awaná come from was owned by a certain Tobias. Price does not identify any specifically Jewish connection in this case.

Another important clan whose formation is placed in the 1690's are the Lángu

whose name is derived from the kingdom of Loango which was located in the area corresponding to the north of the present Zaire. Two main sub-clans - the Kaapátus and the Kadósus - trace their descent respectively from Kaási who supposedly escaped from a plantation on the Para River, and from Wíi who had been the slave of a certain Cardoso - a Portuguese Jew. The Kaapátus' name is identical to the Saramaccan word kaapátu "tick" from Portuguese carapato "tick". The name Kadósu is obviously derived from Cardoso. Price quotes a document of 1730 listing the plantation origin of twelve Kaapátus that had been recaptured. At least seven of these had had Portuguese Jewish owners, six of whose plantations lay on the Suriname River, while the seventh was situated nearby, near the headwaters of the Cassewinica Creek.

The founders of the Abaísa clan revolted, according to archival evidence, in 1693 at Providence plantation far up the Suriname River. They take their name - as Price observes - from the Labadist religious community who ran the plantation.

In short there is a lot of evidence, not all of which I have cited, to associate the beginnings of the Saramaccan tribe with Jewish owned plantations. The claim by Herskovits (1931) and Voorhoeve (1973) that the Portuguese elements in Saramaccan *can not have anything to do with the Portuguese Jews*, since slaves did not only escape from Jewish plantations can be seen to be devoid of substance since Price demonstrates precisely that Portuguese Jewish plantations played a very significant role in the escapes that led to the formation of the Saramaccan tribe. We will examine Herskovits' and Voorhoeve's arguments in more detail below.

Morris Goodman - in a lengthy article (Goodman, 1986) entitled "The Portuguese element in the American Creoles" goes into great detail on the theories of creolization involving this element, and the historical data relevant to these. In particular he attacks the idea, implicit in the monogenetic theory of creolization that all or most of the slaves imported to the Americas had acquired some knowledge of Pidgin Portuguese while waiting in the slave depots of West Africa. This theory assumes that all creole languages have arisen as a result of various degrees of relexification of West African Portuguese Pidgin (WAPP) (Thompson,

1961; Taylor, 1961; 1963; Stewart, 1962). Saramaccan has played an important role in this theory as the prime (and only significant) example of a language caught by the historical circumstances surrounding its birth halfway through this process of relexification. Saramaccan is seen, notably by Voorhoeve (1973), as being distinct from Sranan in that its speakers were removed or rather removed themselves from the relexifying influence of English before relexification could reach the stage of near-completion it attained with Sranan.

We give below Voorhoeve's comparative vocabulary list of Sranan, Ndjuka and Saramaccan. This shows the higher percentage of Portuguese-derived items present in Saramaccan as compared to the other two languages.

Percentages of 200-word Basic Vocabulary List according to Voorhoeve (1973)

<u>Origin =</u>	<u>English</u>	<u>Portuguese</u>	<u>Dutch</u>	<u>African</u>	<u>Total</u>
Sranan	118 (76.62%)	7 (4.55%)	25 (16.23%)	4 (2.60%)	154
Ndjuka	166 (80.56%)	5 (3.47%)	20 (13.89%)	3 (2.08%)	144
Saramaccan	72 (53.73%)	50 (37.31%)	6 (4.48%)	6 (4.48%)	134

(based on Voorhoeve (1973)) (NB. Percentages are in terms of identified etymologies)

Using a slightly emended list, and counting multiple appearances of the same word separately, and multiple sources for the same item as fractions, we arrive at the following slightly different figures:

<u>Origin =</u>	<u>English</u>	<u>Portuguese</u>	<u>Dutch</u>	<u>African</u>	<u>Total</u>
Sranan	145.92 (77.14%)	7 (3.70%)	33.25 (17.58%)	3 (1.59%)	189.17
Ndjuka	136.50 (76.47%)	9 (5.04%)	28.50 (15.97%)	4.50 (2.52%)	178.50

Saramaccan	89.61	62.59	18.75	8.50	179.4
	(49.94%)	(34.88%)	(10.46%)	(4.74%)	

(NB: Percentages are in terms of identified etymologies)

This last set of figures underestimates in all likelihood the African contribution as a number of African items probably remain to be identified, but the Portuguese contribution is probably fairly accurately represented vis-a-vis the English contribution.

Goodman makes the important suggestion that the slaves did not learn Portuguese pidgin in the slave depots, but learned instead the local language to some extent - as he suggests, the locales of these depots were linguistically homogeneous - Gbe on the Slave Coast, Twi on the Gold Coast, and Kikongo and Kimbundu in the Congo-Angolan coastal region, to restrict ourselves to the areas involved with the Dutch trade in the second half of the 17th century. As he says, there was little direct contact between slaves and whites in the slave depots, contact with the whites being in general restricted to the local African servants and middlemen who were involved in the slave trade.

As we have stated above only two cases have been made against the Portuguese influence in Saramaccan being (significantly) derived from the Portuguese Jews. Herskovits (1931) adduces two pieces of evidence against this position. The first piece of evidence comes from a letter sent to Schuchardt and quoted in his (1914) article. This came from J. Kersten, a missionary in Surinam (around 1884), and stated that all the Bush Negroes spoke essentially the same Negro-Portuguese.

As Goodman says, Herskovits himself noted that this was not the case in his day, and there is no reason for assuming that it ever was the case. Goodman is also strongly dismissive about Herskovits' second argument, which concerns the existence of two ultimately Hebrew words in Sranan, but not in Saramaccan. These are /tréfu/ "food taboo" and /kaséri/ "ritually clean". Herskovits poses the question of why, if the majority of the original Saramaccans had hailed from Jewish-owned

plantations, these two items are not in Saramaccan. As Goodman says, apart from the danger of basing drastic conclusions on the presence or absence of two lexical items, there is no guarantee that these words have been in Sranan from the beginning - they could have been taken over after the Saramaccan language had been developed. /kaséri/ is absent from both the oldest published dictionaries of Sranan, observes Goodman, and it is also absent from Schumann's 1783 manuscript dictionary, as Kramp's (1983) edition of this reveals. /tréfu/ is much older, or least its attestation has a longer history, with sources going back to Stedman (1772-1777).

Herskovits' alternative exploration for the presence of Portuguese items in Saramaccan is plainly preposterous, as Goodman terms it. He suggests that these Portuguese items entered the language via Gbe (Ewe-Fon) and other African languages. However, there is no trace of many of the items concerned in likely African languages, and as Goodman remarks, no African language has borrowed from Portuguese the kind of basic items appearing in Saramaccan. Furthermore, the African borrowings tend not to be in the basic portion of the lexicon, but in more culture-bound domains, as Voorhoeve also points out. In any case why would we have 34.88% Portuguese items via African languages in our list, while only having 4.74% African items from these languages themselves? This would be a most unexpected result.

Voorhoeve, however, still accepts Herskovits' basic premise, that the Portuguese items in Saramaccan had nothing particular to do with the fact that there were Portuguese Jewish plantations in Surinam, clustered particularly on the Suriname River. Like Herskovits, he saw no particular reason why the slaves who were to form the Saramaccan tribe should have fled especially from the Jewish-owned plantations. Herskovits asks himself whether our historical knowledge could justify the assumption that this was the case. In fact at that time there was no historical knowledge that was really relevant one way or the other. Voorhoeve's observation that during the Indian uprising of 1678, when a large proportion of the colony's slaves escaped, the Jewish-owned plantations were better defended so that more escapes would tend to take place from non-Jewish plantations could only be shown to have relevance if it could be demonstrated that this was the moment of creation

of the Saramaccan tribe. As we now know, as a result of the facts, or presumably at least a reasonable approximation to the facts, contained in Price (1983), it is virtually certain that the first large group that formed an input to the Saramaccan tribe originated on a Jewish-owned plantation in 1690 (see above), while of four other major clans that had their origins in the 1690's, two at least - the Nasí and Lángu clans - had clear Portuguese Jewish connections.

Price (1984) also points out the specifically Jewish aspects of the Saramaccan calendar. It is inconceivable that these could arise in other than a Jewish environment.

When we combine these facts with the persistent association by various observers of the Portuguese elements in Saramaccan with the Jewish-owned plantations within Surinam itself the case becomes so strong that alternative explanations must be rejected. The first report referring to the linguistic habits obtaining on the Suriname River is that quoted in Price (1976) deriving from an eighteenth century German missionary:

"The language of the town [Paramaribo] Negroes is quite a bit different from the language of the [Suriname River] plantation Negroes. They [the latter] have many broken Portuguese words. They can describe different things in three or four different ways (Staehelin 1913-19, III(1): 75-76)"

Next we have the observations of Hartsinck (1770), quoted by Goodman, who ~~says~~ says that the Saramaccan tribe was reinforced...

"from time to time, by fresh escapes from our plantations, especially from the Jews: for which reason they add a broken Portuguese to their Negro English language."

A third source from the eighteenth century is Schumann (1783), which appears in Kramp (1983):

"Djutongo (i.e. Jew-language) is what the Negroes here call the Negro language mixed with Portuguese. The Saramaccans have Djutongo". (p.85) "In town [Paramaribo] they do not use the word bringi so much; it is Djutongo: but many plantations use it." (p.69)

From these quotations we can see that one accepted opinion regarding the question at issue was the following:

- a) on the Suriname River a different form of language was spoken, containing many "broken" Portuguese words.
- b) this form of language was referred to as Djutongo - Jew-language.
- c) the Saramaccans spoke a form of Djutongo.

That the second proposition was in fact probably the case, and Djutongo did not simply and solely mean Saramaccan as Voorhoeve (1973), and following him, Kramp (1983) assumes, is supported by a third statement to be found in Schumann (1783) (Kramp, 1983):

""krija" to nurture is Djutongo; but still we use it often.
Saramaccan Negroes say "kilja""

This suggests that the primary significance of the expression "Djutongo" was not the language of the Saramaccan tribe, but the form of language employed on the Suriname River.

Wullschlagel (1856) has this to say on the question in the introduction to his Sranan dictionary:

"The first settlers of Surinam were partly English-speaking, and partly Portuguese-speaking Jews who had immigrated from Brazil and Cayenne. Both groups spoke to their numerous Negro slaves in their own language, which were only imperfectly comprehended and spoken by the Negroes, who had originally belonged to various

African tribes, which each had their own dialect. So from the beginning there developed among the Negroes of the colony two new, different languages, Negro-English and Negro-Portuguese, which different as they might have been originally, in time came to complement each other and had many words and expressions in common. The latter language, originally a debased Portuguese, was spoken on the numerous plantations belonging to Jewish owners and has now nearly disappeared from the colony, with the prosperity of those who introduced it. It is now only spoken by a tribe of free Bush Negroes, the so-called Saramaccans on the upper Suriname (River), who mostly derive from the plantations just mentioned, and who at the conclusion of the peace in 1760 lived in the forests on the upper Saramaccan (River), deep in the interior, but today have their domicile on the upper Suriname (River). These Saramaccans, among whom we have had a mission for nearly a hundred years, learn and understand Negro-English as well as their own "Djoe-tongo" (Jew language), or at least those of them who are in contact with the actual colony.

As will become clear below, we consider that Wullschlägel's account is *extremely* close to the truth of the matter.

We are in agreement with Goodman's opinion that the Portuguese Jews brought slaves with them who spoke a form of Creole Portuguese, but that this quickly died out after it had significantly influenced the English-based creole that was spoken on the Suriname River, which then became known by the name of Djutongo. This process of influencing must have been complete by 1690 when the Saramaccan tribe was formed, otherwise it would not have been possible to state that the Saramaccans spoke Djutongo. In any case the Saramaccan clans have separate histories of escape and movement up-river. If the language had not existed as such prior to the period of escape it is difficult to explain the relative uniformity of Saramaccan. This cannot be ascribed to later merging of initially more varied clan dialects as the Matawai split off from the other clans in the 1730's less than forty years after their foundation, while their language remains only dialectally distinct

from Saramaccan. This Portuguese-based creole is also assumed to have been introduced by the Portuguese Jews by Schuchardt (1914) and Rens (1953), as well as Wullschlägel (1856), (see above). Rens specifically concludes:

"We may, therefore, safely conclude that a pure NP [Negro Portuguese] (as was spoken for instance in Brazil) was practically never heard in Surinam, the process of disintegration having begun as soon as the Cayenne slaves settled down in the colony, and that in a few decades what remained of the NP tongue was a number of words, groups of which were constantly becoming obsolete and disappearing from use, while the structure of the tongue was superseded by that of NE [Negro English]"

We will turn aside now and examine the material that Schumann (1783) claims to represent Djutongo or Jews' language.

Djutongo

Voorhoeve (1973), and following him, Kramp (1983) assumed that Djutongo was to be equated with Saramaccan. Voorhoeve arrived at this conclusion by making an error of logic. He took Schumann's statement that the Saramaccans spoke Djutongo, and turned this round suggesting that Djutongo therefore referred solely to Saramaccan. In fact as we saw in the previous section the sum of what Schumann has to say on Djutongo can only be reconciled with the position that both the Saramaccan tribe, and a number of plantations (presumably mostly on the Suriname River) spoke the mixed language referred to as Djutongo. Wullschlägel (1856) suggests this, and more recently it represents the position adopted by Price (1976), as well as Goodman (1985).

Schumann (1783) (in Kramp, 1983) gives nineteen expressions that he qualifies as being Djutongo

- | | |
|-----------|------------------|
| - adjabre | "lie, to lie..." |
| - affitùh | "constipation" |
| - bae | "red, yellow" |

- bassia	"bend down"
- bika	"because"
- bringi	"bear (young)"
- bruija/ - bulja	"confuse"
- buija	"quarrel"
- fikka	"remain.."
- frementu	"yeast"
- fruta	"fruit"
- glua/grua	"raw.."
- krijà	"nurture..."
- mai	"mother"
- paai/pai	"father.."
- panja	"scatter.."
- plattiri	"midwife"
- /plattérin	
- tanga	"pliers"
- faija tanga	"fire tongs"

If Djutongo were equivalent to Saramaccan, we could expect to find these items in his Saramaccan dictionary (1778), but although we find most of them, a fair number are absent, while others have slightly different meanings.

Schumann (1778) contains:

adjabre, bae, bassia, bikà, bulja, búja
fikka, fruta, glua/grua, kiljà, mai, pai,

In other words only 12 of the 19 expressions recorded as Djutongo in Schumann (1783) appear in Schumann (1778). The only significant differences of form appear to be the following:

<u>Djutongo</u>	<u>Saramaccan</u>
bruija/bulja	bulja
krijà	kiljà

At least three items display significant differences in meaning:

1. <u>bruija/bulja</u>	DT: confuse
	Sar: delay; stir

2. <u>mai</u>	DT: mother Sar: mother-in-law
3. <u>pai</u>	DT: father Sar: father-in-law, daddy

By no means all these words are of Portuguese origin, betraying again the mixed nature of Djutongo. Four items are of English origin (we give here the source not the meaning):

- bika	because
- bringi	bring
- tanga	tong(s)
- faija tanga	fire-tong(s)

The item bringi is of particular interest as it is only recorded elsewhere in Surinam in Kwinti, as /bríngi/ (G. Huttar, per.comm.).

Three items have other sources. bae, as we have seen in the previous chapter, is of possible Gbe origin. adjabre "lie" could represent a compounding of Fon /àja/ "report, conflict" and /blɛ/ "deceive, cheat", and so is also possibly of Gbe origin. The third form - affitùh - is of unclear origin.

In other words, we can at least see that Djutongo contained African, English and Portuguese components, just like Saramaccan.

The only logical explanation for the differences we observe here between Saramaccan and Djutongo, in lexical items, and where these are the same, in phonological shape, and/or meaning, is that these two had grown apart by reason of their physical separation, a thoroughly normal state of affairs.

- Remains of the Portuguese Creole

At this stage it becomes relevant to ask if there are any traces of the original Portuguese-based creole that we - following Wullschlägel, Schuchardt, Rens and Goodman - assume to have been spoken on Portuguese Jewish plantations in the years immediately following the arrival of the Jews in 1665. The answer is "Yes, but minimally".

Wullschlägel (1856) gives a long list of Sranan proverbs, two of which seem to provide us with Portuguese creole sentences.

The first - Moendoe bira: joe teki pari, poeloe pondoe - means according to Wullschlägel "The world is turned upside down: you use the paddle and row the pontoon", which has the metaphorical meaning "you have to make do as best you can in this troubled world. Teenstra (1835) gives a slightly corrupt version of the same proverb - moetoe bira, ji taki pari poloe pondo - explicitly referring to this as a Jewish slave proverb. However the Portuguese-derived items mundu and bira in this proverb occur also in Saramaccan, making the identification of these two words as a Portuguese creole sentence not quite certain.

The second - Praga beroegoe no mata caballo - is tentatively identified by Wullschlägel as Portuguese creole, which identification is confirmed by Schuchardt (1914). Goodman is led by the Sranan equivalent supplied by Wullschlägel - bari vo ouroe-koekoe no de kili hasi which means literally "the screeching of an owl will not kill a horse" - to believe that this must be the translation of the Portuguese creole version. However the Sranan proverb is only the functional equivalent of the Portuguese one, not its exact translation.

There are equivalents of this proverb in other Portuguese-based creoles that reveal what the literal meaning is.

a) Creoles

Sranan:	bari vo ouroe-koekoe no de kili hasi (the screeching of an owl will not kill a horse)
Senegal Port.creole:	prága di búru ka-ta-çiga na séu (Chataigner, 1963) (the curse of an ass does not reach heaven)
Papiamentu:	bos di buriku no ta yega shelu (Römer, p.c.) (the braying of an ass does not reach heaven)

The Surinam Portuguese Creole proverb appears to resemble the other Portuguese creole versions as far as the initial portion is concerned, and the Sranan version as far as the final portion is concerned.

b) Surinam Portuguese creole:

SPC:	praga beroegoe no mata caballo (the curse of an ass/will not kill a horse)
-------------	---

This proverb is familiar from European languages (Gluski, 1971)

c) European languages:

English:	the braying of an ass does not reach heaven
French:	priere de fou n'est point écoutée
German:	Katzengebet geht nicht in den Himmel
Italian:	raglio d'asino non entrò mai in cielo
Spanish:	oración de perro no va al cielo
Russian:	sobaka laet, veter nosit

Contrary to what Goodman says regarding this proverb, the Surinam Portuguese creole version does not display a different order of head and adjunct in the subject NP from Sranan and Saramaccan. Where it does differ from Sranan, and the other two Portuguese creoles, is that no preposition separates the head from the adjunct. Another point of difference from all the other creoles is that no durative particle is present. The fact these two grammatical words - presumably present in the original - are missing is perhaps not too significant. How can we be sure that this proverb, recorded in the nineteenth century, is an accurate representation of a language that can be presumed to have been obsolescent in the eighteenth century?

What is significant is that this proverb, unlike the first one, contains words derived from Portuguese that do not appear to have been present in Djutongo or Saramaccan.

- <u>praga</u> "curse"	Port. <u>praga</u>
- <u>mata</u> "kill"	<u>matar</u>
- <u>caballo</u> "horse"	<u>cavalo</u>

Another difference concerns the form of the word "ass". This appears as beroegoe in Surinam Portuguese creole, as compared to /buríki/ in Sranan, and /bulíki/ in Ndjuka and Saramaccan. The Portuguese burrico - phonologically /buríku/ - is not directly relatable to either what can be assumed to be the early Sranan form /*buríki/, or the SPC form, which may be interpretable as /*burúgu/, although we might rather have expected /*burúku/. Both developments could be assumed to be the result of vowel assimilations based on a form /*buríku/, possibly the original SPC form. The form beroegoe, if this does in fact represent /burúgu/, may be a later corruption.

Goodman, noting the fact that the Portuguese derived items in this proverb do not occur in Saramaccan, is concerned about the orthography, which in the case of caballo, could, he thinks, imply a Spanish source. His main concern involves the ll, but Wuilschlagels' usage of single and double letters in Sranan words probably has no particular significance, so that in fact this does not represent a problem. The b for /v/ is quite normal as we have seen.

This proverb, as it stood, presumably represented the following phonological structure:

/prága burúgu no matá kabálo/

- Portuguese creole in Brazil?

If we are to assume that the Portuguese Jews brought with them slaves speaking a Portuguese-based creole, of which the two proverbs quoted in the previous section represent the only direct source, then they must have brought this creole from a Portuguese creole-speaking region - presumably Brazil - and as we shall see, the position that a Portuguese creole was spoken in Brazil is not one that is universally accepted.

Goodman (1986) provides the following sketch of the provenance of the Portuguese Jews of Surinam.

"However, in 1664-5 a group of approximately 200 (Voorhoeve 1970, p. 56), accompanied by some slaves, arrived from Cayenne, after its capture by the French; they had settled there in 1659, when it was a Dutch colony. These, like their counterparts in Curaçao, who arrived there in the same year, were refugees from Brazil, who left that country in 1654 (when the Dutch were ousted) and had gone to Holland. Shortly after immigrating to Cayenne they were joined by Spanish and Portuguese-speaking Jews from Leghorn (Livorno). After the Dutch conquest of Suriname their community was strengthened by additional predominantly Sephardic immigrants from Holland."

However, this picture must be modified somewhat in view of the account given by Rens (Rens, 1982), and summarized by us in Chapter One. While it is not clear just how many of the Portuguese Jews in fact hailed from Brazil, and how many had come from Leghorn, it is obvious that the main body of their slaves must have

come from Brazil. And it is of course with the language of the slaves that we are concerned.

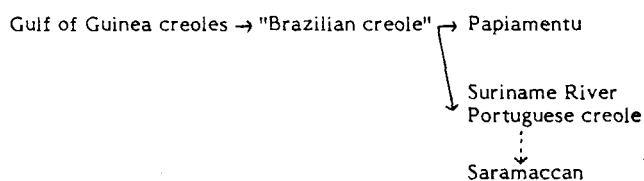
Holm (1986) provides a good discussion of the pros and cons of the debate concerning Portuguese creole in Brazil. He concludes that the available evidence indicates either that Popular Brazilian Portuguese itself has developed out of a Portuguese creole, or that it was deeply influenced by a Portuguese creole. He reaches this conclusion for a combination of historical and linguistic reasons:

- Although the proportion of blacks in Brazil did not reach 50% until 1770, more than 200 years after the first settlement of the country, there were areas - particularly in the North-East - where the slaves must have formed an overwhelming majority, for example in the labour-intensive environment of the sugar plantations.
- Many of the sugar-planters had emigrated from São Tomé, as a result of the depredations of the maroons, and slave uprisings. This immigration took place around 1600 (Ferraz, 1975)
- Holm, Goodman, Valkhoff (1960), and Hancock (1969) see Papiamentu as a hispanicized Portuguese creole. Goodman demonstrates that there were social and political relations between Curaçao and New Holland (NE Brazil) from an early period. The first sizable group of Jewish refugees from Brazil arrived in Curaçao in 1659. These Jews presumably brought some slaves with them. In addition the Jews were the only private citizens allowed to buy slaves till 1674. The West India Company had an exclusive contract to supply slaves to the nearby Spanish colonies until 1713. After 1674 private individuals were also allowed to participate in this export market, and gradually the number of slaves owned by private individuals overtook the number owned by the West India Company. Goodman concludes that as there is reason to believe that Dutch refugees from Brazil played a major role in running the island, and its slave camps, and since, as stated above, the only private citizens allowed to buy slaves till 1674 were Jews, while after that date when all private citizens were allowed to participate in the export slave trade, many of the non-Jews involved were probably Dutchmen from Brazil, it is hardly surprising that a creole Portuguese should become the general slave language spoken on

Curaçao. The rapid hispanicization of Papiamentu, which has led some people to believe that it represents a Spanish-based creole, came about for two reasons. Firstly the widespread trading contacts with the Spanish, who came to Curaçao to collect slaves, and secondly the immigration of Spanish as well as Portuguese-speaking Jews from Holland. Sephardic Jews came to form the majority of the population of Curaçao during the middle portion of the eighteenth century.

- Holm quotes the evidence of phonological, morphological, and syntactic simplification in Popular Brazilian Portuguese, as a possible indication of a post-creole phase, or of direct influence from a creole.
- Modern Brazilian Portuguese displays the same "palatalization" of dental stops ($t \rightarrow tʃ$, $d \rightarrow dʒ$ / ___ i) as do the Gulf creoles, including São Tomé creole. This palatalization is not however present in either Papiamentu or Saramaccan.

It is clear that, if we can demonstrate relationships at a phonological level between Saramaccan and Papiamentu, or between Saramaccan and the Gulf of Guinea creoles, by doing so we provide evidence for the following set of relationships hypothesized in the preceding sections.



We have identified a number of such parallels in the previous chapter.

- 1) In our discussion of the reflex of unstressed Portuguese /e/ in verb stems (pp.78/412) we demonstrated that there were significant parallels in the development of this to a high or mid vowel in the various Atlantic Portuguese creoles. Depending on the conjugation vowel - i, e, or a - assimilation of vowels does or does not take place, and the results of this are in particular in agreement in Saramaccan, the Gulf of Guinea creoles, and Papiamentu.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>Gulf of Guinea</u>	<u>Papiamentu</u>
-ir	i	i	i
-er	ɛ/e	e/ɛ	e
-ar	e/i	ɛ/e/i	e

A strong **correlation** is **even** evident within the -ar group as to whether a high or a mid **vowel** appears, as between Saramaccan and the Gulf of Guinea creoles.

- 2) Similarly Saramaccan agrees with certain of the Atlantic Portuguese creoles in displaying an /i/ instead of the expected /e/ in the conjugation vowel of a number of forms (pp. 79/389/415). As we have argued that the simple forms are to be derived from Portuguese infinitives, we would not expect to have /i/'s here in the first instance. We have argued that these forms result from the levelling of the - vastly reduced - paradigms occurring in basilectal creoles. The /i/ that we find in these forms comes from the normally only other occurring form - that of the past participle, which in Portuguese is in - ido for these verbs. That such analogical formations occur in Saramaccan, where we do not have any trace as such of past participle forms, is a strong indication that the Portuguese forms in Saramaccan derive from a creole. Such forms occur in the Gulf of Guinea creoles, and in Papiamentu, as well as in other Portuguese-based creoles such as those of Guine and Senegal.
- 3) Portuguese nouns in -o have this final vowel pronounced [u]. In Saramaccan we find a number of forms, in particular, in /..íCo/ and /..óCo/ which deviate from the rule in Portuguese (pp. 80/430). In the Gulf of Guinea creoles, although the inexplicable /i/ forms are not paralleled, we do find, especially in São Tomé creole, the assimilatory cases in /o/. In Papiamentu /-o/ forms are widespread, but here the picture has been completely confused by the vast influence this language has undergone from Spanish.
- 4) As we have demonstrated at length (pp. 80/470) there are significant parallels between the developments of the diphthongs in Portuguese words in

Saramaccan, and the Gulf of Guinea creoles. There are three distinctive environments:

		/__ #	/__ C [+palatal]	/__ C [-palatal]
/ai/	Saramaccan	ai	a	ai
	Proto-Gulf	aj	a	
/ãe/	Saramaccan	ai		
	Proto-Gulf	ãj		
/au/	Saramaccan	au		
	Proto-Gulf	aw	a	a
/ão/	Saramaccan	ãũ/ã		
	Proto-Gulf	ãw		
/oi/	Saramaccan			we
	Proto-Gulf	we	o	we

(assuming a change in Principle of /ai/ to /oi/ following labials)

The only strictly comparable cases are those enclosed within boxes. The diphthongal reflexes in final environment in Saramaccan, and reconstructed Proto-Gulf, the monophthongal reflexes of /ai/ before a palatal consonant, involving as it were absorption of the /i/ in the palatal, and the reflex /we/ of /oi/ before a nonpalatal consonant, are still however striking parallels.

- 5) There is a general parallel to the Atlantic Portuguese creoles in that the reflexes of Portuguese /v/ display a confusion between /b/-reflexes and /v/-reflexes, presumably reflecting a situation whereby the reflex was /b/ in the original Atlantic pidgin, and the various creoles have undergone various degrees of lusitanization (pp. 68/184). Alternatively the /b/-reflexes may be explicable in terms of the dialectal confusion of /v/ and /b/ in favour of /b/ in certain varieties of Portuguese. Either way there is a parallelism between Saramaccan and the Portuguese creoles, in type at least if not in token.
- 6) Saramaccan shares with the Gulf of Guinea creoles the reduction of intervocalic Portuguese /st/ to /s/ (pp. 74/210). This does not occur however in the Papiamentu reflexes of the relevant items, where /st/ regularly appears.

- 7) There is a general pattern of reduction of Portuguese words in esC... which varies according to the stress pattern (pp. 75/233). If the high tone in Saramaccan corresponding to the Portuguese accent is located in the syllable following the C (ignoring the subsequent loss of liquids in Saramaccan), the initial Portuguese e is dropped and an epenthetic vowel inserted between the /s/ and the following C. If this high tone is situated in a later syllable, not only the vowel, but also the /s/ is dropped. In the Gulf of Guinea creoles this pattern largely holds also, disturbed principally by later borrowings from Portuguese. In Papiamentu there are only slight traces of this pattern to be seen, and the same holds for Cape Verde creole.
- 8) While the normal development of older Portuguese /tʃ/ (ch) and /dʒ/ (j/g) in Saramaccan is to /tj/ and /dj/ respectively, in contrast to the Gulf of Guinea /s/ and /z/, there are traces of an older reflex /z/ in Saramaccan (pp. 76/259).
- 9) Saramaccan, the Gulf of Guinea creoles, and Papiamentu share the development of Portuguese /gw/ to /w/ (pp. 76/267).
- 10) The treatment of final /..ju/, whether from Portuguese ..lho or ..io, such that the final /u/ is dropped, is common to both Saramaccan and the Gulf of Guinea creoles (p. 327). Papiamentu does not appear to have any clear examples, while the other Atlantic Portuguese creoles do not appear to possess this feature.
- 11) Certain items with intervocalic liquids straddled by non-identical vowels appear to involve a Portuguese or Portuguese pidgin model where the pretonic or pre-high tone vowel has been deleted (pp. 77/320/322). A number of such items appear to be shared between Saramaccan, the Gulf of Guinea creoles, Papiamentu, and occasionally other Atlantic Portuguese creoles.

Portuguese	Sara- maccan	1778	São Tomé	Principe	Papiamentu	Cape Verde
buraco	baáku	bláku	bláku	ubáku	(buráku)	bráku
lacerar	-	lassarà	-	-	lástrà	-
aborrecer	buusé	brussèh	blosé	-	burusí(du)	(burisé)
escorregar	koogá	krokka	klɔgá	-	-	(skoregá)

- 12) The irregular truncation of the frequently occurring items falar "to talk" and quer/querer "to want" appears to be restricted to Saramaccan, the Gulf of Guinea creoles, and Papiamentu (pp. 78/320). Insofar as reflexes are available from other Atlantic Portuguese creoles, these all appear to involve the normal longer forms.

Portuguese	Sara- maccan	1778 São Tomé	Principe	Annobon	Angolar	Papiamentu
falar	fan	fa	fa fá fla falá		fa	-
querer	ké	kêh	-	ke	falá	ke

Günther (1973) states that /fa/ is the older of the two forms of Principe.

- 13) The older Portuguese variant form gumitar of vomitar is reflected in Saramaccan, the Gulf of Guinea creoles, Papiamentu, and the Cape Verde dialect of Fogo (p. 74).

Portuguese	Saramaccan	São Tomé	Papiamentu	Fogo
vomitar	gumbitá	gumitá	gumitá	gumitá

- 14) Saramaccan shares with Papiamentu the development of a /k/ from a /g/ in the item barriga "belly" (p. 286):

Saramaccan	1778	Papiamentu
baíka	barika	baríka

- 15) The irregular development of Portuguese /g/ to /w/ in the item agora "now" is shared by Saramaccan, the Gulf of Guinea creoles, and Papiamentu (pp. 76/287):

Saramaccan	Principe	Papiamentu
awá(a)	wá	awó/awór

These phonological developments are, we believe, strongly indicative of two things.

Firstly, they represent confirmatory evidence that the Portuguese part of Saramaccan's heritage was not strictly Portuguese as such, but belonged to a Portuguese creole, of which the only probable directly surviving remnants consist of two "Sranan" proverbs. Further, they suggest that there are indeed significant connections between Saramaccan and the Gulf of Guinea creoles on the one hand, and between Saramaccan and Papiamentu on the other hand. These connections can only have involved the "missing link" of a Portuguese creole spoken in NE Brazil.

Mixed creoles - what do they tell us?

While the sources of creole vocabulary are frequently very varied - often, by reason of the travels undertaken by many of their speakers, even more varied than many languages with more normal histories - there is nothing per se that is inexplicable about languages deriving elements in their vocabularies from the most far-flung sources. However, when we consult a list of "basic" vocabulary - however so defined - we usually find however much less variety of source among the items present. And finally if we restrict our examination to function words, or grammatical words, we usually find the non-native words sticking out like sore thumbs, so rare are they.

There are a number of creole languages that display great variety in the sources of their basic vocabulary - we shall avoid the problem-laden word "loan" in this discussion - such that there seem to be a number of significant sources involved. In a number of cases we find, in addition to items from the so-called matrix language or the language supplying the majority of basic morphemes, vocabulary items derived from other languages that replaced the matrix language as language of administration, or general language among the higher strata of the population, as for example in the case of Surinam.

This can be illustrated by the cases of Sranan and Ndjuka. Calculating percentages only on the basis of items in the Swadesh 200-word basic vocabulary list whose source can be identified, we reach the following results:

	<u>English</u>	<u>Portuguese</u>	<u>Dutch</u>	<u>African</u>
<u>Sranan</u>	77.14%	3.70%	17.58%	1.59%
<u>Ndjuka</u>	76.47%	5.04%	15.97%	2.52%

The Portuguese and African contributions in these two cases can be disregarded for the moment as not being of great significance. English is the matrix language. In what terms are we to describe the sizable Dutch component? The answer is of course obvious. The Dutch took over the running of the originally English colony of Surinam in 1668, leading to the presence of a significant number of Dutch items in these two languages.

In other cases however, we find a significant element whose presence can not be explained in this way. We are aware of only two such cases at the moment, Saramaccan in Surinam and Berbice Dutch in Guyana.

	<u>English</u>	<u>Portuguese</u>	<u>Dutch</u>	<u>African</u>
<u>Saramaccan</u>	49.94%	34.88%	10.45%	4.74%

The Dutch presence can be explained in similar terms to that in Sranan and Ndjuka. However, Portuguese - assuming for the moment that English is in fact the matrix language - was never the language of administration in Surinam although there was a very short period prior to the formation of the Saramaccan tribe during which the majority of plantations on the middle course of the Suriname River were owned by Portuguese-speaking Jews. Note in addition that the proportion of Portuguese items in Saramaccan is around twice the proportion of Dutch items induced in Sranan (or Ndjuka) by around 300 years of Dutch influence. In other words the proportion of Portuguese items appears to be unexpectedly high.

A similar case, where a non-matrix language supplies what at first sight seems to be an unaccountably high proportion of basic vocabulary is Berbice Dutch:

	<u>Dutch</u>	<u>English</u>	<u>Eastern Ijo</u>
<u>Berbice Dutch</u>	63.79%	7.52%	28.69%

Dutch is the matrix language in this case, and we may take it for granted - as it was not a colonial tongue - that Eastern Ijò never gained any currency among the whites.

The existence of these cases with unexpectedly high percentages of basic vocabulary derived from a language other than the matrix language mean that the classification of creoles that we might initially have made - in terms of relative proportions of basic vocabulary derived from non-matrix languages - has to be reviewed. A certain percentage of items derived from non-matrix languages, that can be explained as a result of the linguistic context obtaining in the post-creolization phase, is not as such especially interesting - this is by no means only a feature of creole languages.

More significant is the occurrence of a large proportion of items derived from non-matrix languages that can either not be explained or is insufficiently explained by the fact of the post-creolization linguistic context. In the case of Berbice Dutch there is no obvious explanation in terms of the linguistic context in post-creolization times. In the case of Saramaccan the time scale involved is too brief to allow of a Portuguese intrusion into a creole whose matrix language was English - assuming for the sake of the argument that this was the case. As we have seen the penetration of Sranan basic vocabulary by Dutch items over 300 years was 17.58% (or less if items of unclear etymological source are counted), whereas we must assume on the basis of the argumentation in the previous section that the common ancestor of Saramaccan and Djutongo was in existence by 1690, the date of the formation of the Matjáú clan of the Saramaccan tribe. Whatever the mode of formation of Saramaccan (this will be examined in detail in the next chapter), there is very little time available, considering that the Portuguese Jews only entered Surinam in 1665, for the penetration of the Saramaccan basic vocabulary by 34.88% Portuguese-derived items. We conclude that this penetration cannot be explained by the normal processes of borrowing that can be appealed to in the case of the Dutch items in Surinam (and Saramaccan itself for that matter).

This allows us to establish the following classifications for the source of the basic vocabulary:

Type I	a. <u>One major source</u> (matrix language)	b. <u>Two major sources</u> (matrix language + other explicable source)
Type II	a. <u>Two major sources</u> (matrix language + other inexplicable source)	b. <u>Three major sources</u> (matrix language + expl. source + inexpl. source).

The type II creoles are those we would categorize as "mixed". Cases of these various types would be the following:

Type I	a. Jamaican Seychellors St. Lucian	b. Sranan Ndjuka
Type II	a. Berbice Dutch	b. Saramaccan

In the rest of this section we will concentrate on an examination of the more restricted, and presumably even more "basic" (i.e. grammatical rather than lexical) class of function words, and show that we can once again identify two major types of creole language.

We have examined 19 categories of function word in six creole languages. The categories of function word examined are the following:

1. personal pronouns
2. numerals
3. other pronominal quantifiers
4. quantifier nouns
5. relative pronouns
6. reflexives/reciprocals
7. question words
8. "quantifying" adverbs

9. place adverbs
10. time adverbs
11. prepositions/locational nouns
12. dative word
13. instrumental word
14. coordinators
15. subordinators
16. copulas
17. TMA-particles
18. negative particles
19. determiners/plural markers

The creoles that were examined were:

1. Saramaccan
2. Sranan
3. Berbice Dutch
4. Jamaican
5. Seychellois
6. St. Lucian

Saramaccan function words split up as follows:

1. English origin:	61 + 8 partial	= 65.0	54.62%
2. Portuguese origin:	16 + 1 partial	= 16.5	13.87%
3. Dutch origin:	14 + 2 partial	= 15.0	12.61%
4. African origin:	6 + 2 partial	= 7.0	5.88%
	(Kikongo: 2.0; Fon: 3.0)		
5. Uncertain origin:	14 + 3 partial	= 15.5	13.03%

Sranan function words split up as follows:

1. English origin:	102 + 9 partial	= 106.5	71.96%
2. Portuguese origin:	2	= 2.0	1.35%

3.	Dutch origin:	19 + 4	partial	= 21.0	14.19%
4.	African origin:	3		= 3.0	2.03%
5.	Uncertain origin:	12 + 7	partial	= 15.5	10.47%

Berbice Dutch function words split up as follows:

1.	English origin:	12		= 12.0	11.11%
2.	Dutch origin:	73 + 4	partial	= 75.0	69.44%
3.	Eastern Ijò origin:	13 + 5	partial	= 15.5	14.35%
4.	Arawak origin:	0 + 1	partial	= 0.5	0.46
5.	Uncertain origin:	5		= 5.0	4.63%

Jamaican function words split up as follows:

1.	English origin:	118		= 118.0	94.40%
2.	African origin:	3		= 3.0	2.40%
3.	Uncertain origin:	4		= 4.0	3.20%

Seychellois function words split up as follows:

1.	French origin:	176		= 176.0	97.78%
2.	Uncertain origin:	4		= 4.0	2.22%

St. Lucian function words split up as follows:

1.	French origin:	128		= 128.0	90.78%
2.	Uncertain origin:	13		= 13.0	9.22

The results of this examination are fairly clear. We can assign all the languages examined to the classes we have defined above.

Type I (a) - Jamaican
 Seychellois
 St. Lucian

- Type I (b) - Sranan
Type II (b) - Saramaccan
 Berbice Dutch

Jamaican, Seychellois, and St. Lucian display almost solely function words belonging to the matrix language - in other words to the original colonial language involved in the formation of the creole. Sranan contains a significant element consisting of Dutch derived items.

The cases of Saramaccan and Berbice Dutch are more complex. The Saramaccan tribe was formed in about 1690 (Price, 1983) after Dutch control in Surinam had lasted some twenty odd years. The Saramaccans were in intensive contact with coastal plantations till around 1712, when their tribe received its last significant groups of escapees (Price, 1976). Following the peace treaty with the Dutch in 1762 regular contacts with the colonial world began again, especially involving the Herrnhutter missionaries. The function words of Dutch origin in Saramaccan are by and large also present in Sranan, suggesting that these did not enter Saramaccan directly from Dutch, but came in via Sranan. We ought then to categorize these - or most of them - as of Sranan origin, rather than as of Dutch origin, as what we are interested in is the immediate source of the items concerned rather than their ultimate origin.

In the case of Berbice Dutch, the significant proportion of English-derived function words must partly at least be explained in terms of the approaching extinction of this language, and the concomitant fact that all its speakers are bilinguals, speaking Guyanese Creole English as well. Often in fact this latter language has become the normal daily means of intercourse.

The question of the Eastern Ijò items in Berbice Dutch is studied at length in Smith, Robertson, and Williamson (1987). In the first half of the seventeenth century the colony of Berbice was founded by a Dutch family as a private venture. At the same period the Dutch were the main traders of slaves in the New Calabar River in the Niger Delta. The authors of the above-mentioned article suggest that the first slave imports to Berbice must have consisted of Eastern Ijò speakers, in

particular speakers of Kalabari, one of its dialects. The number of slaves involved was probably small, as Berbice remained a small colony of five or six plantations until it was taken over by the Dutch West India Company at the beginning of the eighteenth century, at which time it underwent a significant expansion.

It is obvious for historical reasons that the Eastern Ijo influence on Berbice Dutch, on which we shall have more to say later when we examine in greater detail the process by which the Portuguese influence on Saramaccan came about, was not simply the result of later influence on an already existing Dutch-based creole language, as this influence is too extensive to be explained purely in such terms. There is no other creole language in the Atlantic region, exhibiting so much influence from an African language in its basic vocabulary, function words, morphology, and even syntax, as Berbice Dutch. The Portuguese influence in Saramaccan, which is of similar scope as far as basic vocabulary, and function words is concerned, is not strictly comparable from the point of view of the status of the languages concerned. Whatever the method of penetration of the Portuguese influence into Saramaccan, Portuguese was one of the colonial languages, just as English, French, and Dutch, and enjoyed a higher status for that reason. Eastern Ijo on the other hand was an African language with a fairly restricted distribution, and would enjoy less prestige than the Dutch with which it co-existed in Berbice.

Note that in the case of both these languages the assumed matrix language possesses a higher proportion of function words than of the general basic vocabulary (the 200-word list includes a number of function words). We adjust the percentages of the function words here to disregard the items of uncertain origin, as we did above with the percentages of basic vocabulary.

Saramaccan

	<u>English</u>	<u>Portuguese</u>	<u>Dutch</u>	<u>African</u>
<u>Basic Voc.</u>	49.94	34.88	10.45	4.74
<u>Function Words</u>	62.80	15.95	14.50	6.76

Berbice Dutch

	<u>Dutch</u>	<u>Eastern Ijo</u>	<u>English</u>	<u>Amerindian</u>
<u>Basic Voc.</u>	63.79	28.69	7.52	-
<u>Function Words</u>	72.82	15.05	11.65	0.52

For the sake of comparison we provide parallel data for Sranan:

Sranan

	<u>English</u>	<u>Portuguese</u>	<u>Dutch</u>	<u>African</u>
<u>Basic Voc.</u>	77.14	3.70	17.58	1.59
<u>Function Words</u>	80.38	1.51	15.85	2.27

Here we can see that there is an additional parallel between Saramaccan and Berbice Dutch. The significant source whose significance is "inexplicable" is strongly reduced if we examine the relative strength of this element in function words as compared to basic vocabulary in general. We interpret this as confirmatory evidence of our preliminary viewpoint that the Portuguese element in Saramaccan is subsidiary to the English element, as is the case with the Eastern Ijo element in Berbice Dutch in comparison with the Dutch element.

The case of Saramaccan when compared with that of Berbice Dutch also introduces the following problem. Despite the general tendency to emphasize the disparate nature of Surinam's slave population (cf. Price, 1976, p. 19; Bickerton, 1984; Byrne, 1986), the figures of slave imports from various parts of Africa worked out by Price (1976) on the basis of the studies of the Dutch slave trade by Postma (1970; 1975) show that approaching two thirds of all slaves shipped by the Dutch between the 1640's and 1700 came from the Gbe-speaking Slave Coast ports. As we have already mentioned Gbe survives in Surinam as a reduced ritual language, and is responsible for a significant number of items in the vocabulary of the Surinam languages, including Saramaccan. This fact alone suggests that Gbe was, at least in the earliest period, a spoken language in Surinam. Despite this fact the penetration of the basic lexicon, and the field of function words, by Gbe is minimal. In the 200-

word Swadesh basic vocabulary list only 1.25% of the items appear to be Gbe. Two items - both featuring in the Swadesh list - are represented in the list of function words:

<u>Saramaccan</u>	<u>Gloss</u>	<u>Gbe</u>	<u>Gloss</u>
andí	what?	aní (Fon)	what?
ambe	who?	mè/mě (Fon)	someone, person
		mě/mě (Fon)	who?
		ame (Vhe)	person

In total Gbe function words represent 2½% of the Saramaccan function words considered above. To compare this with the Berbice Dutch situation, there the percentage of function words deriving from Eastern Ijò is more than 14%.

In other words the effect of the use of Gbe by an initially large proportion of the population was not very significant as far as the basic vocabulary and function word lexicon of Saramaccan is concerned. The significant contribution of Gbe to the Saramaccan lexicon has been in the more peripheral sphere of religion, flora and fauna, ideophones, etc. (see Smith (in preparation)).

Together with the claim in the previous chapter that a particular feature reflected in the development of items from Gbe with original /v/, and also in early Dutch items in the Surinam creoles, can be associated with a particular dialect feature present in a relatively small part of the Gbe-speaking area, that round the town of Alada - a slave-market much dealt with by the Dutch - these features argue for considerable Gbe involvement in early Surinam. If the phonological argument from Dutch is correct it argues for a period of bilingualism, as is suggested anyway by the survival of Gbe in the form of a ritual language.

However there is nothing in the Gbe-Saramaccan connections that argues for more than a period of ordinary language-contact. There is no phenomenon evidenced that it is not paralleled in other language-contact situations that stop short of creolization, eg. the English-French contact situation in the Middle Ages.

The Eastern Ijò influence on Berbice Dutch is on a grander scale altogether. The percentage of basic vocabulary is more than twenty times greater than the Gbe lexical representation in Saramaccan. The percentage of function words is nearly six times greater when the Eastern Ijò representation in Berbice Dutch is compared with that of Gbe in Saramaccan. As far as morphology is concerned we have possibly one pattern attributable to Gbe in Saramaccan - adjective formation by verbal reduplication - compared with three suffixes in Berbice Dutch of Eastern Ijò origin. We have at least two aspects of syntax in Berbice Dutch that seem to be directly relatable to Eastern Ijò, while so far there is no pattern in Saramaccan that has with certainty been traced to Gbe.

All in all, the difference between the two situations would appear to be greater than one would expect if for instance, the proportion of Slave Coast slaves in the Dutch trade as a whole is extrapolated to the Surinam situation, and we assume that at the beginning there were two-thirds Gbe speakers present in Surinam, as against a conceivable monolingual situation in Berbice, with only speakers of Eastern Ijò represented.

That the Gbe speakers must at least have played a very important role in the formation of the Saramaccan tribe is confirmed by various historical facts, such as the fact that one of the important constituent clans - the Abaísa - were referred to in the eighteenth century as "Papa Negers". Papá is a variant form of the name Popo, referring to two ports - Great Popo and Little Popo - on the Slave Coast (Price, 1983). According to Price, even today, the Abaísa are reckoned to be the best singers of Papá songs, ie. songs in the ritual Papá (Gbe) language, which interestingly enough its speakers refer to as Aladá (Price, 1983) (after the important slave market of Alada).

Our conclusion must be then that the influence of the respective African languages were of a different order in the two cases, and that this requires an explanation. We will attempt to provide one when we compare the Portuguese influence on Saramaccan, with the Eastern Ijò influence on Berbice Dutch.

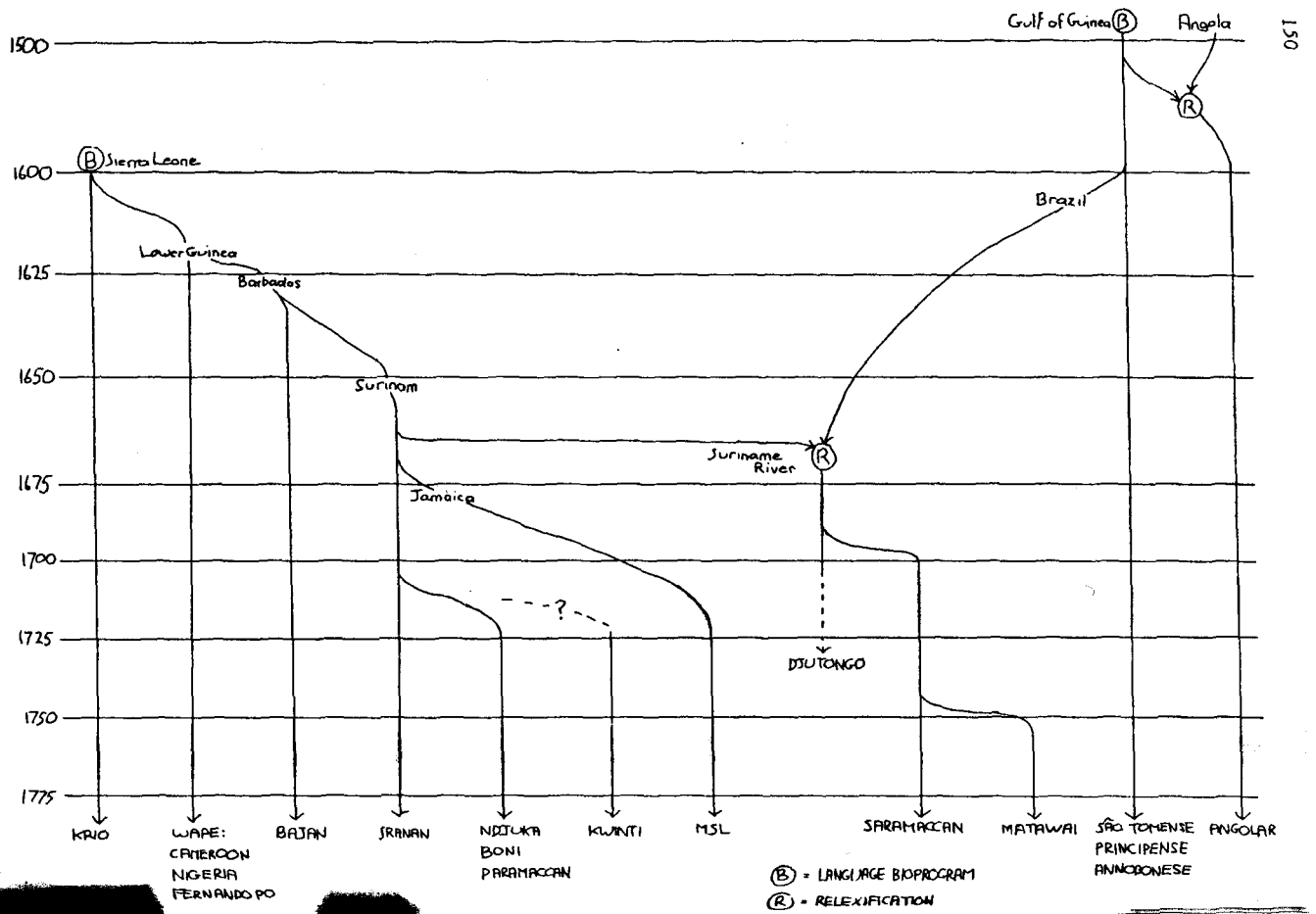
To conclude then, we have a comparable situation between Saramaccan and

Berbice Dutch in the relative percentages of function words, where we find the rough proportion:

Saramaccan:	English > Portuguese
Berbice Dutch:	Dutch > Eastern Ijo

From this parallel situation we can argue that the two languages given had in each case a significant role in the formation of the creole in question. This is clearly distinct from the other cases examined, where there was only one language of any significance involved in the genesis of the creole. In the next chapter we will try to account for the significant involvement of not one but two languages in these two cases, although we will conclude that the primary mechanism of creolization involved in the two cases was in fact different.

ETHNOLOGY OF SURINAM



CHAPTER FOUR

The Origins of the Surinam CreolesIntroduction

In this concluding chapter we will consider in detail our hypothesis regarding the mechanisms responsible for the genesis of the creole languages of Surinam, and in particular, as it involves a more complex scenario, the genesis of Saramaccan.

We will survey briefly first a number of results and conclusions reached in the previous chapters as regards the relationships of Sranan and Saramaccan, what is known about the languages of the earliest slaves, and the social and linguistic mechanisms involved in creolization.

We will address the question of the circumstances under which the two linguistic mechanisms we assume to be involved in the process of creolization - the LBH and Relexification - operate.

Finally, we turn to an examination in detail of the question of the means by which we assume Saramaccan to have been created.

- Sranan

We assume, on the basis of arguments discussed in the previous chapter, that the original language of inter-communication on the English-owned plantations in Surinam was a (more or less) expanded pidgin, which had presumably acquired some native speakers in Barbados, based on the West African Pidgin English (WAPE) of the seventeenth century. The most salient modification this would have undergone in Surinam was the addition of epithetic vowels to items with final consonants, as a reflection of the syllable structure patterns of Gbe and Kikongo, neither of which allow such consonants. The reinterpretation of accentual distinctions in terms of tonal distinctions we assume to have been a feature of the WAPE spoken by Africans. As well as being the case for all the Bush Negro languages of Surinam,

this is also true at least of Krio and Cameroonian pidgin, of the West African forms of English. We have also provided some slight evidence indicating that Sranan was also a tone language at an earlier stage.

The ancestor of WAPE has best been explained as a creolized form of English emerging in the general area of Sierra Leone around the end of the 16th century in the mixed populations arising from settlements of English traders (Hancock, 1986b). The relevance for this of the linguistic mechanism of the Language Bioprogram, and the social factor of a "new" ethnicity are obvious.

It would seem then that as far as Sranan is concerned the operation of the LB must be located in Africa, and not in America at all. In the light of this, Byrne's (1985) remark that the demographic conditions for creolization did not exist until after 1735 loses much of its force. WAPE, which may be presumed to have undergone considerable lexical expansion in Barbados and Surinam in the period, presumably also acquired native speakers, most likely in Barbados. There was sufficient time for this to happen in the period 1625-1651. We agree with Hancock (1980) that stabilization is more important than the question of whether a language has native speakers or not. In this light the Sranan fragment in Herlein (1718), which can be assumed to represent the language of around 1700, is similar enough to modern Sranan to make it clear that we are dealing with the same language, in the unlikely event that Byrne is correct in implying that Sranan was not a creole at this time.

The Eastern Bush Negro languages or dialects - Ndjuka, Boni and Paramaccan - in addition to Kwinti of central Surinam, appear to represent eighteenth century offshoots of Sranan.

The approximation to colonial Standard English spoken at the time in Surinam (and/or Barbados and the other islands involved in the colonization of Surinam) had also presumably contributed to the lexicon of what we may term "Proto-Sranan". This can perhaps best be seen in the contrast between items derived from an r-less variety of English, for which Krio and WAPE in general provide the closest parallels, and an r-full variety, which is paralleled by both seventeenth century Standard English and by Barbadian creole.

- Saramaccan

We assume, with Goodman (1986) and others, that when the Portuguese Jews arrived in Surinam in 1665, settling principally on the Suriname River, they brought with them slaves, of an indeterminate number, who spoke a Portuguese-based creole of N.E. Brazilian origin, with ultimate connections with the creoles spoken on the Gulf of Guinea islands - São Tomense, Principense and Annobonese. On the Jewish immigrants, and their immediately pre-Surinam wanderings see van Lier (1982), Rens (1982) and Goodman (1986).

As we have mentioned above, in the initial phase of the Jewish-English symbiosis on the Suriname River, the Jews formed the minority of the plantation owners. In 1667 there were only seven Jewish-owned plantations in the area, as against twelve English-owned plantations (Rens, 1983). The period following this is characterized by a steady increase in the proportion of Jewish-owned plantations on the Suriname River. Ten years later - as Rens informs us - there are thirteen Jewish plantations, and only six English and Dutch plantations. In 1694 there were forty Jewish-owned plantations in Surinam, concentrated on the upper Suriname River (van Lier, 1949). According to Lavaux's map of around 1750, there were 75 plantations between Marshall Creek and the plantation of Gelderland, on the Suriname River, of which 62 were owned by Jews (Rens, 1953).

Note, however, that this increase in the proportion of Jewish-owned plantations on the Suriname River does not imply a corresponding increase in the number of Portuguese-based creole speaking slaves. Only the slaves that entered Surinam with the Jews - presumably a fairly small number - would be speakers of this language. We may assume that this Portuguese based creole would be spoken on the Jewish-owned plantations in 1667 - one or two years after the Jewish immigration - but we cannot assume that the expansion of the number of Jewish-owned plantations in the years that followed would result in any significant increase in the number of plantations utilizing this language, as any new slaves would derive from the same sources as those applying to the rest of the colony.

In addition to this, the most important phase in any linguistic confrontation is of

course the initial phase, and we regard the fact that there were more English-owned plantations on the Suriname River in this phase as one of the factors responsible for the dominance of English over Portuguese elements in Saramaccan.

- The languages used by the earliest slaves

Various pieces of evidence considered in the previous chapter indicate that the major languages in use among these slaves were Gbe (possibly the majority language) and Kikongo (possibly the language of a minority of the slaves). This is not to deny the possibility that many slaves using these languages - in particular the first - may have had a different mother tongue. A third language - Twi - was possibly represented among the early slaves in Surinam to a lesser degree.

- The linguistic mechanisms of creolization

We assume on the basis of work by Muysken (1981) and Bickerton (1977; 1981; 1984) that there are two basic linguistic mechanisms involved in creologensis - Relaxification and the Language Bioprogram.

Relaxification involves the replacement of the phonological forms in the lexicon of one language by their (approximate) semantic equivalents in a second language, while other features of the lexical entries remain unchanged, and the new phonological forms are basically reinterpreted according to the phonotactics of the original language.

The Language Bioprogram operates in the absence of a coherent linguistic input. This is typically the case where the speakers of different languages communicate with each other in a "new" (i.e. non-stabilized) pidgin, in the context of a newly created "society". When children start being born into the new society they react to the incoherence of the linguistic input they faced by overriding such incoherence with the relevant linguistic universals.

- The social context of creolization

As we stated in Chapter One, a "new" language, which is what a creole is, is not created out of the blue. There has to be a social purpose for a new language. Along with others we would interpret this in terms of ethnic identity. A new language (or variety of a language) is necessitated by a new ethnic identity, however this last is attained - by external factors such as slavery, shipwreck, or migration to a small island, or internal factors such as communal upward mobility.

Relexification or the Language Bioprogram in the genesis of Saramaccan

We require to say something regarding the question of when Relexification will operate, and when the Language Bioprogram will operate.

The paradigm cases are clearly defined - Relexification will be involved when a whole community speaks the same language to start with. In the Media Lengua case a Quechua-speaking community (in fact there are a number of independent cases of this in Ecuador (pers. comm. P.C. Muysken)) relexified to Spanish, i.e. replaced the Quechua phonological form of all lexical morphemes with a Spanish form (of approximate semantic equivalence), retaining however Quechua phonotactics.

The Language Bioprogram will operate - as described above - if speakers of a large number of languages are involved. According to Bickerton this was the case of Hawaii where speakers of Hawaiian, Korean, Japanese, various Philippine languages, and other languages were involved. This resulted in the creation of what were in effect a number of different versions of Pidgin English, whose structures - such as they were - were determined by the structures of the mother tongue in each case. The lack of a clear grammatical model for first language learners caused the operation of the LB. Lexically of course the different versions of the pidgins were largely identical - abstracting away from the phonotactic influences of the various mother tongues, that is.

As we claim that Saramaccan resulted from a process of creolization involving relatively few languages - Proto-Sranan (whether already possessing native

speakers, or still a stable pidgin descending partly from a creole), and N.E. Brazilian Portuguese creole, and two African languages in particular, Gbe and Kikongo - it is not immediately obvious which of the two creolization mechanisms will be operative. We have stated in Chapter One that it is our thesis that this is in fact relexification, and we will now proceed to attempt a demonstration of this. Relevant to this is another case, that of Berbice Dutch, which we showed in Chapter Three had certain properties in common with Saramaccan.

We will first summarize the account of the origins of Berbice Dutch in Smith Robertson and Williamson (1987), then deal in some detail with our relexification hypothesis of the genesis of Saramaccan, finally explaining why we think these cases did not arise via the same mechanism of creolization.

- Berbice Dutch

Smith, Robertson and Williamson (1987) interpret the linguistic evidence present in Berbice Dutch - the relatively high Eastern Ijò component in the basic vocabulary (278), as well as morphological and syntactic features deriving from the same language - to mean that an originally small monolingual slave workforce, speaking Eastern Ijò, was supplemented at a later date by slaves drawn from many parts of the West African littoral. It is clear however that Berbice Dutch is not a case of Eastern Ijò-to-Dutch relexification, as there are major differences of linguistic structure between Eastern Ijò and Berbice Dutch.

		<u>Eastern Ijò</u>	<u>Berbice Dutch</u>
<u>Syntax</u>	i.	SOV	SVO
	ii.	TMA suffixes	TMA indicated by a combination of suffixes and preverbal particles.
	iii.	No nonlocative adpositional structures	Nonlocative prepositional structures
<u>Morphology</u>	i.	see ii. above	
	ii.	Suffixed articles	Prenominal articles

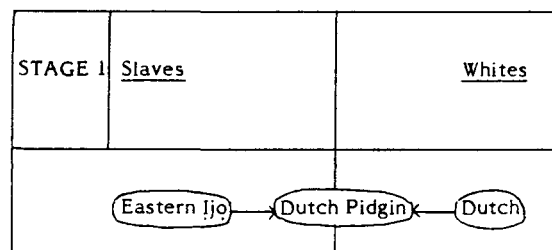
<u>Phonology</u>	i.	Tones	No tones
	ii.	Simultaneous Labial-Velar articulations	No simultaneous Labial-Velar articulations
	iii.	Advanced Tongue Root (ATR) Vowel harmony	Vestigial Vowel harmony, not corresponding to Eastern Ijò system.

The opposite case - relexification from Dutch to Eastern Ijò - is immediately excluded if by Dutch we mean Standard Dutch. If, as Smith, Robertson and Williamson argue, the Dutch involved was a pidgin, similar to that creolized (as Skepi Dutch) in the neighbouring colony of Essequibo, then further discussion is necessary. We might conceivably have a partial pidgin Dutch-to-Eastern Ijò relexification in Berbice Dutch. In fact, we may exclude this possibility fairly confidently. For relexification to have taken place in the direction of Eastern Ijò, we must assume that the process had started prior to the expansion of Berbice, which involved slaves of diverse origins. This expansion might seem to provide a motivation for the partial relexification involved, as there would be no point in continuing relexification to a language that would quickly not be the mother tongue of any more than a minority. It is precisely the presence however of very specifically Eastern Ijò grammatical features in Berbice Dutch that makes this account improbable. These are the following:

		<u>Eastern Ijò</u>	<u>Berbice Dutch</u>
<u>Syntax</u>	i.	Locative postpositions	Locative postpositions
	ii.	End of clause position of negative clitic /*ka/	End of clause position of negative clitic /-ka(ɛ)/
<u>Morphology</u>	i.	Personal plural /-apu/	General plural /-ap(u)/
	ii.	Perfective /-te/	Past /-tɛ/

Note also that it would make little sense for a community whose mother tongue was Eastern Ijò to start relexifying a pidgin Dutch, whose only conceivable initial function would be communication with the Dutch colonists, in the direction of Eastern Ijò, a process more likely to impede efficient communication than anything else.

An examination of the sociohistorical factors involved leads Smith, Robertson and Williamson to favour another account of the situation. In the earliest period the situation was as follows:

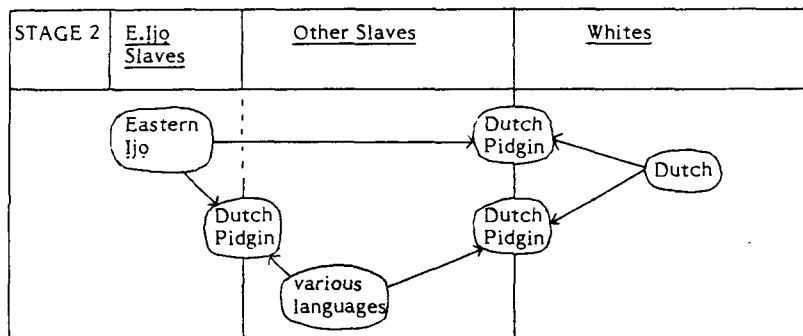


In this first stage, when Eastern Ijò slaves - or at least slaves with a knowledge of Eastern Ijò - are assumed to have formed the bulk of the slave population, the slaves would obviously not need any "new" language for intra-communal communication - Eastern Ijò would serve this purpose fine. The same would of course apply in the case of the Dutch. Smith, Robertson and Williams assume that a Dutch-based pidgin, similar to the creole spoken in the neighbouring colony of Essequibo - Skepi Dutch - would be utilized for inter-communal communication. In fact it is probable that any pidgin employed in Berbice would reflect the more general patterns of Eastern Ijò syntax, such as SOV word order.

Berbice underwent a significant expansion in the eighteenth century in connection with the take-over at the beginning of the century by the Company of Berbice from the van Peere family. At this period a large number of slaves of a great variety of ethnic origins began to be imported into Berbice. As a result of this major change in the linguistic situation Eastern Ijò would have lost its function as the slave language, and have become the language of only a part of the slave population. The only means of communication quickly available to the "new" slaves would be the Dutch pidgin used between slaves and whites, doubtless reflecting in each case the general syntactic patterns of the relevant mother tongue.

However, the slaves as a group would share the same set of socio-cultural patterns, of which the more important were those deriving from their economic position. In other words the very fact of their being slaves would be more significant than their different ethnic affiliations. Out of their shared lot would be born a new ethnicity. The "new" ethnic group would require a "new" language as one of the defining characteristics of their ethnicity.

Eastern Ijo, despite its undoubted higher status as the language of the "old" slaves, in contrast to the (presumably) numerous languages spoken by the newly imported slaves from overseas, would not qualify as a suitable intra-communal means of communication. The Dutch-based pidgin would be required to be learnt by the new slaves, while Eastern Ijo would soon only be the language of a minority and therefore not of general use. Therefore, initially at least, communication between old and new slaves would presumably take place via the medium of Dutch pidgin.



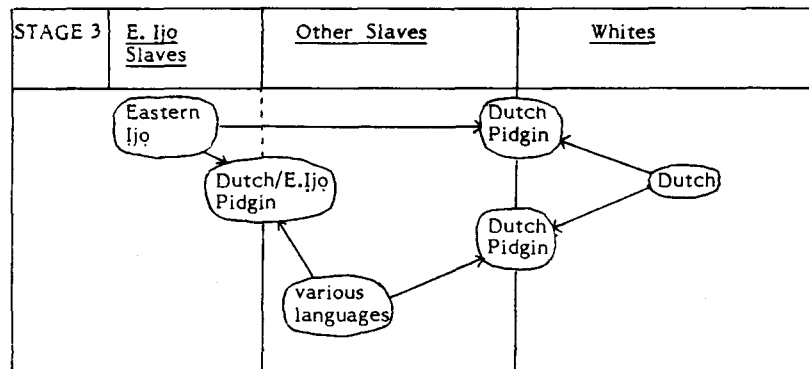
By "various languages" in the Other Slaves column we refer to the various African languages spoken by the "new" slaves and also to the Dutch pidgin.

We have quoted a number of cases from the literature where the concept of ethnicity is employed to explain the development of a "new" language. In some cases at least - e.g. that of Media Lengua (Muysken, 1981) and São Tomense and

Angolar (see pp. 13/14) - it is otherwise difficult to see what reason there could have been for the emergence of the "new" language other than to serve the function of expressing the identity of the "new" ethnic group. A new ethnic group can be assumed to be created by the combination of internal group solidarity and external socio-economic pressures. In the case of slavery the "new" ethnic group is of course created by brute force.

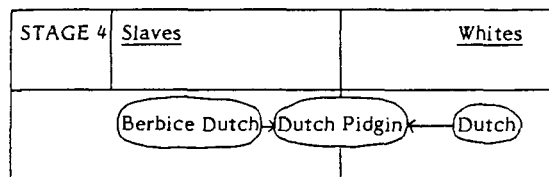
What were the linguistic materials available for the construction of a "new" language? Basically two linguistic systems can be assumed to have been familiar to sufficient people to have been capable of playing a role in this. Firstly Eastern Ijò would be the language of a body of "old" and thus higher status slaves. Secondly the Dutch pidgin would be familiar to virtually all the slaves, although their reproduction of it would not be uniform, reflecting the influence of their varied languages. Berbice Dutch is in fact constructed out of a mixture of these materials, and is basically a Dutch-based creole modified in the direction of Eastern Ijò. In short, we could say, the conflation of ethnicity caused a conflation of language.

Why did the slaves in Berbice not end up speaking a purely Dutch-based creole, since presumably there was a stage - our Stage 2 - when all the slaves spoke a Dutch-based pidgin. We suggest that the reason for this was that this pidgin was not suitable as an expression of the "new" ethnicity of the slaves, as this medium of communication was also known to and used by the whites. Following this line of reasoning it could be expected that as soon as the concept of a shared ethnicity began to make itself felt, another set of linguistic patterns would arise:



As soon as the new ethnicity had become a reality, and concomitantly the old ethnic identities began to be abandoned, which stage would presumably be marked by large-scale intermarriage between old and new groups, the stage is set for the creation of Berbice Dutch.

Although we have introduced an additional stage in the development to Berbice Dutch, in comparison to the description of this process in Smith, Robertson and Williamson (1987), the linguistic mechanism of creolization that we assume to have operated here is the same - the Language Bioprogram. In other words the children of the slaves, especially once intermarriage had begun to take place on a large scale, would be exposed to various versions of the Dutch/Eastern Ijò pidgin. Normally, in the case of unstable pidgins, universal patterns would be expected to dominate over the multifarious patterns to which the children would be exposed. In the special case of Berbice there was a sizeable body of higher status slaves providing a consistent set of linguistic patterns in a sea of inconsistency. This is presumably the explanation for the survival of Eastern Ijò "substrate" elements in Berbice Dutch.



- Saramaccan

Turning to Saramaccan, the sparse historical references to the early linguistic situation on the Suriname River suggest that this is a derivative of the mixed English-Portuguese language - later referred to as Djutongo (Jew language) - spoken on the plantations on the Suriname River (cf. Price (1976), and above). As we have said above, in the period immediately following the arrival of the refugee Portuguese Jewish planters, the English-owned plantations formed the majority of those on the relevant part of the Suriname River. The two (main) languages in confrontation here - Proto-Sranan and N.E. Brazilian Portuguese Creole - can be

assumed, by reason of the similar facts of their origins, ultimately both to have been produced by the mechanism of the Language Bioprogram. Both are the result of the admixture of European and African populations, the first on the Sierra Leone and Gambia Rivers, and adjacent coasts, the second on the islands in the Gulf of Guinea. In both cases the European language was in confrontation with more than one African language. Although there are substrate effects present, especially in the second case where only two African languages seem to have had significant influence - Bini and Kikongo - what we have in these two cases is clearly not relexification as such. This means that the basic structural patterns of the two languages would be fairly similar to start with, making it more difficult to identify the source of the syntactic structures of Saramaccan, which we assume to be basically the product of these two.

However, we find it significant that Saramaccan displays none of the special characteristics of the known Portuguese-based creoles of the Atlantic region, such as the ubiquitous verbal participle in /-du/ (or its phonetic reflex), which is present in São Tomense, Principense, Annobonese, Angolar, Cape Verde creole, Guiné creole and Papiamentu. There is no trace either of such characteristic features of the Gulf of Guinea creoles as the post-nominal position of the modifiers in NP's and the double negative. As we are assuming that Saramaccan is largely directly descended from Djutongo, the "new" language arising from the confrontation between Proto-Sranan and NE Brazilian creole, let us examine the period of time available for the creation of Djutongo itself.

The Portuguese Jews arrived in Surinam in 1665 - three years before the colony effectively passed out of English hands. Price (1983) makes it clear that the formation of the oldest Saramaccan clan can be dated to 1690. This means that if the maroons took an already existing Djutongo to the Bush with them, it must have been formed prior to 1690. An important factor, mentioned by Byrne (1986), referred to above, is that in this period there were very few children around, so that creolization according to the Bickertonian paradigm would not have been probable. For this reason Byrne claims that Saramaccan did not develop until the Saramaccan tribe started to produce children. If we accept 1690 as the effective date of formation of the Saramaccan tribe, then this implies that in Byrne's terms Saramaccan would exist by 1695.

We reject this account for three main reasons. Firstly the references to Djutongo and Saramaccan discussed above, make it clear that these two were largely identical. This is only explicable if there is a relationship between them, but then this relationship must predate the formation of the Saramaccan tribe.

Secondly, prior to the 1730's when a number of clans settled together at Kumakō, there was no single period when more than a couple of clans occupied the same or adjacent territories. This can be seen from a study of the oral historical data in Price (1983). The clans had separate histories of escape from the plantations, and took different routes in their passage upriver (either via the Suriname River, or via the Saramaccan River). The Matawai who speak virtually the same language as the Saramaccan, separated from them in the mid 1760's. In view of these facts one would expect a much greater dialectal variety in Saramaccan (and Matawai) than in fact exists. The uniformity in the language is much easier to account for if we assume that the language was formed prior to the various acts of marronage that resulted in the formation of the two tribes.

- Saramaccan and Berbice Dutch: different situations

Two linguistic systems were in confrontation on the Suriname River - NE Brazilian Creole and Proto-Sranan. Note that this was not the same situation as Smith, Robertson and Williamson (1987) assume to have existed in Berbice. There it was the sudden expansion of the plantation system in the colony resulting in an altered linguistic situation involving the speakers of many languages that caused the emergence of Berbice Dutch. Here we have the situation that in neighbouring plantations two different linguistic systems are in use. This is a different kind of confrontation from that in Berbice, where there is no reason to suppose that some plantations were peopled by Eastern Ijò speakers and others by Dutch pidgin speakers. In Berbice the Dutch pidgin would exhibit variation depending on the linguistic background of the speakers, while in Surinam we would have had two presumably stable systems.

- Saramaccan and Relexification

If we assume that the slaves in the Surinam River plantation area came to form one community as a result of various factors such as the fact that the Portuguese-owned and English-owned plantations did not form discrete blocks, the social intercourse of slaves, and so on, then we have the seeds of the creation of a "new" ethnic group.

If this group consisted predominantly of adults as is clear from the calculations provided by Price (1976), then the only means of creating a "new" language would be by the relexification mechanism. We have suggested above that if there are only two languages in confrontation then relexification will take place, not least because the variation in the initial pidgin phase will be much less than when a number of different languages are involved. But, the reader will argue, we have just stated that there were a number of different languages involved in the Surinam situation, and this number had increased by one - NE Brazilian Creole - in the specifically Suriname River situation. However, the necessary condition for the working of relexification in the creation of a "new" language would seem to be that the two languages involved should together cover the whole community, or nearly so, not that no other languages should be present in the community.

What we are claiming then is that Proto-Sranan and NE Brazilian Creole between them covered the Suriname River community. There were few children around, so that the only possible mechanism that could result in the formation of a "new" language would be relexification. Whether in fact the conditions in the seventeenth century were such that we can speak of the formation of a new ethnic group, at least temporarily, on the plantations in the general area settled by the Portuguese Jews, is something we have no independent evidence for.

If we assume that the relexification of these two systems produced a "new" language - Djutongo, we can reasonably ask ourself the question - relexification of what, to what? At the very beginning of the confrontation between these two languages we might expect to find two kinds of in-between language or interlanguage. That produced by the Proto-Sranan speaker, involving (partial)

relexification towards NE Brazilian Creole, whereby (some) Proto-Sranan lexical items are replaced by the corresponding NE Brazilian items, and that produced by the NE Brazilian Creole speaker, whereby (some) NE Brazilian lexical items are replaced by the corresponding Proto-Sranan items. We know that at this phase there were more English-owned plantations in the general "Jewish" area than Jewish-owned ones, from which we can make the reasonable extrapolation that there were more speakers of Proto-Sranan than NE Brazilian Creole. From this we may conclude that the interlanguage produced by the first group would become the dominant code, and indeed we regard the characterization "Proto-Sranan partially relexified towards NE Brazilian Creole" as the one that fits present-day Saramaccan the best.

Well, the reader might ask, but why is the result of relexification in the case of Saramaccan only partial, while it is complete - or virtually so - in the case of Media Lengua? The answer to this is presumably to be sought in the different situations applying in the two cases.

In the Media Lengua we have a whole community that is Quechua-speaking. We can assume that at some stage the adult community - or at least the more active portion of it - has acquired some sort of acquaintance with Spanish. There is nothing to prevent complete relexification in this case, as we can assume that all other things being equal all the members of the community are more or less in the same boat.

In the case of Saramaccan, however, we have two groups speaking different languages, with the result that as a first stage interlanguages will tend to develop. If the two communities had been equally strong, and had occupied discrete areas we might have expected these interlanguages to have ceased to be generally employed after a time and to have thereafter only appeared as a stage in the learning of the other community's language by individuals. However, because of the inequality in the initial sizes of the groups, their intermixture, and we suspect, the solidarity or sense of ethnicity that developed, the language-learning phase - as it applied to the whole community at least - was prematurely terminated, resulting in the so-called Djutongo, and later in Saramaccan.

One piece of evidence that would tend to confirm our hypothesis of a stage of incipient bilingualism is the fact of the existence of not infrequent English-derived and Portuguese-derived synonyms. We take the quotation supplied in Price (1976) from a German missionary who worked on the Upper Surinam River in 1767:

"The language of the town [Paramaribo] Negroes is quite a bit different from the language of the [Suriname River] plantation Negroes. They the latter have many broken Portuguese words. They can describe different things in three or four different ways" (Staehein, 1913-19, III(1), 75-76)

in combination with the observation in Voorhoeve (1973) of the presence in Saramaccan of English-derived and Portuguese-derived synonyms, to support the relexification hypothesis. Voorhoeve saw the existence of these synonyms as supporting his hypothesis of Portuguese-to-English relexification. Obviously they provide just as much support for our hypothesis of "English-to-Portuguese" relexification.

- Saramaccan and Berbice Dutch: parallels and differences

We refer again to the parallel between the Berbice Dutch situation and the Saramaccan situation with regard to the origin of function words. Both cases are atypical in respect of the normal situation as regards the origin of the function words in creole languages. This is that virtually all the function words of identifiable origin can be traced to the same source as that of most of the lexical items in the language. In a number of cases, e.g. Sranan, there is a group of function words from a different source, but whose origin post-dates the creation of the creole. However, this explanation is not possible in either the Berbice Dutch case, or the Saramaccan case. Here our explanation of the minority element present among the function words derives from our assumption that in each case there were two (main) languages involved in the process of creolization - Eastern Ijò and (pidgin) Dutch in the case of Berbice Dutch, and NE Brazilian Portuguese Creole and Proto-Sranan in the case of Saramaccan.

The difference between these two cases is, as we assume above, that in the case of Saramaccan we have two stable media - one creole language (NE Brazilian

Portuguese creole), and a stable pidgin (deriving ultimately from a creole) which presumably had already acquired first language speakers on Barbados before being imported to Surinam, while in the case of Berbice Dutch we have one stable language (Eastern Ijo) and one presumably unstable Dutch-based pidgin.

These differences were responsible then for the linguistic mechanism of creolization being relexification in the case of Saramaccan and the Language Bioprogram in the case of Berbice Dutch.

- The decline of Djutongo

After the creation of Saramaccan, presumably at some point in the eighteenth century, Djutongo ceased to be a distinct language, leaving only a few lexical items peculiar to (former) Jewish plantations, some of which are recorded in the various dictionaries and vocabularies produced during the eighteenth and nineteenth centuries. Some items that were originally Djutongo seem to have been adopted into Sranan. For example Schumann (1783) indicates as Djutongo the following items that are now part of the ordinary Sranan vocabulary:

<u>1783</u>	<u>Present-day Sranan</u>	<u>Gloss</u>
affitùh	afitú	constipation
fikka	fiká	remain
glua/grua	krúwa	raw
krija	krijá	nurture

The last three of these derive ultimately from Portuguese (respectively ficar, cru(a) and criar), and these borrowings from Djutongo into Sranan represent presumably the final stages of a process that was responsible for the introduction of most of the other items of Portuguese origin into Sranan.

Conclusion

To sum up what we have hypothesized here about the origin of the Surinam creoles, the picture is then as follows. Sranan, Ndjuka, Boni, Paramaccan and Kwinti are

basically derivatives of West African Pidgin English (WAPE), which in turn derives from a process of creolization via the Language Bioprogram which can be located in the region of Sierra Leone (the modern representative of which is Krio). Saramaccan and Matawai, and the former Djutongo are derived from the (re)creolization in Surinam of on the one hand, an early version of Sranan, and on the other NE Brazilian Portuguese Creole. This involved the partial relexification of the former to the latter.

These conclusions can be compared with the two most detailed theories concerning the origin of the Surinam creoles to emerge in recent years, those of Voorhoeve and Bickerton. In Voorhoeve (1973) it is argued that Saramaccan and Sranan both represent relexifications of West African Pidgin Portuguese (WAPP) to English. The greater English influence present in Sranan is due to the fact that the speakers of Sranan were exposed to the English language for a longer period. Voorhoeve assumes that the effective influence from English would be negligible after 1680 or so. He works on the assumption that the Saramaccan tribe was created before this date. However we now know that the creation of the tribe took place effectively in 1690 (Price, 1983). This means the end of English influence on both Sranan and Saramaccan (in the form of Djutongo.) must be located at the same date, around 1680. If the exposure of the one to the English was greater than the other we must assume that the Saramaccan maroons represented on average slaves who arrived later than those who became Sranan speakers. This is made less likely to be true by the fact that most of the original English slaves were removed from Surinam in 1670 and 1675, most of them going to Jamaica where, as discussed above, the Maroon Spirit Language appears to derive largely from this removal. This last displays no trace of Portuguese influence, in the admittedly limited vocabulary, it must be said (Bilby, 1983).

In short it seems unlikely to be demonstrable that the speakers of Sranan and Saramaccan underwent significantly different degrees of exposure to English in Surinam.

For reasons that are unclear Voorhoeve assumes that Ndjuka derives from an English pidgin rather than a Portuguese pidgin. In fact most of the problems

regarding the intercomprehension of Sranan and Ndjuka would appear to derive from their divergent phonological development.

In Bickerton and Byrne (ms.) and Byrne (1986a; 1986b) it is suggested that Saramaccan represents the "deepest" creole language, i.e. the creole language that approximates the most closely to the ideal product of the Language Bioprogram. On the basis of demographic considerations it has the highest creolization index. We do not propose to discuss the question of the relevance of the demographic factors in creolization here, but we would submit that such measures, based as they are on overall population figures or approximations to such, taking no account of local variations in the proportions of slaves and whites, can only provide extremely rough indications of the propensity for creole languages to arise.

If our interpretation - and that of others before us - of the meaning of the term Djutongo is correct, then Saramaccan must effectively date from a period when there were not sufficient children - according to Bickerton and Byrne - to create a creole language according to the Language Bioprogram. However, as Relexification represents a (creolization) strategy adopted by adults - parallel to second language learning - this mechanism would be available. But Relexification is the method by which we assume Saramaccan - or strictly speaking Djutongo - came into being.

Why should Saramaccan have the most creole-like properties as Bickerton and Byrne (ms.) claim. Presumably the answer -if their claim is true - is to be found in the fact that Saramaccan (or Djutongo) represents the recreolization (by Relexification) of a creole and a stable pidgin. In other words Saramaccan is a doubly distilled creole!

PART TWO

SECTION ONE

The Development of the English and Portuguese Consonants in the Surinam Creoles

In this chapter we will study the developments resulting in the present-day reflexes of the consonants of English and Portuguese as these are represented in the creole languages of Surinam. As we have stated in the introduction we will primarily be dealing with data from the four languages: Sranan, Saramaccan, Ndjuka and Boni. The other three languages/dialects: Matawai, Kwinti and Paramaccan, will be referred to only when a form from one of these is of particular interest. Our sources for these three are much less complete than for the other four. This does not matter very much as far as Matawai and Paramaccan are concerned, as these are virtually identical to Saramaccan and Ndjuka/Boni respectively. Kwinti also does not appear to add very much to the conclusions we can draw, as I have remarked in the introductory chapter.

As far as the English part of the comparison is concerned, even in cases where there is no difference of reflex among the four creoles, we will attempt to supply forms from all four languages. Where it seems relevant other English-based creoles will be brought into the comparison. This is most often the case with Krio, which we argue in Chapter Three has a special relationship to the Surinam creoles.

As for the Portuguese part of the comparison, this is as we have said biased towards Brazilian Portuguese. As it is not a priori obvious whether the Portuguese-derived items in the Surinam creoles are based on Portuguese models directly, or are based on a Portuguese creole introduced by the Jewish planters who settled in particular on the Suriname River in 1665, we will, where relevant, also introduce comparative data from various Atlantic Portuguese-based creole languages.

We will proceed in the case of each consonant as follows. First we will discuss the developments in the Surinam creoles of the English sound, then we will discuss the developments of its Portuguese counterpart, and finally where necessary we will

indicate differences between the two cases.

1) Labial Consonants

a) /p/

i) English

This consonant appears in general as /p/ in Surinam, e.g.

i)	<u>pV</u>	<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>
		pick	píki	-	píki	
		speak	píki	píki	píki	
		play	prej	peé	pee	peé
		paint	péni	(pe.ndé)	pénde	péni
ii)	<u>Vp</u>	heap	ípi	(h)ípi	(h)ípi	ípi
		whip	wípi	(h)úpi	wípi	
		stop	tápu	-	tápu	tapu
		top	tápu	-	tápu	tapu
iii)	<u>VpV</u>	cooper	kúpa	kúpa	kúpa	
		copper	kápa	-	-	
		people	piplí (obs)	-	-	
		supper	sápa	sápa-	sapa-	

A divergent development to /b/ appears in a number of cases:

<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>
sleep	sríbi	-	siíbi	siibi
sweep	síbi	-	síbi	sibi
scrape	krébi	-	keébi	
ship(mate)	síbi	-	-	-

The only common factor among these cases is that the English model has an initial /s/. Why this should cause this change is quite unclear. Let us examine the historical data regarding all such forms:

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1844</u>	<u>1798</u>	<u>1783</u>
sleep	sríbi síbi	slibi	sríbi slíbi	slibi		slibie	slibi sribi sibi
sweep	síbi	sibi	síbi				

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1844</u>	<u>1798</u>	<u>1783</u>
ship	sipi	sipi	sipi	sipi		siepie	shippi shibbi sibbi
ship(mate)	sibi	sipi sibbi					shippi shibbi sibbi sabba
supper	sapa	saba	sapa saba	sapa saba		saba	
scrape	krebi		krebi				
stop	tapu	tapo	tapoe				(tappou)
sharp	srapu	srapoe	srapoe		slapo	slapoe	srabbo
<u>English</u>	<u>1780</u>	<u>1777</u>	<u>1765</u>	<u>1718</u>			
sleep	slibi	sleeby	siipi	sliepe			
<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>			
sleep	-		siibi	siibi			
sweep	-		siibi	sibi			
ship	sipi		-sippi				
supper	sapa		sabba-	sapa-			
scrape	-		-	keebi			
stop	-		-	tapu	tapu		
sharp	saapu		srabbo	saapu	saapu		

Of eight clear cases involving an English model s(C)Vp no less than seven provide evidence of a development of /p/ to /b/ from at least one source. In several cases - those of ship, ship(mate), and supper - optional forms are provided in the same source. The cases of ship and shipmate involve a semantic differentiation. Whereas in 1783 the Sranan word for "ship" had an alternative meaning "slave who came from Africa in the same ship", with of course an identical phonological representation, later a situation appears to have developed whereby the form with /p/ came to be reserved for the first meaning, while the form with /b/ came to be reserved for the second meaning.

It is quite unclear why the occurrence of an initial /s/ in the English model should have resulted in the voicing of a postvocalic /p/. This voicing must clearly have been optional as is indicated by the vacillation between forms with /p/ and forms with /b/. There was a natural tendency for a choice to be made in favour of one or other alternant, which has resulted in a fairly even distribution between /p/ and /b/.

Sranan

	/p/	/b/
sípi	"ship"	sríbi "sleep"
sápa	"supper"	síbi "sweep"
tápu	"stop"	síbi "shipmate"
srápu	"sharp"	krébi "scrape"

The choice between /p/ and /b/ has apparently been made at different times for the different items. In the case of sleep we find no evidence for /p/ after 1765. On the other hand, in the case of supper we still find vacillation up till the middle of the nineteenth century when the form with /p/ apparently wins the day.

As far as the nasal cluster /mp/ is concerned one might think that this should be treated together with the other nasal clusters /nt/, /nk/, and so on. However as we have shown in Smith (1982) there is little uniformity of development to be found as far as the various nasal clusters are concerned, so that by treating these separately no loss of generality will result. As far as /mp/ is concerned there are only three clear examples which seem to be based on English models. These are dumpling, jump and sump. Other possible English items such as /kámpu/ "camp", /krámpu/ "cramp", /krámpu/ "clamp", /lámpu/ "lamp" etc. could equally well be based on Dutch models.

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
dumpling	adómprí	adomprí		dómbi	dumpru	dómíí	
jump	djómpo	djómpo	djompo	djómbó	djombo	djómbó	djompo
sump	-	-	-	-	-	sómbo	-

Here we also observe a tendency towards the voicing of the /p/. In this case, however, we can explain the voicing as involving partial assimilation to the preceding (voiced) nasal. At the present day we find voicing only in Ndjuka and Saramaccan. In fact in Ndjuka we seem to have a case of total assimilation in dumpling. What we would have expected is /*dómbíí/. In Sranan we find the voiced stop as an option in 1855 with jump.

In the case of the postvocalic cluster /sp/ we have only one example.

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
wasp	waswási	wassiwási	wasiwási	wassiwassi	wasiwási	wawasi wasi-wasi

We can however reasonably assume that the development of /sp/ to /s/ in this case is the normal development by comparing the development of /st/, which also reduces to /s/.

ii) Portuguese

The normal development of this sound in the Suriname creoles is /p/.

	<u>Portuguese</u>	<u>Saramaccan</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
i) <u>Initial</u>	passar	pasá	pasá	pasá	pass
	penar	pená	piná	piná	suffer
	poder	poli (1778)	-	pój	can
	partir	paatí	pratí	paatí	divide
ii) <u>Medial</u>	pipa	pípa	pípa	pípa	pipe
	popa	pómpa	-	pópa	poop
	chupar	tjupá	-	-	suck

The only exception to this rule concerns the nasal cluster mp.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>Cape Verde</u>	<u>São Tomé</u>	<u>Principe</u>	<u>Guiné</u>	<u>Gloss</u>
sempre	sémbɛ- sémpɛ-	sempe	sẽple			always
limpar	limbá	limpá	limpa		límpa	cleanse
limpo	límbɔ	limpə	lípu		limpu	clean
		limpu (Brava)				

The above items display a development to /mb/. On the other hand the items tampão Saramaccan /tampá/, and temprar Sranan (1855) temprà have the cluster unchanged.

The comparison with the Portuguese creoles indicates that the change to /mb/, at least when it occurs, is probably a strictly Surinam development, to be compared with the similar development in words of English origin. Schumann (1778) gives mb

in the relevant cases.

iii) Comparative notes

The only significant difference observable between the English-derived (hence English) and the Portuguese-derived (hence Portuguese) items is the peculiar development of /p/ after initial /s/ to /b/ in the English-based items. The three Portuguese items displaying such a structure have no trace of voicing in the labial stop.

Portuguese	Saramaccan	1778	Gloss
escupir	-	sukupi	spit
esperar	-	supla	wait
sapato	saapátu	sappatu	shoe

b) /b/

i) English

In nearly every case this sound gives /b/ in the Surinam creoles.

	<u>bV</u>	<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>
i)		bitter	bíta	bíta	bíta	bitá
		big	bígi	bígi	bígi	bígi
		beg	bégi	bégi	bégi	begi
		bury	béri	béi	béli	beli
ii)	<u>Vb</u>	rub	lóbi	lóbi	lóbi	
		grab	grábu	-	gaábu	
iii)	<u>VbV</u>	bubby	bóbi	bóbi ^s	bóbi	
		trouble	tróbi	toóbi	toóbi	tóobi
		cabbage	kábisi	-	tjábisi	

Alleyne (1980) gives for Saramaccan the form /gbóto/ for boat. Other sources for the Surinam creoles have only /b/ in this item.

<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Matuwari</u>	<u>Kwinti</u>	<u>Ndjuka</u>	<u>Boni</u>
boat	bóto	bóto	boto	bóto	bóto	boto

In fact this form is really out of place in this discussion since it could be derived from Dutch boot.

Then we have three items where /mb/ - in one case derived by assimilation and syncope as /mb/</nb/</ndb/</ndəb/ - (sometimes) becomes /m/.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1844</u>	<u>1837</u>
somebody	súma sma	soema	sáma sóema s'ma	soema	somma	soema
roundabout	lombóto lomóto rombóto	romboto	rómboto lómoto rómoto			
remember	membre mémre	membre memre	mémbre mémre	membre	memre	membree

<u>English</u>	<u>1798</u>	<u>1783</u>	<u>1765</u>	<u>1718</u>
somebody	soema sama	somma soma	soma	som badi
roundabout		rombotto lombotto		
remember	memree	membre	<u>1780</u> memere	

<u>English</u>	<u>Saramaccan</u>	<u>1781</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
somebody	sɔmbɛ sɛmbɛ	sombreh soma	sombre	sama	sama
roundabout					
remember	lómbo to mémbe		lombotto rombotto	membre	mémbee membe

In Smith (1982b, 1978) we had attempted to demonstrate that all the forms given alongside somebody above are in fact derived from this word. In fact this demonstration was only really convincing for the Sranan form of 1718 - som badi, and the Saramaccan forms /sɔmbɛ, sɛmbɛ/ and sombre (1778). In order to explain the other forms it was necessary to assume that they had undergone severe phonetic attrition. Let us reexamine these forms. In a number of creole languages

one finds that the lexical item for "person" is derived from a word that originally had the meaning "somebody". "person" is the meaning of these Surinam forms. Parallels are for instance Jamaican Creole /smádi/ (from somebody) and Berbice Dutch /kɛn / (from Eastern Ijò /kɛnj/ "somebody"). What other possibility remains open if we exclude somebody for the later Sranan forms? A derivation that requires much less special pleading would be from someone. A problem with this is that the /w/ of the English form never appears in any of the forms. This lack of /w/ is paralleled however in modern Cockney /səmən/ (Sivertsen, 1960). This form represents a pronunciation [sɛmən] (cf. Sivertsen, p. 83) at the present day.

In other words there are parallels for the substandard pronunciation of someone without /w/. We will assume therefore that the later Sranan forms, as well as those of Ndjuka and Boni, together with soma of Saramaccan (1781) (if this is not simply a Srananism), are derived from someone and therefore are not of relevance for this subsection on b.

roundabout is the only case of strictly intervocalic /mb/ displaying reduction to /m/. This reduction is only optional and seems to be fairly late. by'n'by for example does not display reduction - the present day Sranan form is /bambaj/.

remember must be examined together with other words - including words of Dutch origin - with the structure /..V̄m(b)rV/.

English	Dutch	Sranan	1856	1855	1850
remember	-	mémre	memre	mémre	membre
-	timmer	témre	membre	mémre	timre
hammer	hamer	ám(b)ra	hámera	tímmre	
-	nimmer	némre	nemre	nímmre	
number	nummer	nómru			
-	komkommer	konkómro	komkomro	konkómro	
-	kamer	kámra	kámera	kámra	kamera
-	emmer	ém(b)re	emre		

English	Dutch	1844	1837	1798	1783	1780
remember	-	memre	membree	memree	membre	memere
-	timmer	temree	timmere			
hammer	hamer	hamra				

<u>English</u>	<u>Dutch</u>	<u>1844</u>	<u>1837</u>	<u>1798</u>	<u>1783</u>	<u>1780</u>
-	nimmer	nimre		nemree		
-	kamer			kamra	kamera	kamere

<u>English</u>	<u>Dutch</u>	<u>Saramaccan 1778</u>	<u>Ndjuka</u>	<u>Boni</u>	
remember	-	mémbe	membre	membee	membe
-	timmer			tembee	tembe
hammer	hamer	(h)áma	hammera ambra	ambaa	amba
number	nummer	nóbu (De G)	nombuu	nombu	
-	komkommer	kukummre	komukomu		
-	kamer		kambaa	kamba	
-	emmer	émbe (De G)			

From this table it can be seen that for Sranan at least it is quite clear that the /b/ that frequently appears in older recordings of remember cannot be a transition consonant between /m/ and the following /r/. Otherwise such /b/'s would be of frequent occurrence in the rest of the table. In fact they are only recorded in some words in modern Sranan where they may in fact represent such a transition C. The Proto-Sranan form for this word would then be /*mémbe rε/. /b/ is apparently optionally lost, but at what stage is not clear. We have in fact no evidence against the possibility that this was already an option in Proto-Sranan times.

In Ndjuka and Boni we can clearly see that these imply forms such as /*mémberε, (h)ámbara, nómburu, kámbara, etc./ . The /b/ is not then directly a transition consonant between /m/ and /r/ - at least, not in terms of our assumptions about the nature of PSC - but rather between /m/ and /Vr/. Compare Berbice Dutch /hamburu/ "hammer", but /kambru/ "kamer" (Robertson, 1983). However, we cannot regard the /b/ in /mémbee/, /membe/ as definitely etymological in Ndjuka and Boni, in view of the other forms showing transition /b/.

For Saramaccan we can make no definite statements regarding the source of the /b/ in remember.

ii) Portuguese

The normal development of this sound in the Surinam creoles is /b/.

		<u>Portuguese</u>	<u>Saramaccan</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
i)	<u>Initial</u>	babar	babá	babá	babá	dribble
		burríco	bulíki	buríki	bulíki	ass's foal
		bom	búnu	bun	bún	good
ii)	<u>Medial</u>	acabar	kabá	kabá	kabá	finish
		cobrir	tjubí	-	-	cover
		dobrar	dubá	-	-	fold
		subir	subí	-	subí	go up
		gabar	gafá	-	gafá	praise

Acabar has in addition to the reflex /kabá/ "finish", the reflex /kaa/ "already". This is an abnormal development which is presumably to be explained by the status of this item as a function word. It is by no means irregular for such words to display an unusual degree of phonological attrition.

The apparent development to /f/ in Saramaccan /gafá/ cannot be explained in this way, however. This derives from an earlier /v/ as the Saramaccan form in 1778 demonstrates. A comparison with the Portuguese creoles is however instructive.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Cape Verde</u>	<u>CV-San Antão</u>	<u>Guiné</u>
gabar	gafá	gawwà (=/gavá/)	(ŋ)gabá	(ŋ)gavá	gáaba

A direct relationship with the San Antão dialect of Cape Verde creole is not being argued for in this case. In some forms of Portuguese there was a merger of /v/ and /b/ to /b/. The fact that in this case we apparently have the reverse case /b/ to /v/ here could be due to a hypercorrection. However, in this case, it is striking that the same lexical item is involved.

c) /t/

i) English

In nearly all cases this gives /t/ in the Surinam creoles.

	<u>fV</u>	<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>
i)		fit	fíti	fíti	fíti	
		face	fési	fési	fesi	fesi
		first	fósi	fósu	fósi	foši
		fling	fríŋi			
ii)	<u>Vf</u>	if	éfi	ε/e é/éi/éfi(DeG)	éfu	efi/efu
		cuff	kófu	-	kófu	kófu
		half	áfu	háfu	áfu	háafu
		self	sréfi	seéi/seéfi	seéfi	seéfi
iii)	<u>VfV</u>	softly	sáfri	sáápi	saáfi ^s	sáafi

Under Dutch influence English-derived items closely resembling their Dutch cognates are sometimes spelt with the v of the Dutch item instead of the f that would be expected. However, these spellings probably do not indicate any difference in pronunciation from those items that are spelt in the same sources with an f. Wullschlägel (1856) who has such spellings and also Dutch-influenced spellings of Dutch based items with v, states in his guide to the pronunciation that v is to be pronounced as [f]. Schumann (1783) gives most Dutch items with the v spelling f. Of the few words he gives with v the majority are in fact derived from English words in [f]. The only word of possible Dutch origin he gives with v (as distinct from a couple of words that are explicitly described as Dutch rather than Sranan) is vlakka/vrakka "spots" which may be derived from a dialectal variant of Dutch vlek. It is probably that he is using f and v with German values, i.e. indifferently [f]. See the note on transcription in Chapter One. This is likely too in view of the fact that Schumann, unlike most later recorders of Sranan, does not utilize the Dutch vowel conventions, e.g. [u] is written u and not oe, [y] is written ü and not u(u), vowel length is indicated by h, not by vowel doubling, and so on, all indications that he is employing German conventions.

In modern Saramaccan there are a few cases where /f/ is replaced by /v/, /p/, or zero.

<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Saramaccan^s</u>	<u>1805</u>	<u>1778</u>
stand/ damn fool	tanfúru	tanvúu	tanvúu		tanfuru
play fool	prejfúru	peevúu	(peefúu)		prefuru
self	sréfi	seépi		srefi	srepi
if	éfi/éfu	seéi e/ε é/éi/(éfi) (De Groot)	seéi (éfi)		effi

<u>English</u>	<u>Djuka</u>	<u>Boni</u>
self	seéfi	seéfi
if	éfu	efi/efu

In the case of /tanvú/ whose English origin is fairly obvious, although it is not clear whether it represents damn fool or stand (i.e. "stay") fool, it seems clear that we have another case of voicing in nasal clusters. In the case of /peevú/ however we would seem to have a case altered by analogy. That this is so is suggested by the fact that the two Saramaccan sources quoted differ. The source "s" has the expected development, while Donicie and Voorhoeve (1963) have a deviant development.

/p/ for /f/ in /seépi/ which as Schumann (1778) indicates goes back at least to the eighteenth century is at first sight inexplicable in terms of the influence of the three African languages responsible for influencing the Surinam creoles in Surinam - Gbe, Kikongo and Twi. These all have /f/ in their phonological systems. On the other hand it is clearly a Surinam phenomenon as only Saramaccan (and Matawai) display /p/ here. It is possible that this is parallel to a phenomenon treated in the next section where Dutch and Gbe derived words sometimes display a development of /v/ to /b/ before /i/ (English-derived forms have /b/ in all cases). We related this to a Gbe dialect feature whereby /v/ optionally becomes [β] before /i/ (Capo, to appear). Similarly, the same dialect optionally has [ϕ] for /f/ before /i/. We argue that the bilabiality of [β] was possibly perceived as stronger than its fricativity, giving /b/. The parallel case may apply to [ϕ] giving /p/.

Finally zero for English /f/, and presumably early Surinam creole /*f/ too, is probably to be ascribed to the fact that both the words concerned are high-frequency grammatical words. As is well-known such items are susceptible to types of reduction that do not affect other words.

ii) Portuguese

The only development of this sound in the Surinam creoles is to /f/.

	<u>Portuguese</u>	<u>Saramaccan</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
i) <u>Initial</u>	ficar fungo festa	fiká fúngu -	fiká fúngu fésa	fiká - -	leave behind fungus feast
ii) <u>Medial</u>	mofina coifa	mofína kpéfa	mofína -	- -	poor

d) /v/

i) English

The normal representation of this sound in the Surinam creoles is /b/.

	<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>
i) <u>vV</u>	very	belle- (1765:N)	bere- (1778)	-	-	bere -
ii) <u>Vv</u>	leave love live grave	líbi lóbi líbi grébi	- lóbi líbi geébi	líbi lóbi líbi geébi	lobi líbi gjébi	- lib/liv greb/grev
iii) <u>VvV</u>	river every heavy cover	líba íbri ébi kíbri	íbi hébi -	líba íbri ébi/íbi	líba hébi kiibi	ríba/ríva ébri ébi koba/kova

The reflex of English /v/ is zero in the word give, which is uniformly /gi/ in Sranan, Ndjuka, and Boni - it does not occur in Saramaccan - except for Fermin (1769) who gives give for Sranan. Judging by some of the other forms in this source - hedí "hat", godí "God" - it would probably be a mistake to accept this source as reliable when it gives forms that are closer to English than other sources provide. There is early seventeenth century evidence for the pronunciation [gi:] in substandard London speech (Dobson, 1957: p. 477).

Herlein (1718) gives various reflexes for words with English /v/:

<u>English</u>	<u>Sranan 1718</u>
very	belle
river	riba
live	liewy
love	love

For liewy and love Nepveu (1765) explicitly gives the corrections libi and lobi. We have to ask ourselves to what extent Herlein is a reliable source.

In the first place he includes a fair number of errors:

<u>English</u>	<u>Sranan 1718</u>	<u>1765 (Nepveu)</u>
stand	tem	tan
want	wanto	wanti
place	plasje	ple(i)si

Secondly he incorporates a number of Dutch expressions, or "Dutchifications" of English-derived expressions, that do not seem likely ever to have belonged to Sranan:

<u>Sranan 1718</u>	<u>Dutch</u>	<u>Sranan</u>	<u>English</u>
wil	willen	wani	want
agter	achter	attara (1783)	after ("arter")

It would seem then impossible to base any conclusions on Herlein's use of v and w for English /v/ in one item each where all the other reliable sources are unanimous in displaying b.

We do have one form only evidenced in modern Sranan /revensi/ revenge - but we have no reason for regarding this item as other than a modern loan from English or Guyanese creole.

ii) Portuguese

We find two developments here - to /b/ and to /v/. These are not predictable on phonological grounds. The /b/ reflex is more common.

		<u>Portuguese</u>	<u>Saramaccan</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
i)	<u>Initial</u>	a) varrer	baí	-	-	sweep
		vestir	bisí	-	-	dress
		virar	biá	-	-	turn
	b)	vento	véntu	-	-	wind
		vivo	-vivo	-	-	alive
	ii)	<u>Medial</u>	a) gavião	gabián	-	-
cativo			katíbo	katíbo	-	slave
ovo			(w)óbo	-	-	egg
b)		avô/avó	avó	afó	avó	grandfather/ mother

/v/ develops to /f/ regularly in Sranan, and sometimes apparently, in Ndjuka and Saramaccan.

We will compare all items containing Portuguese v with their cognates in the Portuguese creoles.

	<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>São Tomé</u>	<u>Principe</u>	<u>Gloss</u>
a)	varrer	baí	bali	baí	vwê	sweep
	vestir	bisí	bisî	biší	biší	dress
	virar	biá	biá	bíla	vyâ	turn
	voar	buá	boà	vwa	vwâ	fly
	vassoura	basó	bassorre	basóla	bo swá	brush
	ferver	fɛɛ bé	frebbèh		febé	boil
	provar	poobá	probà			taste
	atravessar	tobesá	trebessà			cross
	cativo	katíbo	kattibo	katšibu		slave
	chuva	tjûba	tchuba	súba	usúva	rain
	gavião	gabián	gabiàm			hawk
	gengiva	gingímbi (Ndjuka)				gum
	ovo	(w)óbo	wóbo	óvu	óvu	egg
	pólvora	poóba	hóbo proba			powder
	b)	invejar	*fedjá	wedja		
vara		-	walla			rod
vento		véntu	wintu		uvětu	wind
vivo		-vivo	wiwo			alive
avô/avó (gabar)		avó gafá	awwò gawwà		avó	gr.parent praise

<u>Portuguese</u>	<u>Cape Verde</u>	<u>Papiamentu</u>	<u>Gloss</u>
varrer	baré	báři	sweep
vestir	pstí	bísti	dress
virar	brá	bíra	turn
voar	bwá/vwá	(búřà)	fly
vassoura	basóra	basóra	brush
ferver	ferbé	(herebe)	boil
provar	prová	prúbà	taste
		púrbà	
cativo		katíbu	slave
chuva	súba	-	rain
gavião	gavjãw		hawk
ovo	óbə/óvə	(wébu)	egg
polvora	polvrá	póibu	powder
b) invejar		(envidia)	envy
vara		bára	rod
vento	béntə	(biéntu)	wind
	véntə		
vivo	bíbə		alive
	víbə		
(gabar)	(ŋ)gavá		praise
	(S. Antão)		

* said to be a Ndjuka word (Donicie & Voorhoeve, 1963)

Although the variation we see here does not run parallel in the creoles examined here, they all exhibit it to a greater or lesser degree.

Ferraz (1979) says of São Tomé creole (p. 15):

"Modern Portuguese /v/ corresponds to either /v/ or /b/ in ST. The correspondences of Portuguese /v/ with ST /b/ date back to the Portuguese spoken in the formative stages of ST. In Old Portuguese, /b/ occurred as a variant of /v/, a variation which is still found dialectally in the north of Portugal. This variation was due to a confusion between /v/ and /b/ dating back to Vulgar Latin (Nunes, 1969). Gil Vicente, writing in the first half of the 16th century, converts /v/ into /b/ in the speech of his Negro characters. The replacement of /v/ by /b/ may have persisted until the end of the 15th century, being absorbed into African Creoles, but already appearing non-standard in the 16th century. Today it is the direct correspondence Standard Portuguese /v/ - ST /v/ which is productive; Portuguese /v/ no longer becomes /b/ in ST."

iii) Comparative notes

The development of /v/ in the Surinam creoles displays obvious differences as between items of English and Portuguese origin. Those items that are indisputably of English origin display a consistent /b/ in Surinam (apart from recent loanwords). The twenty Portuguese items on the other hand display /b/ in 14 cases only, and /v/ in the six other cases.

The replacement of /v/ by /b/ in the English items is at first sight puzzling. Price (1975) argues that nearly all the slaves imported into Surinam in the 17th century derived from the ports of the Congo and Northern Angola coast (one third), or the Slave Coast (two thirds). The major languages of the first area are as we have seen Kikongo and Kimbundu, and of the second area Gbe (the name for the dialect complex to which Ewe and Fon belong). Now all of these languages have a /v/ as part of their consonant systems, so that it is not obvious why /v/ in English items should have been replaced by /b/. In other words, if the Surinam creoles were purely a local creation due to a Bickertonian creolization it would be difficult to understand why /v/ should go to /b/. On the other hand Krio (and WAPE in general) displays /b/ frequently, suggesting the possibility of an African source for this reflex.

We have three languages - one the matrix language English, Kikongo (the influence of Kikongo appears to have been much greater than that of Kimbundu), and Gbe - all of which have /v/ in their consonant systems. Under these circumstances the only explanation of the replacement of /v/ by /b/ would be the occurrence of a normal phonological change. However, this is unlikely to have occurred in view of the following evidence.

Crucial are the items of Portuguese origin, the majority of which are assumed to have been present in Surinam from the beginning by supporters of the monogenesis/relexification hypothesis, and from 1665 by creolists who ascribe the Portuguese component to the Jews who arrived in that year. Roughly a third of these preserve /v/, or its later development /f/. Supporters of the first viewpoint would be hard put to it to find any explanation for this at all. If the Portuguese

items represent the oldest level of vocabulary in the Suriname creoles, why should the change from /v/ to /b/ be incomplete, while it is complete in the later level represented by items of English origin?

If the assumption is made - and we are of the opinion that this assumption is correct (see Chapter Three) - that it was only the Jewish immigration in 1665 that was responsible for the introduction of the Portuguese element into the creole languages of Surinam, then we have to say that sometime after 1651 an obligatory sound change took place from /v/ to /b/, affecting all the English items with /v/, but that during the presumably brief period following 1665 when Portuguese items were entering the language(s) this change ceased to operate, with the result that some Portuguese words did, and other Portuguese words did not undergo it.

In addition it is useful to ask if there are any early Dutch items in the Surinam creoles with /b/ for /v/. These would shed light on the question of whether there was a strategy of replacing /v/ by /b/ in the early period in Surinam. Note, however, that even if the existence of such a strategy were to be established it would definitely not prove that items of English or Portuguese origin did not enter Surinam already changed. In fact as items adopted from Gbe and Kikongo (presumably all early) will show, there was no general accommodation strategy involving the replacement of /v/ by /b/.

First a word about the normal treatment of Dutch words with /v/. Initially we find only /f/. Medially and finally the same is the case, with the possible exception of the items listed below.

There are six possible cases of /b/ of Dutch origin:

	<u>Dutch</u>	<u>English</u>	<u>Sranan</u>	<u>1783</u>	<u>Saramaccan 1778</u>	
1	lever	liver	léfre	lefre	lében	lébben
2	zeven	seven	séjbi	seben	sében	seben
3	duivel	devil	didífri	didüfri (Black) düfri (White)	didíbi	düfri
4	drijven	driven	dríbi	dríbi (1855)	-	-
5	vanille	vanilla	baníri	baníri (1855) banilla (1777)	-	-
6	stuiver	stiver	tífri (1855)	tibri	-	-
7	provoceren	-	-	-	póboísi	probossi

Note that while the influence of Guyana Dutch creole - Berbice Dutch and Skepi Dutch - cannot definitely be ruled out, the normal reflex of Dutch /v/ is apparently /t/ in these languages. However, due to the restricted nature of the available data it seems premature to draw any too definite conclusions either way.

We will now consider the various items in more detail.

1. lever:

It is worthwhile to compare the modern form in all languages of Surinam as this is unusually varied.

<u>Sranan</u>	<u>Saramaccan</u>	<u>Kwinti</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>(Berbice)</u>
lefre	lében	lébe lébé	lébí	lébi	léfre

The stressed vowel of this item is not diagnostic of either English or Dutch origin. /e~é/ occurs for English /i/, cf.

<u>English</u>	<u>Sranan</u>
if	éfi/éfu
bin (been)	ben
shilling	sren

In items of Dutch origin /e:/ is usually represented by /ej/ in Sranan, but /e/ occurs as well, presumably representing an older accommodation strategy.

<u>Dutch</u>	<u>Sranan</u>
kweken	kwéki
slepen	srépi
keep	képi

The patterns /é-e/ and /é-i/ both occur with both English and Dutch items.

<u>Dutch</u>	<u>English</u>	<u>Sranan</u>
winkel	-	wénkri
ceder	-	sédre (1855)
-	gentle	géndri
-	remember	mémre

We must conclude the question of Dutch and English origin in the case of the /b/- forms is unclear in this case. The resemblance between the Sranan form and the Berbice form is striking.

2. zeven

The forms of this word in the various creole languages are as follows:

<u>Sranan</u>	<u>1855</u>	<u>1798</u>	<u>1783</u>	<u>Saramaccan</u>	<u>1778</u>
séjbi	seibien seebien seibi	sebie	seben	sébéen séibi ^s	seben
<u>Kwinti</u>	<u>Ndjuka</u>	<u>Boni</u>			
seíbi	seíbin	seíbi			

The recordings by Schumann of Sranan (1783) and Saramaccan (1778), as well as the modern Saramaccan form /sébéen/ could be derived from either Dutch or English. The later Sranan forms, as well as the Kwinti, Ndjuka, and Boni forms can all be explained in terms of an original Dutch-derived form /*séibin/, which probably dates back at least to the early eighteenth century, as it occurs in Ndjuka. This creates a problem, however, as Schumann (1783) gives a form for Sranan - seben - which is clearly not derived from the presumed early Sranan form /séibin/. Interestingly we find a similar situation regarding the numeral "nine".

	<u>Sranan</u>	<u>1855</u>	<u>1798</u>	<u>1783</u>	<u>Sara-</u> <u>maccan</u>	<u>Dutch</u>	<u>English</u>	
i)	a)	néigi	néigien	neegie	-	néigi	negen	--
	b)	-	-	-	neni	néni	-	nine
ii)	a)	séjbi	seibien etc.	sebie	-	séibi ^s	zeven	-
	b)	-	-	-	seben	sébéen		seven (?)
i)	<u>Sar.</u>	<u>1778</u>	<u>Kwinti</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Dutch</u>	<u>English</u>	
	a)	-	neígi	neígin	neígi	negen	-	
	b)	neni	-	-	-	-	nine	
ii)	a)	-	seíbi	seíbin	seíbi	zeven	-	
	b)	seben	-	-	-	-	seven (?)	

Note that the parallelism found in this table does not necessarily prove that the forms under ii)b. are of English origin. We regard it however as very suggestive evidence for such an origin. If this is so then the /b/ of the ii)a. form might not be original, but be the result of a crossing with the putative English-derived form.

3. duivel

The forms of this word in the various creole languages are:

<u>Sranan</u>	<u>1855</u>	<u>1798</u>	<u>1783</u>	<u>1780</u>
didíbrí	didíbrí	diediebríe	didúbri (Black) dóbri (White)	dubeli
<u>Saramaccan</u>		<u>1778</u>	<u>Ndjuka</u>	
didíbi		dúbri	dídíbí	

This form could be derived either from the Dutch standard variant duivel /d̥y̥vəl/ or the substandard English divvil /divəl/. The German spelling ü and the Dutch spelling u indicating a pronunciation [y] do not have the diagnostic value one might expect, as Schumann frequently records a vowel of this quality in cases where /i/ occurs in labial environments indicating a rounded allophone caused by the environment. Compare:

<u>English</u>	<u>Sranan-1783</u>	<u>Sranan</u>
fit	fúti	ífi
spit	spúti	spíti

A further reason for disregarding such spellings is the fact that the reduplicative vowel in this form - didúbri - indicates that the second vowel is also phonologically /i/. This case must remain undecided.

4. drijven

The two /b/-forms which might be suspected of being derived from this word are the present Sranan form /dríbi/ and the same form in Focke (1855). The present form is glossed "move up, shift; float". Semantically there is overlap with forms with an /f/ or a /p/: Sranan /drífi/: "drive, drift"; Saramaccan /diípi/< /*dirípi/: "recede; drift; flow", which could either be from an older monophthongal

pronunciation of drijven, [dri:vən], or from the English word drift. A problem is that there is no /b/-form evidenced earlier than 1855. Schumann (1783) has only drifi. The /b/-form could be derived either from the same monophthongal pronunciation of drijven referred to above, or from English driven, or driv (a past tense form of drive occurring in the U.S., parallel to /súnju/ (< sunk), /drúju/ (< drunk), /bróko/ (< broke(n))).

A Dutch origin would however appear more likely on semantic grounds.

5. vanille

Another case only evidenced in its present form since 1855 is /baniri/ "vanilla" which could reflect the variant Dutch pronunciation [vaniljə]. This case is also unclear, however, due to the existence of a form given by Stedman (1796), which presumably is to be dated to his sojourn in Surinam, in other words to 1777 at the latest. This is banilla, which would raise the possibility that the modern form is the result of a cross between an English-derived form and the Dutch form.

6. stuiver

An apparently stronger piece of evidence is the following form:

<u>Sranan-1855</u>	<u>1798</u>	<u>1783</u>	<u>1780</u>
tíbrí	tiebrie	tibri	tiberi

This must be derived from the monophthongal Dutch pronunciation [styvər]. The more normal diphthong gives /oi/ in Sranan. The unrounded vowel is no problem as this is paralleled by forms such as /fandísi/ vendutie, /postíri/ postuur, /bírti/ buurt, etc. The loss of initial /s/ indicates that this is a very early borrowing into Sranan as this occurs only very infrequently in Dutch-derived items. Interestingly enough Neger-Hollands, the Dutch creole of the former Danish Virgin Islands, also has a /b/ in this word, which appears in the form /stibi/. It is not impossible that this word might have entered Sranan via English, as it occurs in the OED with the meaning "typical coin of small value". The pronunciation given in this dictionary is however [staivər] which represents the Anglicization of a diphthongal rather than a monophthongal pronunciation. This would normally give /*tébre ~ tébri/ in Sranan. We conclude therefore that this represents a Dutch form.

7. provoceren

The development of Saramaccan /póboŋi/ (1778: probossi) is partly discussed in the section on /r/. However, the development of the fricative to /b/ is not dealt with there. At first sight this might appear to be a straightforward case. It belongs, however, to a rather unusual class of items - Dutch items in 18th century Saramaccan which are not found in Sranan. This raises the possibility that we might have a cross here between provoceren and the Portuguese provocar, which could have existed in a Portuguese creole as /*proboká/.

One additional factor to be taken into account is that in terms of our hypothesis on early Surinam creole sound structure no less than four and a half out of seven of these items involve a /b/ followed by an /i/.

1. lɛ́bɛn/lɛ́bɛɛ/lɛ́biri (?)
2. séibi (Dutch)
3. didíbi (?)
4. diríbi (Dutch)
5. baníla - baníli (English - EnglishXDutch ??)
6. tíbiri (Dutch)
7. poroboséri (DutchXPortuguese ??)

We will find the same imbalance in favour of /b/ before /i/ in the Gbe items in the Surinam languages.

In discussing the reflexes of Gbe /*v/ in the Surinam languages it is perhaps useful to treat the Saramaccan, Sranan, and Ndjuka reflexes separately as there are some differences.

First the Saramaccan cases:

Gbe (Fon)	Saramaccan	1778	Gloss (Gbe)	Gloss (Sara)
avìtì	aviti	awítiti	trap	animal trap
àvɔ̀	avɔ̀	-	cloth	strip of cotton with ritual associations
vodu	vodú	-	magic	snake
ali-ví	alibí	aibì	kidney (dim)	kidney bean
vɛ̀	bɛ̀	bae	red	red
hòxó-vi	hohobi (Herskovits, 1931)	-	twin (dim)	twin

Here we have three cases of Fon /v/ appearing as /b/ - /alibí, be, hohóbi/.

Secondly the Sranan cases:

<u>Gbe (Fon)</u>	<u>Sranan</u>	<u>Para</u>	<u>1783</u>	<u>Gloss (Gbe)</u>	<u>Gloss (Sran)</u>
àvɪkɛ́tɛ	(a) frekete	avrekete	-	God of shore	God
vi-ye	fiye (Fodu lge)		-	my child	child
àviti	abití		-	trap	animal trap
vɛ	-		bae (Djutongo)	red	red
gò-ví	gobi		-	small bottle	small drinking calabash
jobó	jobó (1856) (secret lge)		-	white man	white man
vodu	fodú	(a)vodu	-	magic	magic

Here we have four cases of Fon /v/ appearing as /b/ - / abití, gobi, jobó (1856), bae (1783)/.

The Ndjuka evidence is not very extensive:

<u>Gbe (Fon)</u>	<u>Ndjuka</u>	<u>Gloss (Gbe)</u>	<u>Gloss (NDJ)</u>
àviti	afítí, avítí	trap	animal trap
vodu	vodú	magic	snake sp.

In Ndjuka there is as yet no case involving Fon /v/ appearing as /b/.

Note that among the /b/-cases we have four cases involving the environment before /i/ as against two cases involving other vowel environments. It is very curious that we should find among the Dutch forms a predominance of cases involving this environment, and the same among the Gbe forms. Note that items deriving from Portuguese and involving the sequence /vi/ also display a majority of /bi/-reflexes over /vi/-reflexes - four to one. However, this cannot be shown to be relevant as /b/-reflexes are more frequent than /v/-reflexes in any case.

The probable explanation for this skewing of reflexes is to be sought in the Fon

dialect *Arɔhún*, spoken in and around the town of Alada, /v/ optionally becomes [β] before /i/ (Capo, to appear). If this is an old-established allophonic feature - which is impossible to say (it is however shared by a few neighbouring dialects) - then we might reasonably suppose that [β] would be represented by /b/ in the Surinam languages, rather than by /v/. This would involve the bilabiality of [β] being perceived as more prominent than its fricativity. This would certainly provide us with an explanation for the preponderance of /b/-reflexes preceding /i/ in Dutch-derived and Gbe-derived items. A further consequence would be that the Dutch and Gbe items concerned entered the Surinam languages (or their earlier stages) at around the same time.

Speakers of many forms of Gbe, and of Kikongo do not utilize this sound [β]. Note that Saramaccan /aviti/ and Sranan /abití/ would derive from different variants, or from different dialects.

According to Wooding (1972) the most important slave-trading centres in the Slave Coast region in the seventeenth century were Alada and Whydah. This would explain the occurrence of a dialectal feature native to Alada. A strong Alada connection among the Saramaccan at least is demonstrated by the fact that singers of Papá songs refer to them as Aladá. Papá songs are in a secret ritual language based to a large extent on Gbe words.

This leaves us with two items still requiring an explanation - /be/ and / jobó/.

As far as the first is concerned we think that influence from other forms of similar meaning in other languages and dialects may well be responsible for the replacement of /v/ by /b/.

- | | | |
|----|------------|--|
| i) | Gbe (Vhe): | bia "be red"; biabiã "red" |
| | Yoruba: | bē "bright-coloured, red" |
| | E. Ijo: | ɓjaɓja "bright-coloured" (< ɓja "ripen") |
| | | (Berbice Dutch bebta "red, yellow") |
| | Twí: | beré "red"; berébèrè "red" |

Here we mention only languages for which there is some evidence of direct contact

with the Surinam creoles in the form of direct loaning. The form could, however, be explained solely in terms of the two Gbe items.

- ii) Other Gbe: yevú/yevó/yovú "white man"
 Yoruba: òìbò/òyìbò/òyímbo/èèbò'
 Ibo: oyìbo

This represents a thornier problem than that of the first case. The form /jobó/ bears the most resemblance to Fon /jovó/. The Saramaccan preserve traditions of strands of Anagó ancestry - the Anagó are the Yoruba of S.W. Nigeria, who are neighbours of the Fon - but the number of Yoruba items in Surinam is small. The word /jobó/ is first recorded in 1856, when ordinary Sranan had no contrast between /v/ and /f/ (cf. Wullschlägel, 1856), so that the /b/ might represent a late attempt to preserve the effect of /v/. However, this item is stated to be from a secret language which probably suggests that it was much older.

The same skewed distribution of /v/ and /b/ observed above does not appear in the items from Kikongo /v/. These presumably entered the Surinam more or less contemporaneously with the Gbe items. However, there is no definite example of the Kikongo sequence /...vi.. / evidenced here.

Kikongo dialects	Sranan	older Sranan	Gloss (Kik)	Gloss (Sran)
1. Ntandu: mvúka	fuka (Para)		ague	sp. sickness
2. Kituba: mvúmvu	wunwun	voenvóen: 1855	wasp	large carpenter bee
Kikongo dialects	Saramaccan	1778	Gloss (Kik)	Gloss (Sara)
2. Kituba: mvúmvu	vunvu	wumwu	wasp	humming bird
	vunvun ^s			
3. Ntandu: mvúla (also Kimbundu)	vulá		rain	rain
4. Ndibu: ma-véénda	muvenda	lovenda	baldness	hairless corners of forehead
	mofenda ^s			
5. Ntandu: véléléé Yombe: vííníníí	vénénéé		clean	clean
6. Yombe: véénénéé	vénénéé		naked	naked
7. véembe Kimbundu: mbembe	bembé		sp. grass purslane	purslane

Etymologies: (Item number 1 is from Wooding (1972); Items 3-8 are from Daeleman (1972)

Here we find /v/ reflected in the Surinam creoles as /v/ (or its development /f/) with the possible exception of /bembé/. However Kimbundu could be responsible for the stop in this form. Semantically it provides as Daeleman (1972) says a better match than the Kikongo form. Daeleman gives a number of other forms for which equivalents can only be found in Kimbundu.

Let us sum up the available evidence regarding the treatment of /*v/ in the Surinam creoles.

<u>Origin</u>	<u>Surinam creoles</u>
English	/b/
Portuguese	/v ~ b/
Dutch	/b/ (early preceding /i/)
	/f/
Kikongo	/v/ (→ /f/ in Sranan)
Gbe	/v/ (→ /f/ in Sranan)
	/b/ (preceding /i/ (sometimes))

Words of English origin display a consistent /b/ except for the presumably late loan /revensi/ "revenge". This is consistent with our hypothesis that the development of /v/ to /b/ took place outside Surinam. The reflex /b/ is common in the Caribbean creoles, and also strikingly in Krio and WAPE.

The theory that there was a sound change from /v/ to /b/ in the early years although suggested by the total replacement in items of English origin, lesser replacement in items of Portuguese origin, and even lesser replacement in items of Dutch origin, matching the chronological order of the linguistic inputs into the Surinam creoles, falls down on two points. Firstly the fact that words derived from Dutch parallel those derived from Gbe in the skewed occurrence of /b/ precisely before /i/ - a feature which can in all probability be associated with the Fon dialect spoken in Alada, one of the two most important slave trading centres of the Slave Coast. Why this feature was transferred to items of Dutch origin can be explained by the fact that during the seventeenth century no less than two thirds of the slaves imported into Surinam came from the Slave Coast, and of course it was precisely during this period that Dutch items began entering the Surinam creoles.

The fact that both Gbe and Kikongo speakers had /v/ in their phonological systems, and therefore did not need to substitute another sound for it (with the one exception of the optional allophone [β] of /v/ before /i/ mentioned above) suggests also that both the English and Portuguese items with /b/ have an origin external to Surinam - the English items are to be explained as brought from Barbados with Proto-Sranan, while the Portuguese items derived from Brazil in a Portuguese-based creole (which, like all other such creoles in the Atlantic area, has dual reflexes of Portuguese /v/ - /v/ and /b/).

e) /m/

i) English

This sound is normally represented by /m/ in the Surinam creoles, except in final position where it is generally represented by nasalization of the preceding vowel, [ŋ] or both.

i)	<u>mV</u>	<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>
		meet	míti	míti	míti	míti
		middle	míndri	míndi	míndii	mingi
		make	méki	mbéi	méke	meki
		many	méni	-méni ^s	-men	-men
ii)	<u>Vm</u>	dream	dren	-	deén	den
		name	nen	né/nén ^s	nén	nen/nem
		time	ten	té/tén	tén	ten
		come	kon	kó	kón	kom/ku
iii)	<u>VmV</u>	promise	pramísi	paamísi	paamísi	
		tomorrow	tamára	-	tamáa ^s	tamaa
		woman	úma	-	úman	uman

In Saramaccan, English /m/ becomes /mb/ in some cases.

<u>English</u>	<u>Saramaccan</u>	<u>English</u>	<u>Saramaccan</u>
me	mi	meat	mbéti
meet	míti	mill	mbíi
mosquito	masikíta ^s	mate	mbéti
miss (n)	mísi	make	mbéi
miss (v)	mísi		
mix	mókísi	make-we-	mbó-u-

<u>English</u>	<u>Saramaccan</u>	<u>English</u>	<u>Saramaccan</u>
middle	míndi		
meddle	méi		
how many	un-méni ^s		
'member	mémbe		
smell	suméé		
mind	méni		
mutch	músu		
much	túmúsi	promise	paamísi/paamúsi
must	músu	goodmorrow	kumáa
money	móni	mortar	máta
mangrow	mángo	molasses	maási
smoke	sumúku	master	mása
more	mɔ	man	mánu
come out	kumútu		

If we examine the vowel context we come up with an interesting distribution:

<u>Vowel</u>	<u>/m/</u>	<u>/mb/</u>
i	x	x
e	-	x
	x	-
a	x	-
	x	-
o	-	x
u	x	-

The only context where in fact both /m/ and /mb/ occur in Saramaccan in English words is before /i/. In our listing of these cases there are five cases where /m/ occurs, and one where /mb/ occurs. One case not listed involves variation:

<u>English</u>	<u>Saramaccan</u>	<u>Saramaccan^s</u>	<u>1778</u>
shaving	sémbí-ndéfi	sé mĩndéfi	sebinefi
-knife	sémí-néfi		

The 1778 form is close to what we would posit as the Proto-Sranan form /*sébi-néfi/. As a result of a nasalization process described in Smith (1980), the /b/ was nasalized to /m/. This is then the immediate point of departure for the development of a variant with /mb/.

Especially interesting is the complementary distribution among the mid vowels: /m/ occurring with /ɛ/ and /ɔ/; /mb/ occurring with /e/ and /o/.

The eighteenth century recorders of Sranan and Saramaccan demonstrate clearly that even then there was widespread confusion between final /n/ and /m/. We will say more on this topic in the next section (that on /n/) but will illustrate this here:

<u>English</u>	<u>1798</u>	<u>1783</u>	<u>1780</u>	<u>Earlier Sources</u>
dream	dreen/drem	drem		
him	em	hem	hem	
shame	sjem	shem/sjem		1771 hem
them	djen	dem		1777 den
time	tem	tem	tem	1765 tem 1718 tem
come	kom/kon	komm	kom	1765 kom 1718 kom
drum	droon	drum		
cookroom	koekroe	kukru	koekrom koekeroe	

In Saramaccan in particular nasality seems to be unstable (Voorhoeve, 1939) and easily lost. Compare the following examples:

<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Boni</u>
name	né/nén ^s	nem	nen	nén	nen/nem
them	de	dem	den	dén	den
time	té/teñ	tem	ten	tén	ten
come	kó	komm	kon	kón	kom/ku
some	so	som	son		

More common than loss in Saramaccan is however retention of the nasal feature.

<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Boni</u>
swim	sún	sum			
him	hén/én	hem	en	en	en
beam	bén	bem	-	-	-
shame	sén/sín ^s	shem	sjen	sjén	sin
time	tén/té	tem	ten	tén	ten
drum	doón	drumm	dron	doón	doon
dram	daán	dram	dran		

There are only a couple of examples of /m/ in an unstressed, or **weakly stressed** position in an English model:

<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>1798</u>	<u>1780</u>
cookroom	-	kukru	kukru	koekroe	koekrom koekeroe
handsome	hánso hánse	hansem			
<u>English</u>	<u>1765</u>	<u>1718</u>	<u>Ndjuka</u>		
cookroom			kúkúu		
handsome	hansom	hansum hantsum			

In all the modern languages /m/ has been lost in such positions.

ii) Portuguese

This sound is normally represented by /m/ in the Surinam creoles.

	<u>Portuguese</u>	<u>Saramaccan</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
i) <u>Initial</u>	meter	meté	meté	-	introduce
	mandar	mandá	-	-	send
	mulher	mujée	-	mújée	woman
ii) <u>Medial</u>	comer	kómé	-	-	eat
	consumir	kusumí	kusumí	-	consume
	tomar	tumá	tumá	-	grasp

The only exceptions seem to be the following cases:

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>São Tomé</u>	<u>Gloss</u>
demolir	dimbolís	-		ruin
vomitar	gumbitá	-	gumitá	vomit
melancia	baasia	-		watermelon

<u>Portuguese</u>	<u>Cape Verde</u>	<u>CV dial.</u>	<u>Papiamentu</u>	<u>Gloss</u>
vomitar	vumitá	gumitá (Fogo)	gumita	vomit
melancia	malásia balásia	bəlanšijə (Brava)		watermelon

The two cases with /mb/ are to be compared with the similar cases involving English-derived vocabulary.

The Saramaccan form /baasía/ suggests the existence of an earlier form /*balansía/. This is to be related to the recorded Portuguese dialect variant belancia (cf. Lopes da Silva, 1957).

2) Dental/alveolar consonants

a) /t/

i) English

This consonant appears in general as /t/ in the Surinam creoles, e.g.

i)	<u>tV</u>	<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>
		stick	tíki		tíki	tiki
		tie	taj	tái	téj	téi
		trouble	tróbi	toóbi	toóbi	tóobi
		tongue	tógo	tʃngɔ	tóngo	tongo
ii)	<u>Vt</u>	hit	íti	(h)íti	íti	
		spit	spíti	-		
		white	wéti	wéti	wéti	weti
		hat	áti	-	áti	hati
iii)	<u>VtV</u>	bitter	bíta	bíta	bíta	bitá
		gutter	gótro	gʃtɔ	gótóo	
		bottle	bátra	báta	bátáa	bata
		mortar	máta	máta	máta	mata

One exception to this rule concerns the nasal clusters again:

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>
want	wáni	wani	wánni		wannie wannie wan	wanni
hunt	ónti	honti	hónti	hontie	hondi	
paint	péni	peni		penni	pendi	
plant	práni	plani	plánni	planti	penni	
			práni		planti	
cant	kánti	kanti	kanti	kanti		kanti
gentle	géndri		géndri	gendri		gendri
country	kóndre	kondre	kóndre	kondre	kondree	kondre

<u>English</u>	<u>1780</u>	<u>1765</u>	<u>1718</u>
want	wandi wan	wanti wandi	wantje
hunt	hoendi		

<u>English</u>	<u>Saramaccan</u>	<u>1781</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
want	-	-	-	wáni	wáni wan
paint	(pɛndé)		(pindeh)	pénde	peni
hunt	hɔ́ndi		hondi	hónti	hɔ́nti
plant	(paandí)			paándi	paandi
cant	kánda		kanti	kánda	kanti
gentle	djénde		gendri	djéndée	
country	kónda	contri kondre	kontri	kóndée	
twenty	tuwénti			twénti	

In Smith (1982) we concluded on the basis of the information then available to us that a) the nt-words that changed /nt/ to /n/ did so via the intermediate stage /nd/, sharing further the development of the nd-words to /n/, b) the nt-words that changed /nt/ to /nd/ had done so by around 1775, and c) that the change from /nd/ to /n/ had started by 1798.

The addition of data from Schumann (1783) alters the picture slightly. If we examine the relevant nt-words and nd-words we find the following:

<u>English</u>	<u>1718</u>	<u>1765</u>	<u>1769</u>	<u>1777</u>	<u>1780</u>	<u>1783</u>	<u>1798</u>	<u>1837</u>
bend						n/nd		
send		nd			nd	n/nd	nd	
blind							n	
find					nd		n	n
want	nt	nt/nd			nd	n	n	n
paint						n/nd		
plant						nt		n(1835)
hunt					nd	nd	nt	
country			nt	nd		nd	nd	nd
gentle						nd		

<u>English</u>	<u>1844</u>	<u>1850</u>	<u>1855</u>	<u>1856</u>	<u>Present</u>
bend		n/nd	n	n/nd	n
send	nd	n	n/nd	n	n
blind		n/nd	n	n/nd	n

<u>English</u>	<u>1844</u>	<u>1850</u>	<u>1855</u>	<u>1856</u>	<u>Present</u>
find		n/nd	n	n/nd	n
want	n	n	n	n	n
paint		n		n	n
plant		nt	n	n	n
hunt	nt	nt	nt	nt	nt
country	nd	nd	nd	nd	nd
gentle		nd	nd		nd

Here we give only those items for which there is positive evidence of a change with respect to the original model. Therefore we omit those nd-words for which the model appears to have been a form in final /n/, e.g. grind, etc.

An examination of the nd-words in this table indicates that the change of /nd/ to /n/ had already begun by 1783. The 1780 column represents a source that in fact has no definite dating. We suggested in Smith (1982) that the data from this source seems to be conservative in nature. This agrees with our table rather nicely. Both the nd-words and those nt-words in this column display /nd/. Schumann (1783) on the other hand has several examples of /n/. An alternative explanation that has been given by Schuchardt (1914) is that van Dyk (1780) represents a more conservative form of Sranan spoken on the plantations.

An examination of the sources from the 1850s suggests that 1850 and 1856 are more conservative sources than 1855. This last source is as far as the data in this table is concerned very close to the present day pronunciation of Sranan.

If the nt-words that end up with the pronunciation in /n/ fell together first with the nd-words the occurrence of the form planti in 1850 seems at first sight rather odd. However the occurrence of prani in 1835 suggests that we must consider the existence of variant pronunciations in /nt/ and /n/ for this word for at least a time in the early nineteenth century. In this light it is interesting to refer to another conclusion reached in Smith (1982) - that the change of /nd/ to /n/ took place (or at least began) before 1780 while the Boni tribe was still being formed.

<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
bend	nd	nd	nd	n
send	-	nd	nd	n
blind	-	-	nd	n
find	n/nd	nd	nd	n
want	-	-	n	n
paint	(nd)	(nd)	nd	n
plant	(nd)		nd	nd
hunt	nd	nd	nt	nt
country	nd	nt	nd	
gentle	nd	nd	nd	

It is striking that of the words in these tables which have /n/ in modern Sranan all except the word /paandi/, corresponding to plant, have /n/ too in Boni.

Another consideration is that when we examine the periods of the formation of Saramaccan and Ndjuka respectively - the period following 1650, and that following 1715 - it is reasonable to assume that the reflex of the nt-words at that period would have been /nt/, i.e. unchanged. It seems fairly safe to assume this in view of the fact that in 1765 in Sranan want - the consistently most advanced of the nt-words - still had an optional pronunciation in /nt/, while in 1718 the /nt/ pronunciation is the only one given. The developments to /nd/ in these two languages are thus presumably independent developments from the parallel development in Sranan. Since Ndjuka and Boni are practically identical dialects - the differences in the development of nasal clusters being one of the major differences between them (Huttar, 1982a) - it is at least conceivable that /nd/ in plant is due to the same process as in Ndjuka, and that when the Boni tribe was formed between 1760 and 1780 the original form was /*plánti/, which form is after all that given for Sranan in 1783.

The conclusion is thus that we have evidence from more than one source indicating that, of the nt-words that have simplified their nasal cluster in modern Sranan, plant retained longest a variant pronunciation in /nt/.

The clusters /st/ and /ft/ in postvocalic position always seem to simplify by loss of /t/ in words of English origin.

English	Sranan	1855	1783	Sara- maccan	1778	Ndjuka	Boni	Krio
soft	sáfu	sáffoe		-	-	sáfu	safu	saf
softly	sáfri	sáfri	safri	sáápi	sapri	saáfi	safi	sáful/sáfli
after	-	-	attara	-	-	-	-	-

After is not in fact an exception to this rule, being based on a different model - descended from ME auter - that gave rise to a southern English dialect pronunciation lacking /t/. This is evidenced in Cockney at least till the last century in the spelling arter.

Examples for /st/ are as follows:

English	Sranan	1855	1783	Sara- maccan	1778	Ndjuka	Boni	Krio
sister	sísa	sísa		sísa	sis	sísa	šiša	sista
chest	kísi	kísi	kissi	(k)ési		(k)ési	kiši	tšes
haste	ési	hési	hessi	(h)ési	hessi	(h)ési		
taste	tési	tési	tesi	tési	tési	tési		
yester- day	és(re)de	ésrede	issredeh	éside	isrede	ésíde	ešide	éside
must	músu	móesoe	musse	músu	musse	músu	musu	məs
thrust	trúsu	troesoe		tuúsi	trussi	toósi	tuúsu	trəs
					trusse			
roast	lósi	lósi	lossi	-	-	lósi		ros
		rósi	rossi					
lost	lásí	lásí	lasi	lásí	lāsi	lásí	laši	lɔs
nasty	nási	nási		nási	nāsi			násti
	násti							
master	másra	mássra	massera	mása	massra	másáa	masa	másta
		mássera						mása

The only apparent exception to this rule concerns one of the modern variants of the word nasty. The suspicion must be strong that this is an adaptation of the Sranan form to the English one, possibly involving Guyanese influence. Is it a coincidence that this is the only item in the above table where the replacement of /s/ by /st/ results in a close approximation to the modern English pronunciation? It seems then safe to conclude that the Proto-Sranan correspondence to an English model with postvocalic /st/ was /s/. master is recorded twice in the eighteenth century with t both times as mastra in 1718 and 1780, in Sranan. However, since we have

forms lacking t in 1765, 1777, and 1783 the reliability of these forms with t must be in question. It is at least conceivable that the recorder was influenced in these cases by a knowledge of the English origin of this item. The forms quoted from Krio would tend to suggest that it is likely that the WAPE model available in Surinam had /s/ in this case.

This raises a methodological point. While it is reasonable to explain reflexes of Dutch words that resemble their model more than one would expect from other recordings of the same item as due to the influence of Dutch, it must be questioned whether it is of any explanatory value to allow the parallel procedure with items of English origin. In the case at issue there is at least one alternative explanation that has at least the advantage of phonetic plausibility. This is that a transition sound /t/ developed between /s/ and /r/. This is paralleled by the development of IE /*sr/ to /str/ in the Germanic languages. More probably however this transition sound was only present in some of the European renditions of Sranan as a result of the fact that /sr/ does not occur in Dutch, while /str/ does.

Similarly to /st/, the cluster /ts/ in an English model also involves the loss of /t/ in Surinam creole reflexes:

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>Saramaccan</u>	<u>1778</u>
curtsey	kósi	kósi	-	-
ants	-	-	(h)ánsi	hansi

ii) Portuguese

Initially and intervocally this sound is usually represented by /t/ in the Surinam creoles. The cluster /nt/ displays two reflexes - /nt/ and /nd/. The cluster /st/ normally results in /s/, but following an initial unstressed vowel gives /# sVt/ or /# t/. For this last we see the section on /s/ (section e).

	<u>Portuguese</u>	<u>Saramaccan</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
i) <u>Initial</u>	tocar	tuká	tuká	-	touch
	tomar	tumá	tumá	-	grasp
	tia	tía	tía	tía	aunt

	<u>Portuguese</u>	<u>Saramaccan</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
ii) <u>Medial</u>	meter	mɛ tɛ	meté	-	introduce
	bater	bati ^s	-	-	beat
	botar	butá	-	-	place

Forms in /nt/ are best examined in the light of the eighteenth century forms given by Schuman (1778), and compared to the Portuguese creoles. These together suggest that the voiced reflex has arisen in Surinam. Strictly speaking Portuguese /Vnt/ is [ṽt] but there are many reasons for assuming that the interpretations of this model were in terms of a structure /Vnt/ among others the voiced reflexes themselves. From now on we will discuss such terms as if they were in fact /nC/ clusters.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>São Tomé</u>	<u>Gloss</u>
cantar	kandá	canta	kātá	sing
contar	kondá	kondà		tell
entrar	dendá	dindrà	lentla	enter
juntar	zuntá	sundà		assemble
		suntà		
mentir	mindí			lie
espantar	pantá	panta		frighten
plantar	-	planta		plant
apontar	-	pontà		aim
-quentar	kendé		kénta	neat
sentir	sintí			perceive
cinta	sínta	sinta		belt
conta	kónda	kónda		bead
dentro	déndu	dindru	gléntu	inside
garganta	gangáa	grangánda	giagãtši	neck
junto	zúntu	suntu	zúntu	close
		sundu		
mentira		mitira		lie
pagamento	pakamé(n)tu	paggamentu		payment
panturrilha	pantéa	pantría		ankle
pente	pénti	penti		comb
ponta	pónta			point
quente	kéndi	kendi	kétši	hot
santo/a	sánta	santa		holy
tanto	tántu	tantu	tantu	so many
vento	véntu	wintu		wind
conto	kóntu	kóntu		story

Portuguese	Principe	Cape Verde	Papiamentu	Gloss
cantar		kantá	kántà	sing
contar	kʃtá	kontá	kóntà	tell
entrar	lětá	intra/entra dentra (Fogo)	dréntà	enter
juntar	zũtá	žuntá		assemble
mentir		mintí	mínti	lie
espanta		spantá	spántà	frighten
plantar	plātá	prantá (S.Nicolau)	plántà	plant
apontar		pontá		aim
-quentar	kjětá		kéintà/kéntà	neat
sentir		sintí	sínti	perceive
cinta	śtá	sínta	sínta	belt
conta		kónta		bead
dentro	udětu	dénta	denter (Curaçao) déntro (Aruba)	inside
garganta		gargánta	gargánta	neck
junto	zũtu	žũntu		close
mentira	mĩtšja	əmtíra	mentíra	lie
pagamento	pagamětu	pagaménta	pagaméntu	payment
panturrilha				ankle
pente				comb
ponta	póta	pónta		point
quente		kénta/sénta		hot
santo/a		sónta	sántu	holy
tanto		tónta	tántu	
vento	uvětu	bénta/vénta	(biéntu)	wind
conto	kótu	kónta		

The existence of a few variable forms in 1778, and one form in /nt/ of which the modern cognate is /nd/, would seem to indicate that a process of voicing in nasal clusters was still marginally operational in 1778, but not for long after that. The relevant forms here are cantar, juntar, and junto.

In mentira and pagamento there is loss of the nasal. This must be connected to the fact the syllable-initial is a nasal.

Saramaccan /gangáa/ for garganta may indicate a cross with a form resembling Kwinti /goongóo/.

Portuguese /st/ preceded by CV gives /s/ in all cases.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>São Tomé</u>	<u>Gloss</u>
acostumar	kusumá	kussumà	-		be familiar with
gastar	gasá-gasá	gassà	-		wear out
mostrar	musulá	mussula	-	músa	show
vestir	bisí	bisí	-	biší	dress
festa	-	-	fésa	fésa	feast

<u>Principe</u>	<u>Cape Verde</u>	<u>Papiamentu</u>	<u>Gloss</u>
	k(ə)stumá	kustuma	be familiar with
	gastá	gástà	wear out
biší	pstí	bísti	dress
		(fiésta)	feast

The same development that can be seen in the Surinam creoles is also found in the Gulf of Guinea creoles but apparently is not the normal development in other Atlantic Portuguese creoles.

As we have said above the discussion of preaccentual and initial /st/ will be postponed till the section treating /s/.

An isolated development of /rt/ to /d/ is found in the item lagartixa "lizard".

<u>Portuguese</u>	<u>Sranan</u>	<u>São Tomé</u>	<u>Principe</u>	<u>Papiamentu</u>
lagartixa	lagadísa/lagadísja	lagatlísa	lagatíša	lagadíši

The loss of /r/ might be explained as a case of the dissimilation of liquids. More difficult to account for is the voicing of the stop. This is paralleled in Papiamentu. The influence of Dutch hagedis might also be appealed to here.

b) /d/

i) English

In general this appears in the Surinam creoles as /d/.

	<u>dV</u>	<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>
i)		deer dinner day dead	díá dína dej déde	- - dé- (DeG) déde	díá -dína dé/déj déde	de/dej dede
ii)	<u>Vd</u>	bed afraid head broad	bédi fréde éde brádi	bedi fɛɛɛ (h)édi baáí	bédi feéle éde baála	feéle (h)ede baadi (Hu)
iii)	<u>VdV</u>	greedy middle today lie down	grídi míndri tidé didón	giíi míndi tidé didón ^s	giíli míndíi tidé didón	giíli mingi tidé didon

In certain cases English /d/ gives /r/ or a development of this in Surinam.

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Saramaccan</u>
seed	síri	síri		síi
weed	wiwíri	wiwíri wiriwíri	wirriwirri	wiwíi uwíi
goodbye	krobój kribój	krobói kriboi	kroboi (korbuy 1780)	kiibói
O Good God		ógroe gádo		
somebody	-	-	(som badi 1718)	sombɛ (páda)
paddle	pári	pári		méi
meddle	méri	méri	meli	gólú
gourd	gódo	gódo	gollo	

<u>English</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
seed	síri	síi	šíi
weed	wirriwirri	uwíi owíi	wiwi
goodbye	kruboi	kiibój	kibói
somebody	sombre	-	-
paddle	(padra)	páli	pali
meddle	meli		
gourd	golu	godó	
	gollu	góo	
	gbru		

All these cases are interpretable as liquefaction of /d/ before high vowels /i, u/. The first two cases require no further explanation. goodbye (which has undergone a semantic shift "farewell-last-topmost-attic") has undergone various phonetic shifts

/*kurubwái/ (cerroboai (1777)) → /*kurubói/ (Saramaccan (1778)) → /*korobói/ (kroboi (1783) and korbuy (1780)) → /krobój/. /kribój/ presumably descends from a form with the irregular epithetic vowel /i/ - /*kudibwái/ → /*kuribwái/ → /kribói/. See further the discussion on the vocalic structure of this item in the section on vowels.

O Good God represents a Proto-Sranan form /*ó gudu gádo/ → /*ó guru gádo/ → /ó gru gádo/.

somebody is Proto-Sranan /*sɔm badi/ → /*sɔmbadi/ → /*sɔmbari/ → /*sɔmbɔri/ → /*sɔmberi/ → /sɔmbɛɛ/ → /sɔmb / → /sɔmbɛ/. Note that these do not necessarily all represent discrete historical stages; some may only be intermediate stages in derivational history. That is, one of these changes may have automatically caused the operation of an existing phonological rule, with the effect that one or more of these stages may have been skipped over in real time.

paddle is Proto-Sranan /*pádili, pádara/. /*pádili/ → /páriili/ → /pári/.

meddle is Proto-Sranan /*mé dili/ → /*mé rili/ → /*mé rili/ → /méri/.

gourd is Proto-Sranan /*gɔ́dɔ or gódo, gódu/. /*gódu → gólu/. Schumann's 1783 notation gollo might be for /gólu/ or /*gɔ́lu → *gɔ́ɓ/. If it is the latter it is probably also the precursor of Ndjuka /góo/. gburu might be intended for goru as Schuchardt (1914) tentatively suggests.

We have given the result of liquefaction in the above case as /r/. This is because it is consistently represented by /r/, even in the early records.

Another environment where /d/ had a tendency to liquefy was following a preceding liquid cluster.

English	Sranan	1855	1783	Sara-maccan	1778	Ndjuka	Boni
greedy	grídi	grídi	griddi	gíí	griddi	gíí	gíli
afraid	fréde	fréde		fíí	frédde	feéle	feéle
bread	bréde	bréde	brédi	bréé	brédi	beéle	bééle
blood	brúdu	bróedoe	brudu	buúu		buúlu	buúlu
flood	frúdu	fróedoe		foóu	fluudu	fuúdu	
					frudu		
					frolo		
					froro		

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Sara- maccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
proud	pródo	pródo	pródo	poólo	prolo proro	poólo	poolo
broad	brádi	bráda brádi		baái	brari brali bradi bladi	baála	
(brother)	bráda brára	bráda brára		baáa	brara 1789 brara brala	baála	baala

The last example is included here as its development runs largely parallel to the others. The /d/ that liquefies here is not English /d/ but early Surinam /*d/. The developments here separate Sranan from all the Bush Negro dialects. The optional development to /r/ in brother is the only case of liquefaction in such a structure in Sranan, and the /r/ here might therefore in fact be a reflection of English /ð/ as in tara (1855) (tother). In the cases from English /d/ at any rate there is never any liquefaction in Sranan. In the Schumann (1778) manuscript dictionary of Saramaccan (Schuchardt, 1914) the liquefaction appears in some cases, in others optionally, and in yet others not at all. In modern Saramaccan on the other hand it always appears, but has been obliterated except in the case of /poólo/ by the deletion of the liquids. In Ndjuka on the other hand liquids appear in every case except that of /fuúdu/. As this last example does not appear in the Boni word-list (Hurault, 1984), it is uncertain whether liquefaction is complete in Boni. What is clear is that it was well under way in Saramaccan in 1778.

There is a general problem in connection with the fact that all the Bush Negro dialects display evidence of the same process here. This is counter to the historical development of the various tribes. According to Price (1975) for instance, the large majority of the Saramaccan ran away between 1650 and 1715, especially concentrated in the last years of the seventeenth century and the earliest years of the eighteenth century. The focus of the escapes was the Suriname River (Price, 1983). The majority of the Ndjuka ran away between 1715 and 1760, while the Boni mostly ran away between 1760 and 1780, although they included a few who escaped at the beginning of the eighteenth century. The focus of their escapes was more to the east. Clearly the early escapees will have had more influence on the final form

of the tribal language than later escapees. The question of the various similarities between the languages could be explained in various ways. We could for instance explain the great similarity between Boni and Ndjuka - these two are in fact mutually intelligible dialects of one language - because the first escapees who formed these two tribes escaped at about the same time. This would imply that the Sranan spoken on the plantations at the time of their escape would be more or less the same, (although cf. /nd/ p. 215) and this must of course form the basis for their further linguistic development. Alternately we could explain the similarity of these two by reason of their geographical proximity - they are both spoken with their centre of gravity on the Marowijne river and its tributaries. Another possible contributory explanation is conceivably to be found in the relative size of the two tribes - the Ndjuka are the largest Bush Negro tribe in Surinam, while the Boni are one of the smallest.

A stickier problem is formed by the question of the resemblances between Saramaccan and Ndjuka. How are these to be explained? One conceivable explanation could be that the seeds of the features common to Saramaccan and Ndjuka were present in the late seventeenth and early eighteenth century plantation Sranan, or dialects of this. This seems potentially more viable an explanation than that what these two (as representatives of the two main Bush Negro languages) have in common is due to wave-type factors.

As far as the final cluster /nd/ is concerned there is evidence of two separate kinds of loss of /d/. In Sranan the occurrence of epithetic vowels in words of English origin depends on the nature of the final consonant of the English model. If this was /n/ or /m/ no epithetic vowel was added. Now as far as items in English /nd/ are concerned there are two developments: a) with epithetic vowel and - in most cases - evidence of earlier /d/, and b) without epithetic vowel and no evidence in Surinam of /d/.

Examples of the first type are the following:

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>
send	séni	seni	sénni séndi	seni	sendie	senni sendi bendi benni
bend	béni	beni bendi	bénni	beni bendi		
find	féni	finni findi	fínni	finni findi	fenie	
blind	bréni	blini blindi blinde	blínni brínni	blinde blini	bleeni-	
hand	ánu	hanoé	hánoé	hanoé	hanoé	

<u>English</u>	<u>Sranan</u>	<u>1780</u>	<u>1765</u>
send	séni	zende	sendi
find	féni	finde	

<u>English</u>	<u>Saramaccan 1778</u>	<u>Ndjuka</u>	<u>Boni</u>
send	- sendi	sénde	seni
bend	béndi bendi	béndi	béni
find	féndi (Lo) féni (Li)	findi fénde	féni
blind	-	beéndi	béeni
hand	-	ána	ana anu

The reason for considering these words as being of English origin, and not Dutch is that they have a parallel development to the nt-words paint and want which cannot of course be derived from Dutch. Clearly Dutch items do not display in this environment developments further than /nd/, and normally have /nt/. /nt/ is clearly the starting point for such words since we must take account of final devoicing, the effects of which are sometimes nullified by voicing assimilation from the nasal.

Here only Boni and Sranan show loss of /d/ consistently, while the Golio (Li) dialect of Saramaccan shows it in one of the two nd-words evidenced in this dialect. This is parallel to paint, but not to want which shows loss of /d/ in all languages in which it appears.

Examples of the type without epithetic vowel follow:

English	Sranan	1856	1855	1850	1798	1783	1780
grind	grin		grien	grien		grin	
mind	min	min	mien			min	
round-	lom-	rom-	rom-			rom-	ron-
	rom-		lom-			lom-	
	(n → m/ ___ b)						
ground	gron	gron	gron	gron	gron	grunn	gron
stand	tan	tan	tan	tan	tan	tann	tan
					tam		
hand	-	han	han	han		hann	

English	Sranan	1765	1718
stand	tan	tan	tan

English	Saramaccan	1778	Ndjuka	Boni	Boni-Kumentí (cult language)
grind	-	-	giin		
round-	lom-	lom-			
		rom-			
ground	goón	grun	goón	goon	golon
stand	tán (stop)	tann	tán	tan	
	tá (dur.)	tann			
hand	-	-	-	-	haan

If we consider the two facts already noted about these items - a) that they have no epithetic vowel, and b) that they never show any trace of /d/, then we must conclude, I think, that the most logical explanation for this is that the English model for these items lacked a final /d/. In the case of hand there must have been two models - /hand/ and /han/.

It is clear from various sources of evidence that /d/ after /n/ was often not pronounced at the period in which Sranan was formed. Matthews (1937) gives examples from seventeenth century Cockney, eg. stipen 1620 "stipend", while in present day Cockney /d/ is more or less optional in this position - eg. /san(d)/ "sand, /ban(d)/ "band, /len(d)/ "lend" (Sivertsen, 1960). In more standard English this loss seems to be restricted to cases where the /d/ is also followed by a consonant (Dobson, 1957). Matthew's study of seamen's speech in the second half of the seventeenth century also shows the frequent loss of /d/ here - Hine "hind", win "wind", Roune "round", etc.

WAPE also displays a widespread loss of /d/ following /n/:

<u>English</u>	<u>Krio</u>	<u>Nigerian</u>	<u>Cameroonian</u>	<u>Fernando Po</u>
bend	bɛn	ben	ben(d)	(bend)
send	sɛn	sen	sen(d)	(send)
mind	mɛn/majn		majn	men
sand	sansan	san	sansan	sansan

This might be a case where we can distinguish between WAPE and Standard English reflexes - displaying respectively the loss versus the retention of the /d/ in the nasal cluster in Proto-Sranan. The WAPE reflex would then be inherited, while the Standard English model would represent an accretion in Barbados or Surinam. The precise form of this accretion - whether it represented the modification of an already extant WAPE form, or the addition of a new form to the language - is of course not recoverable.

In contrast to the situation after /n/, /d/ of English origin, when following liquids, seems usually to be deleted, or more likely to have been absent from the model.

The relevant examples would appear to be the following:

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1844</u>	<u>1837</u>
cold	kówru	kouroe	kóuroe	kouroe	kouloe	
old	ówru	ouroe	óuwroe	ouroe	ouwroe	
hold	óri	holi	hóli	holi		holie
			hóri			horie
yard	jári	jari	jári	jari		
yard'			jári			
garden	djári	djari	djári	djari		
gourd	gódo		gódo	goddo		
<u>English</u>	<u>Sranan</u>	<u>1798</u>	<u>1783</u>	<u>1780</u>	<u>1765</u>	<u>1718</u>
cold	kówru	kouloe	koure			
old	ówru	ouwloe	oure		oule	
		ouloe				
		ouwroe				
hold	óri	holie	holi			
yard	jári	jarie	jari			jary
yard'			jari			
garden	djári	d'Jarie	djari			

<u>English</u>	<u>Sara-</u> <u>maccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>	<u>Camer-</u> <u>oonian</u>	<u>Fernando</u> <u>Po</u>
cold	-	-	kóo	kóo	koɪ	koɪ	koɪ
oid	awoo	oure			(w)ol	ol	(u)old
hold	hóɪ	holi	(h)óli	hóli	ol	hol	hol
beard	bía	bia	-	-	biyabíya	biabia	biabia
yard	jái	jari			jad	jat	jad
garden	djái				gadin	gadin	
yard'	-				jad	jat	jad
gourd	gólu	golú/ gbru	godó/ góo				

(yard = "three feet"; yard' = garden)

It is never the case that a liquid-consonant cluster remains in post-stress position in words of English origin with the single exception of /rk/, which has been restored by syncope in Sranan. There are four strategies by which such clusters are simplified:

- i) loss of the consonant
- ii) loss of the liquid
- iii) "metathesis" of the liquid with the preceding vowel
- iv) insertion of an epenthetic vowel

Johnson (1974) views these strategies as having been applied in a Proto-creole, from which all the English-based Atlantic creoles are descended. This is certainly not the case with the third "strategy", which we will later demonstrate to have been the result of an accent shift which took place in Surinam itself.

The first strategy - inasmuch as it is evidenced in Surinam - may be a direct reflection of the model rather than a transformation of this. As is well-known Krio, and other forms of WAPE as well, owe a great deal to "nautical" English (Hancock, 1975). Apparently the treatment of English /rd/ represents one of the few significant differences between "nautical" English and (sub)standard London English of the seventeenth century.

It seemed that the stop tended to be lost in nautical English but not in substandard

London English. The evidence for the loss of the final /d/ in the pronunciation of sailors includes the following (Matthews, 1935):

hole "hold" 1694 houle "hold" 1692 har "hard" 1689
clare "cleared" 1689 boar "board" 1689

The evidence from Cockney (Matthews, 1938) includes a number of cases with deletion of final /d/ after /l, r/ in unstressed syllables from the sixteenth and seventeenth centuries, but none illustrating this loss in a stressed syllable. Sivertsen (1960) gives no such cases for modern Cockney.

Dobson (1957) quotes a number of sources for the loss of /d/ following /l/ in items such as: mould, wild, fold, in the standard English of the seventeenth century. On the other hand he gives no examples of the loss of word-final /d/ following /r/, and says that the loss of consonants after /r/ is rare.

Note that the case of /rd/ in the examples other than that of beard and gourd is subject to two explanations. It could be explained by the loss of /d/ as we have just explained. Alternately it could involve the dissimilatory loss of /r/ before another coronal articulation (see the section on /r/), and subsequent liquefaction before a high vowel (see above), e.g.

	<u>garden</u>
<u>English model</u>	/*gjádin/ (for /i/ compare the section on /n/)
<u>WAPE/Surinam</u>	/gjádin/
<u>d-liquefaction</u>	/gjárin/
<u>gj + dj</u>	/djárin/
<u>n-loss</u>	/djári/

Thus we only have two examples where it is completely obvious what has happened - /bía/ where the /a/ indicates that the loss of /d/ preceded that of /r/, as this vowel must represent the transitional schwa developed between the /i:/ and the /r/ in English, and /gódo/ where the /r/ is missing. We will demonstrate the sequence of events in /bía/ in detail as this may not be entirely clear.

beard

	<u>derivation 1</u>		<u>derivation 2</u>
<u>Input</u>	bi:rd	<u>Input</u>	bi:rd
<u>Dissimilation</u>	bi:d	<u>Transitional Schwa</u>	bi:ərd
<u>(WAPE)</u>	bid	<u>Loss of /d/</u>	bi:ər
<u>Surinam</u>	*bɪdi	<u>Loss of /r/</u>	bi:ə
		<u>WAPE/Surinam</u>	bía
	<u>derivation 3</u>		<u>derivation 4</u>
<u>Input</u>	bi:rd	<u>Input</u>	bi:rd
<u>Transition Schwa</u>	bi:ərd	<u>Loss of /d/</u>	bi:r
<u>Loss of /r/</u>	bi:əd	<u>WAPE</u>	bí
<u>(WAPE)</u>	bíad	<u>Surinam</u>	*bí
<u>Surinam</u>	*bíada		
	<u>derivation 5</u>		
<u>Input</u>	bi:rd		
<u>Loss of /d/</u>	bi:r		
<u>Surinam</u>	*bíri		

For the purposes of these derivations we assume that WAPE had as its model an *r*-less model, and Proto-Sranan an *r*-full one. This is not a necessary assumption however, and does not affect the discussion as far as the pre-transfer developments in the various forms of English are concerned. The correct account of the order of the application of the various processes is of course that given in derivation 2, which corresponds to the modern form of this item, both in Saramaccan, and in Krio and the various forms of WAPE.

The other clear case - that of /gódo/ in Sranan - illustrates the operation of Johnson's second "strategy" (Johnson, 1974). However, whether or not we must in fact regard this as a transference strategy as such - i.e. as the result of an accommodation to the phonological patterns of some African language or languages - or simply as the result of a historical change within English itself, is not entirely

clear. The major English model for WAPE seems to have been an r-less one as we have stated above, so that the latter option could in fact be the correct one. This means that the difference in treatment as between that of final /ld/ and that of /rd/ - the loss of /d/ after /l/ as against the preservation of /d/ in the case of gourd at least - is not diagnostic in this case between a WAPE, presumably r-less, origin, and a Surinam English, presumably r-full, origin, as there was a tendency - earlier and apparently separate from the general English Standard English loss of /r/ in codas - to lose /r/ before dentals and alveolars as a kind of dissimilation (cf. Hill, 1940; also the section on /r/)

The fourth strategy quoted by Johnson - insertion of an epenthetic vowel - is in fact the only one that is definitely the result of an accommodation to African morpheme structure conditions - at least as far as the Surinam creoles are concerned. For details of this see the sections on the liquids.

An aberrant development of /d/ appears in the Boni form /mingi/ middle. As this is reminiscent of the development in many Caribbean creoles, some parallels are given. Note that this change of /d/ to /g/ does not take place in Krio.

<u>English</u>	<u>Sranan</u>	<u>Sara-</u>	<u>Djuka</u>	<u>Boni</u>	<u>Jamaican</u>	<u>Limon</u>	<u>Antiquan</u>
middle	míndri	míndi	míndí	mingi	migl	migl	mígl
							midl

The nasal is a purely Surinam development, and in fact the Sranan form in 1783 is middri or mindri, and in 1780 middere. /dl/ changes to /gl/ in a number of English dialects, as does /tl/ to /kl/. Whether the Caribbean development is to be associated with any particular English dialect is not clear. Matthews (1938) does quote a Cockney replacement of /tl/ by /kl/ in the sixteenth century. Whatever the source of this development it would seem reasonable to associate the Jamaican etc. development and this one Boni case. The consequence of this is that we require two variant models in Surinam or Barbados English - /*míd(ə)l/ and /*míg(ə)l/.

ii) Portuguese

This sound is generally preserved as /d/ in the Surinam creoles. Before a liquid

there is some evidence for its replacement by /t/ in postaccentual position. Preceding a high vowel a liquid may develop which can then disappear under the usual conditions for liquid loss in the various creoles. If the model has /d/ directly following a liquid it is lost in pre-accentual position.

a)	<u>Initial</u>	<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Gloss</u>
		dormir	duumí	-	-	sleep
		dado	-	-	dádu	dice
		dentro	déndu	-	-	inside
b)	<u>Pre-liquid</u>	pedra	-	petra	-	rock
		quadriolho	kpátiwójo	kwatriwójo	-	opossum
		but				
		podre	póndi	pondri		rotten
c)	<u>Pre-high vowel</u>	<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Gloss</u>
		pode	-	poli	pój	can
		sacudir	sakpí	sakkuli	-	shake
		jardim	djaáí	djaráll	-	garden
		machado	matjáú	matjáru	-	axe
		tudo	túu	tulu (1805)	-	all
		redondo	-	luluntu	-	round
d)	<u>Post-liquid</u>	<u>Portuguese</u>	<u>Saramaccan</u>	<u>Boni</u>	<u>Sranan</u>	<u>Gloss</u>
		toldar	tolá		-	mar
e)	<u>Other medial</u>	capado	kapádu		kapádu	castrated
		mamão doce	maamaadósu		marmadósu	sp. fruit
		pecado	pikádu	pikadu	pikádu	sin

The developments illustrated here under b), c), and d) do not occur in the Portuguese creoles.

	<u>Portuguese</u>	<u>Saramaccan</u>	<u>São Tomé</u>	<u>Principe</u>	<u>Cape Verde</u>	<u>Gloss</u>
b)	pedra	*pétra	pédla	péda	pédə	rock
c)	pode	*póli		pódi	póde	can
	sacudir	*sakulí	sagudží		sakdí	shake
	jardim	*djaralí	žadli	žadí	žardí	garden
	machado	*matjáru	masádu	masádu	matšóda	axe
	tudu	*túlu	túdu	túdu	túda	all
d)	atardar			todá	tardá	delay

	<u>Guine</u>	<u>Papiamentu</u>	<u>Gloss</u>
b)		(piéd(r)a	rock
c)	pudi	poder	can
	sakudi	sakudí	shake
	mantjaadu	tur	axe
		(1776 tudu)	all
d)	tarda	tárdà	delay

x = 1778 presumed values

Papiamentu seems at first sight to display a parallel development to Saramaccan in the reflex of tudo. However, the 18th century form tudu indicates that the liquefaction here must be ascribed to an independent development. The Papiamentu equivalent of Saramaccan /póndi/ - /putrí/ might at first sight look as if it involved the devoicing of /d/ before a liquid, but this is not the case. This Papiamentu item is not based on Portuguese podre, but on Spanish putrido with the normal Papiamentu loss of unstressed -do.

Obvious parallels are to be found for the Saramaccan liquefaction of /d/ - illustrated under c) - in the English-derived vocabulary of the Surinam creoles (see Smith, 1980; 1982). In Smith (1982) we explain this as the reversal and expansion of a Kikongo rule.

The second last type (d) where /ld/ is realised as /l/ may indicate that it is not necessary to postulate models of ld/rd words in English lacking the final stop. The loss of /d/ might have been one of the strategies involved in the adaptation of such

items (cf. Johnson, 1975). On the other hand it is also possible that it was the existence of variable models of such English words in Surinam that mediated the loss of /d/ in these Portuguese items. Note again that there are no parallels in the Atlantic Portuguese creoles.

c) /θ/

i) English

This English sound has a basically twofold reflection in the Surinam languages - in English syllable-initial or ambisyllabic position it is /t/; in syllable-final position it is /f/.

The fact that [θ] is represented in Surinam by /f/ and /t/ has in all probability multiple causes. In the first place [θ] does not appear in any of the languages likely to have been spoken natively by the slaves. In the second place it is quite possible that [θ] did not appear very frequently either in the forms of English that provided the model for Proto-Surinam. In Cockney, both of the present day and of the seventeenth century, [θ] is replaced either by /f/ or /t/. Compare /fáwzənd/~táwzənd/ thousand (Sivertsen, 1960), and Smitt "Smith" and frust "thrust" in the seventeenth century (Matthews, 1938). Both these substitutions also occur in the logbooks of seventeenth century seamen, e.g. Tunder "thunder" 1697, Erefe "Erith" 1693 (Matthews, 1935). According to Dobson (1957) /f/ for /θ/ sometimes also occurred in the speech of educated persons.

Other creole languages generally replace /θ/ by /t/ in all positions with only occasional examples of /f/. The apparently conditional distribution of /t/ and /f/ in the Surinam creoles seems to be unique among the Atlantic creoles.

<u>English</u>	<u>Sranan</u>	<u>Sara-</u> <u>maccan</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>	<u>Jamai</u> <u>can</u>	<u>Camer-</u> <u>oonian</u>
teeth	tífi	-	tífi	tífi	tit	tiit	tís/tít/ tík
mouth	mófo	-	mófu	mófu	mɔt	mout	mɔ́t/mɔ́p
broth	bráfu	baafu	baafú				
think	-	tínga			tink		tíŋ(k)

<u>English</u>	<u>Sranan</u>	<u>Sara-</u> <u>maccan</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>	<u>Jamai-</u> <u>can</u>	<u>Camer-</u> <u>oonian</u>
throw- away	trowé	tú	towé	towe	trowé		trowé
thrust	trúsu	tuúsi	toósi	tuúsu	trɔs	tros	
thatch	tási	tási	tási	taš	tatš		tátš
thank(ee)	taŋí	tangí	tángi	tangi	ténk(i)	tenk(i)	téŋ(k)
nothing	nóti	-nóti			nátin		
something	san(i)	son(d)í	sán(i)	sani	sɔntín	sontí(ŋ) sintí(ŋ)	
poor thing	pooti	pootí-	poótr			etc.	

The only form in the above table displaying a development other than to /f/ or /t/ is something. The various forms of this word can be explained by assuming a Proto-Sranan form /*santín/ developing via /*sa/ondí/ to /sa/oní/. See for the details the sections on English /ʌ/ and English /t/.

That there must have been a /t/ in this item originally is demonstrated by the 1780 form zanti.

There are two other forms with deviant developments:

<u>English</u>	<u>Sranan</u>	<u>Sara-</u> <u>maccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>	<u>Jamai-</u> <u>-can</u>	<u>Camer-</u> <u>iinian</u>
think	-	(tínga) nínga	(tinga)	-	-	tink		tíŋ(k)
path	pási	pási	pási	pási	paši		paas	

As far as the first case goes this is fairly simple. The form /nínga/ is an example of the assimilatory effects of nasality. Nasal assimilations of this type are not uncommon in Surinam, and this form is perfectly explicable from a Proto-Sranan form /*tínga/. For more details and further illustration see Smith (1980).

The balance of the probabilities is that the second item represents the plural form paths, rather than just path, or pass as has sometimes been claimed.

ii) Portuguese

Irrelevant

d) /ð/

i) English

This sound is generally realised by /d/ in the Surinam creoles.

i)	<u>Initial</u>	<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>
		this	dísi	dísi	dísi	dísi
		there	de	de	de	de
		them	den	de	den	den
ii)	<u>Final</u>	-	-	-	-	-
iii)	<u>Medial</u>	feather	féda	-	-	-
		together	tigédre	-	-	-

A divergent development to /r/ is seen in two cases:

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1844</u>	<u>1837</u>	<u>1798</u>
t'other	tra	tra	trā	tra			tra
brother	brára	brara	brára	brara	brara		brara
	bráda	brada	bráda				brada

<u>English</u>	<u>1783</u>	<u>1780</u>	<u>1777</u>	<u>1765</u>
t'other	tarra		tara	tara
brother	brara			

<u>English</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>
t'other	-	taá	taa
brother	baáa	baála	baala

In our discussion of the representation of English /d/ in the Surinam creoles we posed the question whether the development of English /ð/ to Sranan /r/ in brother was parallel to the cases involving English /d/ such as bread where structures /CLVd./ are involved. The possible arguments one way and the other are as follows. Firstly, brother is the only item of this type showing liquefaction in Sranan. Secondly, tother shows liquefaction in other English-based creoles, eg. Jamaican /tára/, Gullah /táɾa/, while brother does not. The first fact suggests a

lack of parallelism between the items with English /d/ and brother. The second fact on the other hand suggests a lack of parallelism between brother and tother in other creoles, which might suggest that the reasons for liquefaction in the two cases might not be the same. The conclusion must be, I think, that the evidence either way is inconclusive.

We must assume then that English /ð/ does definitely develop to Proto-Sranan /r/ in the case of tother, but that it is uncertain whether the case of brother is optionally parallel to this, or whether brother behaves like other words for which we must postulate a Proto-Sranan form in /CLVd../.

There is one form where there is a possible development to /n/. This is the following:

<u>English</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Boni</u>
then	ne	ne	ne nen

It is conceivable that these forms have developed from an early form /*den/, by a process of nasalisation described in Smith (1980), and referred to above in the discussion of the development of think (Saramaccan /tínga~nínga)/.

A development to zero is illustrated in the following case:

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1850</u>	<u>1783</u>	<u>1777</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>
the	a	da	da	da	da	dí	dí	a
<u>English</u>	<u>Boni</u>	<u>Krio</u>	<u>Berbice</u>	<u>Skepi</u>	<u>Neger-Hollands</u>	<u>Afrikaans</u>		
the	a	di	di	di	di	di		

The a and da forms are clearly based on the model of unstressed the. The Saramaccan form /dí/ could be either based on the stressed form of the same word - as presumably is the Krio form - or on the Dutch díe which only functions as a relative and demonstrative in modern Dutch, but still has the function of the article in Afrikaans, as well as appearing in this function in the three Caribbean Dutch creoles: Berbice Dutch, Skepi Dutch and Neger-Hollands.

This unusual development is presumably to be related to its status as a function word. If the durative marker:

<u>Sranan</u>	<u>1855</u>	<u>Ndjuka</u>	<u>Boni</u>
e	de	e	e

is to be related to English there as suggested by Schuchardt (1914) and Alleyne (1980), this provides a precise parallel to the case of the, as once again a function word is involved.

ii) Portuguese

Irrelevant

e) /s/

i) English

This is generally represented by /s/ in the Surinam languages.

i)	<u>Initial</u>	<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>
		six	síksi	síkísi	sigísi	sigíši
		set	seti	seti	sete	seti
		some	son	so		
		sunk	súgu	-	súngu	súngu
ii)	<u>Final</u>	this	dísi	dísi	dísi	díši
		bless	brési	-	beési	
		curse	kósi	kósi	kósi	koši
		buss	bósi	bósi	bósi	boši
iii)	<u>Medial</u>	fasten	fási	-	fási	fáši
		handsome	hansom (1765 N)	hánse hánso		

One exception to this concerns the realization of initial clusters consisting of /s/ plus a voiceless stop in English. The /s/ in such cases is often not realized:

	<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>
a)	square	kwéri	kpéi	kwéli	kweli
	squeeze	kwínsi	kpínji	kwínsi	kuintšin
	skin	skin	sinki(n)i	sikín	sikin
	scrape	krébi	-	keébi	
	squall	skwála	-		
	scratch	krási	kaási	kaási	kaáši
	schooner	skúna			
b)	spella	spéri	-		
	spoon	spun	-	supún	supún
	spermaceti	pramaséti			
	speak	píki	píki	píki	
	spit	spíti	-		
	spoil	póri	pói	póli	poli

a = "take turns"

c)	stop	tápu	-	tápu	tapu
	strong	tráŋa	taánga	taánga	taánga
	stand	tan	tán	tán	tan
	stand by	stanbáj	-		
	star	stári	-	sitáli	
	stewpan	stjupan	-		
	steel	-	tíi		
	stick	tíki	-	tíki	tiki
	string	trínji	-		
	stink	tínji	tíngi	tíngi	tingi
	stone	ston	sitónu	sitón	šton
	story	tóri	-	tóli	toli

	<u>English</u>	<u>Krio</u>	<u>Cameroonian</u>	<u>Jamaican</u>
a)	square	skwája	s(i)kwía	skwier
	squeeze	kwis	kwís	kwiiz
	skin	skin	s(i)kín	kin
	scrape	krep		
	scratch	kratš	krás	kratš
b)	spoon	(s)pun	s(i)pún	puun
	spit	pit		
	spoil	pwɛl pwɔjl	s(i)pɔjl	pwail
c)	stop	tap	s(i)tɔp	(s)tap
	strong	tránga trɔŋ(ga)	trɔŋ	(s)traŋ
	stand	tan	tán/tandà	(s)tan
	star	sta	s(i)tá	staa
	stick	tík(i)	s(i)tík	tik
	stink			stink
	stone	(s)ton	s(i)tón	tuon
	story	(s)torí	tɔri	tuori

About half of these forms display /s/, the other half have zero. Three forms appear to be recent loans from English, being only evidenced in modern Sranan - /stanbaj/, /stjupan/ and /skwáia/. If these are disregarded, then we could find support for the rule expressed elsewhere (Sebba, 1982; Alleyne, 1980) that clusters of the type /sCL-/ never display the /s/ in the Surinam creoles, and that this absence of s- is extended this to all clusters /sCC-/. Another possibility is that we are seeing dropping of /s/ due to it being more than one syllable removed from the accent as in the parallel Portuguese cases. This would supply a possible explanation of the complete lack of /sCL-/ structures in Sranan, as against the variable loss of /s/ in other /sC/ cases.

The examples of /sCC-/ clusters are then:

<u>English</u>	<u>Sranan</u>
strong	tráŋa
string	tríŋi
scrape	krébi
scratch	krási
square	kwéri
squeeze	kwínsi

For the other forms no rule appears to be statable in order to forecast the nonappearance of /s/. The distribution of s-less and s-preserving forms is as follows:

- p) +: spéri spun spíti
 -: píki póri pramaséti
- t) +: ston stári
 -: tápu tan tíi tíki tíŋi tóri
- k) +: skin skúna
 -: -

It is tempting to assign the two "strategies" employed here to accommodate such clusters to the phonological structural patterns of (most) African languages to the two strata of exposure to English we would like to distinguish. In other words the /s/-dropping strategy might have been that originally adopted by WAPE, as evidenced by Krio, while the epenthetic vowel strategy might have been utilized in Surinam, as also in Cameroon. This is clearly not the whole answer, as a very few

Dutch items seem to show /s/-dropping, cf. Sranan /tíbri/ "stuijver" (see also the section on /v/). The effects of the epenthesis strategy have been nullified in modern Sranan, of course, by syncope.

In various Eastern Bush Negro dialects, as well as Kwinti, there is "palatalization" of /s/ before /i/. In Ndjuka an "alveo-palatal" sound appears in this position (Huttar, 1981). Presumably this is identical with or similar to the [ʃ] that appears normally in the same environment in Boni. In Kwinti, according to Huttar (1982) there is optional palatalization of /s/ before /i/ - [s~ʃ]. Even in Sranan /si/ see can be [ʃi].

In Boni (Hurault, 1984) the palatalization seems not to be entirely consistent. It is unclear whether this is due to phonological factors, optionality, or inconsistency of notation. In this language the palato-alveolar fricative seems to occur in other environments than preceding /i/ alone.

<u>English</u>	<u>Boni</u>
house	oʃu
louse	loʃu
shoes	ʃuʃu
sister	ʃiʃa
sweet	ʃwíti/swíti
swear	ʃweli
sweat	ʃwéti

The conditions under which /s/ goes to [ʃ] before /u/ would seem to be different from those applying to /s/ preceding /i/. /i/ of whatever origin is equally affected - organic, epenthetic or epithetic /i/. In the case of /u/ it is, except for the case of /ʃuʃu/, only before epithetic /u/ that /s/ becomes [ʃ].

Preceding /w/ we seem to have [ʃ] in some cases and not in others as is also the case in Sranan.

On the basis of the little data available it appears that Boni might possess sibilant harmony, whereby no word may contain a mixture of sibilants and shibilants. If this is in fact the case, then what we have here is an example of dominant harmony, with the shibilant playing the dominant role.

We now give a list of all the items in Boni containing two or more *s*/shibilants. These are arranged in three columns. The first contains items with sibilants. The second contains shibilants that are forecast because of the phonetic environment. The third contains again shibilants, but where at least one shibilant is in an unexpected environment.

1)	ii)	iii)	
seséi E. <u>share</u>	šinénši D. <u>chinees</u>	šiša E. <u>sister</u>	
sese		šešte D. <u>zuster</u>	
soso Igbo sòṣò		šušu E. <u>shoes</u>	

At first sight the second example in iii) seems unexpected, but such clusters as that evidenced in this word are of infrequent occurrence in Boni (Huttar, 1982) and presumably in this case we could also have had /šešite/. The Ndjuka form is /sésíte/.

ii) Portuguese

This sound is represented normally as /s/ in the Surinam creoles. In some intervocalic cases, however, it appears as /z/. In a vowel-initial first syllable it is subject to loss if it is one or more syllables removed from the position of the Portuguese stress.

	<u>Portuguese</u>	<u>Saramaccan</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
a) <u>Initial</u>	subir	subí	-	subí	go up
	sombra	sómba	(s)ómbra	-	shadow
	suar	suá	-	-	sweat
b) <u>Medial</u>	nascir	nasí	-	-	grow
	passar	pasá	pasá	pasá	exceed
	vestir	bisí	-	-	dress

Another environment in which the reflex /z/ appears is following a nasal (vowel) (Portuguese /~/). There are only two such cases.

<u>Portuguese</u>	<u>Saramacaan</u>	<u>1778</u>	<u>Gloss</u>
lança	lánza		lance
lenço	-	lensu	cloth

The graph s in Schumann (1778) is, as we have noted above, ambiguous as between /s/ and /z/ in this position as Schumann basically utilizes German orthography. The development in this cluster can be compared to other nasal clusters where voicing takes place.

Another case displaying a development to /z/ is the following:

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Gloss</u>
peçonha	poozían	possínja	poison
	poosíjan ^s		

There is in neither of these cases any reason for thinking that this voicing development has any connections external to Surinam.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>Principe</u>	<u>Cape Verde</u>	<u>Papiamentu</u>	<u>Gloss</u>
lança	lánza		lãsa	lánza	lance
lenço	*lensu	ulĕsu	lĕsə	lénsu	cloth
peçonha	poozían		psóŋa		poison

* = 1778

A very interesting near-regularity in phonological development concerns initial pretonic structures in orthographic #es - (pronounced [iʃ] in Portugal and [es-iz] in Brazil). The initial vowel is lost in all cases as is usual for initial stressless vowels in Portuguese items. The /s/ however remains if the vowel following the next consonant bears high tone or accent. If this vowel has no accent or high tone /s/ is lost.

1) <u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
escada	sikáda	skada sikáda	-	-	ladder
escuma	sukúma ^s		skúma	-	scum
escuro	zugúu sugúu ^s	sukru	-	-	dark
espelho	sipêi	sipêi	-	-	mirror
estanho	sitánja	sitanja	-	-	steel

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
2) esburgar	buuká	brukà	-	-	peel
escolher	-	kujeh	-	-	choose
escorregar	koogá	krokka	-	-	slide
esfregar	feegá	frigà	-	-	rub
	feigá	frikà			
espalhar	pajás		panjá	-	spread, smoothie
espantar	pantá	panta	-	pantá	over frighten
espraiar	paajá	praija	-	-	spread
esquentar	kendé		-	-	heat
estrela	teéa	teréja	-	-	star

There are three cases that are apparently irregular in not dropping the initial /s/ where expected.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
2) escupir	-	sukupi	-	-	spit
espanhol	sipajólo		spanjóro	-	Spaniard
esperar	-	supla	-	-	wait for

We will now compare the developments in Portuguese creoles.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>São Tomé</u>	<u>Principe</u>	<u>Gloss</u>
1) escada	sikáda		škáda šikáda	ladder
escuma	sukúma ^s			scum
escuro	sugúu ^s	kúlu	ukúru	dark
espelho	zugúu			
estanho	sipéi sitánja	supé	supé	mirror steel
2) esburgar	buuká			peel
escolher	*kujeh	kojé		choose
escorregar	koogá	klogá		slide
esfregar	feegá	flegá	fəgá	rub
espalhar	pajás			spread
espantar	pantá			frighten
espraiar	paajá			spread
esquentar	kendé	kénta	kjětá	heat
estrela	teéa	stlěla	těla	star
escupir	*sukupi	kúpi		spit
espanhol	sipajólu			Spaniard
esperar	*supla			wait for

* = 1778

	<u>Portuguese</u>	<u>Cape Verde</u>	<u>Papiamentu</u>	<u>Gloss</u>
1)	escada	skáda		ladder
	escuma	skúma	skúma	scum
	escuro	skur	skur	dark
	espelho	sukuúru (Brava)	spil	mirror
	estanho	st ʒɲa		steel
2)	escolher	skodžé	(e)skohe	choose
	escorregar	skoregá		slide
	esfregar	(s)frégá	frégà	rub
	espalhar	spadžá		spread
	espantar	spantá	spánta	frighten
	esquentar		kénta/kéintà	heat
	estrela	stréla	(stréja)	star
	escupir		skúpi	spit
	espanhol	spanól	span ɔ	Spaniard
	esperar	sperá	spèrà	wait for

There are clear parallels, in particular with São Tomense and Principense - the Gulf of Guinea creoles. Of the two Gulf of Guinea forms apparently exhibiting irregular developments, one - /stléla/ (ST) - is in fact not irregular as the accent directly follows in this case. Unlike early Surinam creoles São Tomense does not have regular epenthesis in matrix language liquid clusters. Principense on the other hand has frequent loss of liquids. In Traill and Ferraz (1981) it is demonstrated that tonal evidence suggests that this followed epenthesis. This is however generally not visible in the transcriptions found in Günther (1973) and utilized by us here - criticized by Traill and Ferraz for this among other reasons.

Ferraz (1979) and Günther (1973) provide other examples illustrating the same general distribution:

	<u>Portuguese</u>	<u>São Tomé</u>	<u>Principe</u>
1)	estrada	ʒtláda	
	espada		supáda
	esquerda		ʒkéda
2)	esquecer	kesé	kèsé
	escrever	ʒklevé	ʒkevé
	esconder		kòdè
	estender		sèdè
	escapar		ʒkapá
	espingarda		pígáda

Here are a number of irregular forms. The forms under 2) with an initial sibilant are likely to be Lusitanisms, as Portuguese has had of course some influence on these languages - São Tomé and Príncipe only ceased to be Portuguese in 1975 and Portuguese is still the official language. The development of estender is to be explained by the fact that /st/ in Portuguese always develops to /s/ in Príncipe.

Cape Verde creole and Papiamentu tend to preserve the /s/ of these clusters. Occasional loss of /s/ appears to take place in the second section of the table only, suggesting some slight link. In these two cases the influence of Portuguese and Spanish respectively has been massive, so that large scale restoration of /s/ is at least a possibility.

A deviant development of /s/ is to /nj/.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>Cape Verde</u>	<u>Gloss</u>
maçar	manjá	masá mašá	bore

The nasality of the second consonant is presumably to be explained as a reflection of the nasal character of the initial. See also Smith (1980). Less clear is the cause of the change from alveolar to palatal articulation. However, similar cases are to be found in the section on /z/.

f) /z/

i) English

This sound is realized as /s/ in the Surinam creoles. Examples only occur of English items with medial and final /z/. Initial /z/ is rare in English in any case.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1798</u>	<u>1783</u>
squeeze	kwínsi	kwinsi	kwíensi	kwiensie	kwinsi
peas	pési	peesi	pési		pesi
		peesje			piesjes
please	prísi	pliesi	prísi	pliesie	plíts/príts/blíts/bríts
says he	sáisi sísi		sísi		

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1798</u>	<u>1783</u>
clothes	krósi	klosi	klósi krósi	klosie kloosie	klossi krossi
nose	nóso	noso	nóso	noso	nussu
yaws	jási		jási		jassi
because	biká(si) bakási	bika(si)	bikási bikà bakà	biekasie	bikasi bika (Djutongo)
ashes	asísi	ásesi	ásisi	assiesie	asses
shoes	súsu	soesoe	sóesoe	soesoe	sussu
news	njúnsu	njoesoe	njóensoe njóesoe	n'joensoe	njusu

<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
squeeze	kpíndji kpíngi kpínji kwíndji	kunji	kwínsi	kuintjin
peas	gbíngi (US) pési pési ^s	pisís	pési	peši
please	-	brís(i) brís		piíši
clothes	koósu	krossu klossu	koósi	koóši
nose	núsu núnsu ^s	nusso	nósu	nosu
yaws	jási	jassi	jási	
because	biká bigá ^s	bika	bikáa biká	beka beka
ashes	-	-	asísi	
shoes	súsu		súsu	šušu
news	-	njusu		

The developments to /nj/, /ng/, or /ndj/ in Saramaccan, and to /ntj/ in Boni may reflect the Cockney variant /skwíjdz/ (Sivertsen, 1960) and evidenced as squeedge in 1803 (Matthews, 1938). Another possibility is that, given the Sranan form /kwínsi/ as a starting point, the same kind of development of nasal + sibilant is involved as in the following cases.

<u>Portuguese</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>São Tomé</u>	<u>Gloss</u>
maçar	-	manjá		-		tire
cinza	-	síndja	sinja	-	šídža	ash

<u>Kimbundu</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>São Tomé</u>	<u>Gloss</u>
mbanza	banjá	banjá bandjá	banja			a dance
<u>Kintandu</u> <u>(Kikongo)</u>						
mbaansya	-	bandja	banja	bánsa		side
nzawu	asáw	zaun	sau	ndzáw		elephant
makwaansya	-	makpánja		-		pimples
nzaa	-	njaa njaan ^s	njaê			shining

There are not enough cases to be completely sure of the developments or their temporal sequence of operation, but at least developments of /nz/ - and /ns/ via /nz/ - to /nj/ and /ndj/ are illustrated.

ii) Portuguese

This sound is not frequently reflected in the Surinam creoles in Portuguese-derived items. The few cases there are display little consistency among themselves.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
asa/ansa	hánza hánsa ^s	hansa	-	-	wing
azia	-	assia	-	-	heartburn
liso	línzo	linsu liso	-	-	smooth
camisa	kamísa	kamissa	kámsa	kamísa	shirt
cinza	síndja	sinja	-	-	ash
casa	-kása	-kassa	-	-	house
casinha	kazían kasían ^s	kassínja	-	-	small house

A problem concerns the interpretation of the forms in Schumann (1778). Three graphemic combinations must be taken into consideration - s, ss, and ns. To judge by the modern reflexes s was used ambiguously by Schumann.

	1778	Sara- maccan	São Tomé	Principe	Portu- guese	Gloss
i) <u>initially</u>	a) <u>suntu</u>	zúntu	zúntu	zútu	junto	close
	<u>suntà</u>	zuntá		zútá	juntar	assemble
b)	<u>sakkuli</u>	sakpí	sagudží		sacudir	shake
	<u>sappatu</u>	saapátu	sapátu	sapátu	sapato	shoe
ii) <u>medially</u>	a) <u>liso</u>	línzo			liso	smooth
	<u>/linsu</u>					
b)	<u>bisí/besì</u>	bisí	biší	biší	vestir	dress
	<u>nasih/ nasèh</u>	nasí	násé	nasé	nascer	grow

The orthographic representation ss seems to have represented unambiguously /s/:

Sar. 1778	Sar.	Port.	Occurrences
ss	s	s	17
ss	s	ʃ	3
ss	s/z	s	1
ss	z	ʃ	1
ss	s	z	2
ss	s/z	z	1
ss	s	ʒ	1

Can we say anything more definite after examining Schumann's orthographic habits? The forms assia, -kassa, kassinja and kamissa suggest that Portuguese /z/ was replaced by /s/. The items showing forms, or at least variants, in /z/ have sufficient parallels in forms with Saramaccan /z/ but derived from Portuguese /s/ to make it plausible that these developed from earlier forms in /s/.

ns is more difficult to evaluate. The modern developments to /nz/ could be explained as deriving from /ns/ in 1778 by the same rule of voicing frequently observed in nasal clusters (see the discussion elsewhere on /nt/, /mp/, /nk/). On the other hand ns in 1778 could have represented /nz/. If this was the case, however, it is difficult to see how a form such as /hánsa/ could be explained.

The single item liso with intervocalic s in 1778 is difficult to interpret in isolation. As such, intervocalic s is used in items where the beginning and end-points are known to be /s/ as well as /z/.

	<u>Beginning point</u>	<u>1778</u>	<u>End-point</u>	<u>Gloss</u>
/s/	English: ask/"ax"	hakkesi	hákiási	ask
/z/	Fon: azé	asêh	azé	witch

However, since the form in question would be completely isolated, in the light of our discussion on orthographic ss and ns, if we assumed that the 1778 form represented /lízo/, we will assume that this form too had an intervocalic /s/. This decision isolates in its turn the two forms suntu and suntà which we assume by the same beginning-and-end-point reasoning followed above to have had initial /z/. These are not relevant for the present discussion, however.

iii) Comparative Notes

We must conclude then that insofar as English and Portuguese provide comparative cases, these appear to involve the same development to /s/. Following a nasal there were apparently a variety of developments, none however exclusive to one or other language.

g) /n/

i) English

This sound is normally represented by /n/ in the Surinam creoles, except in final position (in English) where it is generally represented by /n/ in Saramaccan, but by nasalization of the previous vowel, [ŋ], or both in the other languages.

i) <u>Initial</u>	<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>
	nasty	nási	nási		
	name	nen	né	nén	nen
	nose	nóso	núsu	nósu	nosu
	knock	náki	náki	náki	naki
ii) <u>Medial</u>	money	móni	mɔ̃ni	móni	móni
	many	méni	-m'éni	-men	-men
	anyone	íniwan	(h)íniwan	-	-
	coney	konkóni	kɔ̃kɔ̃ni	kon(i)kóni	

As far as final /n/ is concerned, consider the following examples:

<u>English</u>	<u>Saramaccan</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Boni</u>
skin	sinkí(n)i	skin	sikín	šikín
pen	peńi	pen		
cane	tjéni	ken	ken	kjen
burn	boónu	bron	boón	boon
bone	bónu	bon (1855)	bón	bon
stone	sitónu	ston	sitón	šton
man	mánu	man	mán	man
sun	sónu	son	sán	san
baboon	babúnu	babún	babún	babun

These represent the normal cases. There are however quite a number of items showing reflexes that do not follow these rules:

<u>English</u>	<u>Saramaccan</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Boni</u>
in	-	íni	íni	ini
begin	bigí (pína)	(bigín)	(bigín)	
pin	pína	pína	pin(a)	
dumbcane	dónke	dónke	(dónkén)	
nine	(néni)	neni (1783)		
one	wán	(wan)	(wán)	(uan)
gun	(góni)	(gon)	góni	goni
liedown	didón ^s	(didón)	(didón)	(didon)
sitdown	sindó	(s(i)dón)	(sidón)	(šidon)
-man	-ma	(-man)		(-man)
-moon	-mu			
turn	toón	(tron)	(toón)	

The deviations from the expected reflex are of different types. Firstly, we have a number of cases where Sranan, Ndjuka, and Boni have unexpected epithetic vowels. These are in which is irregular in Sranan, Ndjuka and Boni; pin which has an irregular epithetic vowel /-a/ in Saramaccan, Sranan, and optionally in Ndjuka; nine which is irregular in Sranan (1783); gun which is irregular in Ndjuka, and Boni.

Then we have a group of items that are irregular in Saramaccan by virtue of not having an epithetic vowel: begin, one, liedown, sitdown, and turn.

Finally we have a group of items that also lack an epithetic vowel in Saramaccan, but seem in fact to represent the regular case when the vowel preceding /n/ is unstressed in English, and does not have a hightone in Saramaccan. There are in fact more examples of this type than we have quoted here.

One reason for the variation that we have seen here is the confusion between /n/ and /m/ already referred to. If we examine more closely those items irregularly lacking epithetic vowels we find more evidence of such confusion.

English	Sara- maccan	Sranan	1798	1783	1780	Earlier Sources	Krio
begin	bigí	bigín	biegien	beginn			bigín
one	wán	wan	wan	wan	wan	1718 wan-	wan
liedown	didón ^s	didón	diedon	liddom	lydom		ledóm
sitdown	sindó	s(i)dón	sidoon	siddom	ziddom	1718 sie don	sídóm
turn	toón	tron	trom	tronn	trom		tɔn

In no less than three of the five cases where Saramaccan has an irregular lack of an epithetic vowel, late eighteenth century sources for Sranan show an m. Now we already know that Saramaccan does not regularly have an epithetic vowel in the case of final /m/. It would seem safe to claim that in the three cases where an m is evidenced in eighteenth century sources in Sranan this was at least optionally the case too at an earlier stage in Saramaccan. Note also that in two of these cases Krio displays final /m/.

It is also of interest to compare eighteenth century Saramaccan with the present-day language.

English	Saramaccan	1778	Epithetic vowel in 1778
skin	sinki(n)i	skín	-
cane	tjéni	tchenni	
plane	peéni	plêni	
again	-	agehn	-
pen	péni	penni	
ten	téni	téni	
gun	góni	goni	
sun	sónu	sonn	-
burn	boónu	bronn	-
bone	bónu	bôn	-
stone	sitónu	stoon	-

<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Epithetic vowel in 1778</u>
man	mánu	mannu	
moon	-	mune (1805 munu)	
baboon	babúnu	babun	-

We see that around half the cases that have an epithetic vowel in modern Saramaccan lack one in eighteenth century Saramaccan. There is a non-random distribution of epithetic vowels in 1778. Of the front unrounded vowel cases four out of six display epithetic vowels. Of the back rounded vowel cases five out of seven lack epithetic vowels. The only example of a back unrounded vowel has an epithetic vowel.

English /n/ in unstressed position is sometimes retained, but usually lost in the modern languages:

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1798</u>	<u>1783</u>	<u>Saramaccan</u>
cotton-linen	kankan-	kánkan-		kattan-linnie	kankan-
Indian	índji	iéngi		indji indjin	íngi
poison	pónsu	pónsoe			
rotten	ratín	ratíen		latin	
fasten	fási	fási		fassi	
fashion	fási	fási		fasi	fási
garden	djári	djári	d'Jari	djári	djái
bargain	bárki	bárki		barki	báíki balíki ^s
cushion	kúnsu	kóensoe koesoen-	koensoe	kussu	kúnsu
woman	úma	óeman hóeman	oema	uman	
				<u>1777</u> woma	
usen ("used (to)")	njúsu	njoesoe		<u>1783</u> njusu	júnsu/njúsu njúnsu

English	1778	Ndjuka	Boni	Krio
cotton	kattan-			ḱótin
Indian	ingri jingri	íngí	ingi	índžin
iron		ájee	aje	ájɛn
poison		pónsu	pónsu	
rotten				rótin
fasten		fási	fáži	fásin
fashion	fasi faassi	fási		fášin
garden		djáli		gádin
bargain	barki			bágin
cushion		kunsu	kunsu	kúšin
woman		úman	uman	úman
usen ("used (to)")	njusu			(jus)

In two cases there has been a transference of nasality to the first, stressed syllable - poison and cushion. This transference is absent in the 1855 form with the meaning of "pillow-slip" koeso-en-slópo. This is *moden* /kunsusrópu/ and represents the Dutch kussensloop with the first element replaced by the cognate English-derived item. Whether /kankan-/ represents cotton in Sranan and Saramaccan is unclear. Both languages have kattan in the eighteenth century, so this form could be an irregular reflex of an intermediate stage /*kantan/. That such an intermediate stage is not entirely without parallel can be seen from the Saramaccan congener of skin - /sinkíi/ or /sinkíni/. /*(n)júnsu*/ in Saramaccan is another likely case. The nasality here is probably to be explained as due to the English model usen ("used"). This is clearly exemplified in Jamaican /yuuzn/ (cf. Smith, 1980). The Sranan and Saramaccan /*njúsu*/ probably lack the nasalization of the initial syllable due to confusion between the stronger phonological nasalization of the true nasalized vowels, and the weak contextual nasalization due to the syllable-initial nasal consonant.

The only other item with any nasalization remaining as a trace of the final /n/ is /*ratín*/ where the stress has been irregularly transferred to the final syllable, making this example not really comparable with the rest. In 1855 we observe the final nasal in woman for the last time. In 1783 this is also optionally the case with Indian. Even in 1783 however, the nasal is missing completely in about half the cases.

ii) Portuguese

This sound remains /n/ in the Surinam creoles.

	<u>Portuguese</u>	<u>Sara-</u> <u>maccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
a) <u>Initial</u>	negar nascer	- nasí	ninga naslh nasèh	- -	- -	deny grow
b) <u>Medial</u>	tornar penar juntar	tooná pená zuntá	tronna penna suntà sundà	- piná djuntá	- piná djuntá	return suffer assemble
	dentro	déndu	dindru	-	-	inside

Loss of /n/ occurs in a small number of cases.

	<u>Portuguese</u>	<u>Sara-</u> <u>maccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
	mentira pagamento	- pakamétu	mitira paggamentu	-	-	lie payment
	abundar	-	-	abodán (1856)	-	abund- ance
	menino	míí	minini	-	-	child

The first two cases are probably another illustration of the confusion, referred to in the section on English /n/, between the stronger nasalization of a true nasalized vowel - in this case to be expected to be accompanied by a syllable-final /n/ - and the weaker nasalization resulting from the presence of a syllable-initial nasal. They also have in common that the following consonant is /t/, although this does not usually trigger off loss of /n/.

The third form - /abodán/ - displays not so much a loss of /n/ as a displacement of nasality to another syllable, in this case the syllable to the right of the syllable originally containing the nasal.

The last item - /míí/ - is paralleled by the above-mentioned case of skin, as well as by the case of the Saramaccan word for "hill" - /kúnunu~kúun/ - explained by Schuchardt (1914) as tentatively associated with Portuguese collina.

A word is necessary at this point about the treatment of word-final nasal vowels in Portuguese.

There is evidence that some Portuguese nasal vowels were reinterpreted in the Surinam creoles as sequences of a vowel plus a nasal. We shall provide examples from Saramaccan.

	<u>Portuguese</u>	<u>Sar. 1778</u>	<u>Saramaccan</u>	<u>Gloss</u>
a)	carvão	kramàu	kaabán (Lo) koobán (Li)	charcoal
	fundão	fundàm	fundá	whirlpool
	gavião	gabiàm	gabián	hawk
	mamão	mamàu	mamáu	sp. fruit
	mão	mau	máun ^s	hand
	tampão	tampa	máun ^s	lid
	pasmão	passamau	tampá	person surprised at everything
			-	
b)	mãe	mai	mái	mother
c)	bom	bun	búnu	good
		bunne	bun-búu	
			búm-búnu	
	com	ko	ku	with

As we have pointed out in the section on the developments of English /m/, there is clear evidence from Saramaccan that these were by and large distinguished from those with final /n/. Let us review, and where necessary reinterpret, what we said there. What is the situation with English-derived items in Saramaccan?

In modern Saramaccan these two types are distinguished by the presence of epithetic vowels following /n/ in the case of /n/-derived items. As "nasalization" tends to be a weak feature in Saramaccan, /m/-derived items sometimes have lost all trace of any nasal in this language, sometimes it is retained, as has already been described, either as a final velar nasal, or as nasalization of the preceding vowel, or both.

In the eighteenth century, the distinction between the two types was different. Schumann (1778) does not write epithetic vowels in all the items that have them in modern Saramaccan. In particular they tend not to occur when the nasal is preceded by a rounded vowel. This suggests that when Schumann recorded Saramaccan, epithetic vowels were in the process of being added to the /n/-derived items. Therefore the presence or absence of an epithetic vowel was not the distinguishing factor in eighteenth century Saramaccan, especially as Schumann's recordings suggest that at an earlier stage these were lacking in /n/-derived items. /m/-derived items on the other hand are consistently recorded with a final m.

What were the phonetic implications of final orthographic n and m as employed by Schumann (1778)? Note also that the same distinction is made in his Sranan dictionary (Schumann 1781, 1783), published in Kramp (1983). Sranan later neutralized this distinction. Note that Schumann (1783) also has a third final nasal -ng, which he uses in the item shelling, sjelling "shilling". This rules out the phonetic value [ŋ] for the orthographic m - not inconceivable in itself, seeing that the source of these English-derived words must in most cases have been obvious to Schumann.

We are compelled to conclude the following:

- a) the modern Saramaccan distinction makes it clear that the distinction between m and n in Schumann's Saramaccan dictionary was not just orthographic, but had a phonetic basis.
- b) it is reasonable to suppose that the orthography he employed for Sranan had the same or similar motivation.
- c) and that the introduction of a third nasal - final ng - indeed implied that Sranan distinguished three final nasals.
Note also that final [ŋ] is in fact one value of present /-n#/ in all the creoles of Surinam.
- d) the non-etymological m's in some English items - 1783 liddom, siddom, etc. did in fact imply [m], the possibility of which is strengthened by Krio /ledɔ́m/, /sidɔ́m/ which are of course cognate.

Where does this leave us as far as recordings such as fundàm, gabiàm, and bun/bunne are concerned? We ought, I think to ignore the fact that -am was an earlier orthographic convention representing present Portuguese -ão. That bun really did mean that this item ended in /n/ is sufficiently confirmed by modern Saramaccan /búnu/ with an epithetic vowel. That fundàm and gabiàm were not so pronounced is implied by the modern reflexes:

*fundánV /fundá
 *gabiánV /gabián
 cf. babúnu < 1778 babùn

We can only conclude that these items were pronounced with final /m/ - for unclear reasons.

Note that certain items in Sranan, Saramaccan and Ndjuka with final /n/ seem to display alternations involving /m/. Compare Voorhoeve (1982) for Sranan /lon/ (run), /íon/ (E. Ijò: /fom/), /bron/ (burn) /kron/ (Dutch: krom), /ston/ (stone) /kan/ (Dutch: kam), /lan/ (Dutch: lam), /njan/ (African: njam), /span/ (Dutch: span), /frustán/ (Dutch: verstaan), /kren/ (climb), /swen/ (Dutch: zwemmen), and /krin/ (clean). Examples also occur in Saramaccan involving at least /fón/ and /nján/ - both with final m in 1778 - (Kouwenberg, 1985), while similar alternations occur in Ndjuka (Huttar, personal communication).

3) Palato-alveolar consonants

a) /tʃ/

i) English

This sound is realised as /tj/ before back vowels, and as /tj/ or /k/ before front vowels. Following /n/ it may be subject to voicing. Following a vowel it becomes /s/.

	<u>Initial</u>	<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>
i)		change	kénki [kénki ~ tjéntji]	tjéntje	kéngi	kjengi
ii)	<u>Final</u>	witch	wísi	wísi	-	wisi
		search	sási	-	-	-
		catch	kísi	kísi	kísi	kísi
		thatch	tási	tási	tási	taš
iii)	<u>Medial</u>	hankercher	ańisa	(h)ángisa	angisa	

Examples of the development following /n/ are as follows:

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1798</u>	<u>1783</u>
pinch	píńi	pingi	píengi	piengie	pinji
wench	píńi wénke wéntje	wendje	wéntje	wenkee	wendje
punch	pónsu (Para)				
trench		trensi			

<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>
pinch	píńdja	pinja pinji	píngi
wench	wéńdje	wenje woenje	
bunch	bóngi	bondji	

Here we see two developments, one to /k-g/, and the other to /s/. Of these two only the first would seem to represent the proper Proto-Sranan development of /tʃ/. ponsu could just as well be based on the model of Dutch punch, which itself is a loan from the English word, especially as this word is not recorded before 1632 in English. trensi is more difficult - it also occurs as trens in the Dutch of Surinam (van Donselaar, 1976). Its ultimate derivation from English trench is not in doubt, although the lack of early forms is puzzling. The following explanation would seem to be the most probable for the difference in development between the first three forms and trensi.

The original group /ntʃ/ in English has at the present two variants - /ntʃ/ and /nʃ/ - of which the second is more frequent. The first trace of this given by Dobson (1957) is early in the seventeenth century. This suggests that two models should have been

available to Proto-Sranan speakers - one with /ʃ/ and one with /tʃ/. trensi would seem then to have been based on the model with /ʃ/.

As in other cases where we have two reflexes of an English sound, or even as here where we may be seeing the reflection of two variants in English, it is of interest to see what the reflexes are in other English-based creole languages. We shall not just look at the reflex following /n/, but also at that in other positions.

	<u>English</u>	<u>Sranan</u>	<u>Krio</u>	<u>Cameroon</u>	<u>Fern. Po</u>	
i)	chop change	tjápu tjéntji	tʃap tʃendʒ tʃendʒi(n)	tʃɔp tʃens	chench	
ii)	catch scratch rich too much	kísi krási túmsi	ketʃ kratʃ ritʃ tumɔs	kas/katʃ kras ris tumɔs túmɔs tatʃ	ketch cra(t)ch tumoch	
	thatch bleach church how much witch mutch	tási wísi músu	tatʃ- britʃ tʃɔtʃ ʒmɔs witʃ	tsɔs wis/witʃ	choch aumoch wi(t)ch moch	
iii)	pinch wench bunch	pípi bóndjiʒ (Sara.)	pintʃ		pinch bonch	
	punch trench	ponsu (Para.) trensi (1856)			ponch (blow) trench	
iv)	handkercher	anjása	enkíntʃa	hángis	hánkecha	
i)	<u>English</u> chop change	<u>Nigerian</u> tʃendʒi katʃ	<u>Guyanese</u> tʃap tʃendʒ ketʃ kratʃ ritʃ tú:mɔtʃ bli:tʃ tʃɔtʃ	<u>Jamaican</u> tʃap tʃiendʒi ketʃ kratʃ ritʃ tumotʃ bli:tʃ tʃa:tʃ homotʃ	<u>Gullah</u> cɔp cenj cɛc krac ric tʌmʌc bli:c hʌmʌc	<u>MSL</u> kisɔ
ii)	catch scratch rich too much bleach church					
	how much witch	wintʃ	hɔwmɔtʃ	homotʃ	hʌmʌc	
iv)	handkercher			henkitʃif	hénkʃə inketʃá	

We can see that the only other language displaying a similar distribution of reflexes to the Surinam creoles in Cameroon WAPE. There is some variability in the medial reflexes, due no doubt to the continuing influence of Standard English. The dialect studied by Todd (1984) also reveals this instability in the few relevant examples quoted by her:

scratch	kraʃ
touch	tɔs
which	wiʃ/witʃ
reach	riʃ

In the light of this variation it is a pity that precisely with reference to this point the Spanish orthography of the so-called Broken English of Fernando Po does not consistently distinguish [ʃ] and [tʃ] or for that matter [ʒ] and [dʒ]. Where ch and tch are given as alternatives we can conclude that these two refer to the fricative and affricate respectively. In other cases however we cannot be certain of the meaning of ch as a reflex of English /tʃ/.

As we had noted in our discussion of the fate of English /k/, the optional allophone of /k/ before front vowels - [tj] - overlaps with the same sound as a realization of the phoneme /tj/ in the same environment in Sranan. There is a complete neutralization. This has led to the result that items with Proto-Sranan /*tj/ before front vowels have acquired an optional allophone [k].

As an examination of the table of the post-nasal developments shows, voicing frequently took place following /n/ - as in other nasal clusters - leading in this case in the first instance to /ndj/. Parallel to /tj/ (which was neutralized with /k/) /dj/ was neutralized with /g/ before front vowels. In the nasal cluster case this resulted in /ng/ which developed in Sranan to /ŋ/. This new phoneme has, however, an optional allophone [ɲ] overlapping with the same allophone as a realization of /ɲ/ (here noted as /nj/) before front vowels. The connection between /ndj/ and /ɲ/ as alternates before front vowels seems to have been lost, although there are apparently still examples in the modern language. The pronunciation [ɲ] did not appear only when /ng/ simplified to /ŋ/ in Sranan, as nj-spellings in Saramaccan - which did not of course undergo the above mentioned simplification - would appear

to indicate. Compare again the 1778 spellings in the above table, and also modern spellings in the section on English /dʒ/ (following section).

Note that in Saramaccan the neutralization between /k/ and /tj/ before front vowels seems not to be present any longer - Donicic and Voorhoeve (1963), Alleyne (1980) agree that this is the case, although the first-mentioned do so only tentatively. That it was formerly present is clearly demonstrated by such cases as /píndja/ pinch and /tjéni/ cane.

A potential problem is Sranan wáki which is historically assigned to English watch by many researchers (Alleyne (1980) is probably the most recent of these), in contradistinction to all other forms displaying original English /tʃ/ following a vowel, which only display Surinam /s/. Here an alternative explanation involving duality of English models is not available. So, in this case, our methodological principle of allowing the clear cases to decide the assignation of language in doubtful ones forces us to assume a Dutch etymology - waken "wake, watch".

ii) Portuguese

This sound has become [ʃ] in modern Portuguese, but had the value of [tʃ] in standard Portuguese up till about 1700. The pronunciation [tʃ] is preserved in various European and Brazilian dialects. In the Surinam creoles it is normally reflected by /tj/, although a couple of forms display /s/.

We will illustrate all the cases:

	<u>Portuguese</u>	<u>Sara-</u> <u>maccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
i) <u>Initial</u>	chegar	tjiká	zikka (1805)-	-	-	suffice
	chupar	tjupá	-	-	-	suck
	chumbo	tjúmbu	-	-	-	lead
	chuva	tjúba	-	-	-	rain
	chocolate	sukuáti	-	skráti	sukaáti	chocolate

	<u>Portuguese</u>	<u>Sara-</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
ii) <u>Medial</u>	fechar	fitjá	fitjà	-	-	close
	rachar	latjá	latja	-	-	split
	bicho	bítju	bidju pitju	-	-	insect
	mecha	-	-	métja	-	supposi- tory
	manchar	mandjá	-	-	-	stain
	machucar	masiká makisá	massika makkisa	-	mokisá	crush

In fact it can be argued that the sole reflex of /tʃ/ in Saramaccan is /tj/, the two *s-* forms being amenable to explanations that result in their not being directly comparable with the other forms.

If /makisá~masiká/ were solely to be explained as a reflex of machucar it would also be deviant for another reason. The expected reflex - assuming that /tʃ/ gives /tj/ - would be /*matjúká/. The phonetics of /masiká/, however, would suit a development from another verb - mastigar "masticate, chew". The Saramaccan word is glossed "shatter, pulverize" (Donicic & Voorhoeve, 1963); "squash, step on treat with lack of respect" (/makisá/) (SIL), "squash, kill" (/masiká/) (SIL). These meanings come closer to that of machucar, the full range of which is "bruise, batter, pound, crush". What we seem to have here is a cross between mastigar and machucar the meaning ranges of which at least approach each other with "masticate" and "crush". The Saramaccan form resulting from this crossing had approximately the meaning of machucar but had the expected reflex of mastigar. The Ndjuka item /mokisá/ "mix" conceivably represents a further crossing of this form with the ancestor of Sranan /móksi/, Saramaccan /mókísi/ "mix". In Cape Verde creole /mutšká/ from machucar is frequently used in the sense of mastigar so that the confusion of these two forms would have parallels (cf. Lopes da Silva, 1957).

The word for "chocolate" - /sukuáti/ - represents, we would suggest, a loan from Sranan. Two arguments can be offered in support of this view. In the first place the word does not appear in Schumann's 1778 list; this is of course only negative evidence, as other words appear in later sources only which must for various reasons have been present in eighteenth century Saramaccan, for instance other

items of Portuguese origin not occurring in Sranan. More significantly, this word can be taken as belonging to a group of words of Portuguese origin, not occurring in general in Saramaccan, that refer to various sweetmeats and cooked foods. These words, some by their very nature of unlikely occurrence in a bush cultural context, came into Sranan presumably directly from the Portuguese used by the Portuguese Jews.

<u>Portuguese</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>P.Gloss</u>	<u>S.Gloss</u>
chocolate	skrátí	sokrati skrátí		chocolate	chocolate
bocadinho bolo	bokadínju bóru	boloe	bokadiénjoe bóloe bóroe	bit cake	sweet cake cake
doce fiado	dósi fiádu		dósi fiádu bólú fiádu	sweet trusting	cassava cake
empada frito mexido	empáda fríta misídu		empáda fríta misídoe misjoédoe	meat pie fried stirred	meat pie fat, food icing sugar

If we proceed from the assumption that this group of items - which form a clear class - were borrowed from the Brazilian Portuguese of the Portuguese Jews in Surinam, combined with the likelihood that the change of Portuguese /tʃ/ to /ʃ/ had already taken place prior to the exodus of these Jews from Brazil, then the item /sukuáti/ would be completely irrelevant for the discussion of the developments of /tʃ/.

The conclusion would seem to be reasonably justified that the normal development of Portuguese /tʃ/ is to /tj/ in all positions, and that following a nasal the normal voicing to /dj/ has taken place.

A comparison with the Portuguese creoles is of interest.

<u>Portuguese</u>	<u>Sara- maccan</u>	<u>São Tomé</u>	<u>Princ- ipe</u>	<u>Cape Verde</u>	<u>Papiamentu</u>	<u>Gloss</u>
chegar	tjiká	ʃiga	ʃigá	tʃgá/kdžá	(yégà)	arrive, suffice
chupar	tjupá		supá	tʃpá	tsúpà	suck
chumbo	tjúmbu	súmbu		tʃúmbə/ súmbə	tsúmbu	lead

<u>Portuguese</u>	<u>Sara-</u> <u>maccan</u>	<u>São</u> <u>Tomé</u>	<u>Princ-</u> <u>ipe</u>	<u>Cape Verde</u>	<u>Papiamentu</u>	<u>Gloss</u>
chuva	tjúba	súba	usúva	tšúba	(yobida)	rain
chocolate	sukuáti			šukláta	tšukuláti	chocolate
bicho	bítju	bísu	bísu	bítša	bítši	insect
fechar	fitjá		fisá	ftšá/fjtšá		close
rachar	latjá			ratsá	rátšà	split
mecha	Sr. métja				métša	suppository
machucar	(masiká)			mutšká	matšika	crush
manchar	mandjá			mãtšá	mãntšà	stain

In São Tomé and Príncipe the development is to /s/ or /š/. In the case of /šiga/ it is not possible to say which we have as /s/ → [š] before /i/. /s/ represents clearly the original reflex, while /š/ in other contexts than before /i/, represents later Portuguese influence. In Cape Verde creole we can identify /tš/ as the original reflex, with /š/ as the result of later Portuguese influence. In Papiamentu, there has been later Spanish influence, here observable through the forms in /y/.

	<u>Original reflex</u>	<u>Later influence</u>
Saramaccan	tj	(s)
São Tomé/Príncipe	s	š
Cape Verde	tš	š
Papiamentu	tš	y (Spanish)

It is clear that here the Gulf of Guinea creoles have a more simplified reflex than the other creoles, including Saramaccan.

iii) Comparative Notes

Here is a clear case of a difference of reflex in the two groups of words. The English-derived items are interpreted by us as displaying the reflex /tj/ (in variation with /k/ preceding front vowels) initially and in post-nasal position, and /s/ otherwise. The Portuguese-derived items display /tj/ in all positions. The two cases displaying /s/ are special cases, explicable in other terms.

b) /dʒ/

i) English

This sound has largely parallel realizations in the Surinam creoles to those of /tʃ/ - [dʒ] before back vowels, [dʒ] or [g] before front vowels, following /n/ [dʒ] or [g] depending on the vocalic makeup of the item, and following a vowel - /s/.

	<u>Initial</u>	<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>
i)		gentle	géndri	djénde	djéndée	
		jump	djómpo	djómbó	djómbó	djompo
		jacket	djákti	djákiti		
		ginger	gíndja	adjíndja	djíndja	
ii)	<u>Final</u>	cabbage	kábisi		tjábísi	
iii)	<u>Medial</u>	ginger	gíndja	adjíndja	djíndja	

As in the case of /tʃ/ the initial development of /dʒ/ depends on the nature of the following vowel. There is only one clear case of postvocalic /dʒ/ - cabbage, which is supported, however, by the parallels of the development of final /tʃ/. The form in Fermin (1769) cabisch may indicate that /dʒ/ (and presumably /tʃ/) were originally represented by /ʃ/ rather than /s/ in Surinam. /wégi/, assumed by Alleyne (1980) to be from wedge, has a methodologically sounder explanation in terms of Dutch wig "wedge". The cases of /dʒ/ following /n/ are sufficiently interesting to be shown in more detail:

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1844</u>	<u>1798</u>
Indian	ípi índji íngi	ingi	iéngi			
ginger	gíndja	djinja	djiéndja djiénja			ginjaa
change	kénki	kenki	kínki	kenki	kenki	kenkie
revenge		revensi				
challenge	tjalensi					

<u>English</u>	<u>1783</u>	<u>1777</u>	<u>Saramaccan 1778</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>
Indian	indji indjin	ingi	íngi	jingri	íngí	índžin
ginger	djinja		adjíndja	adjinjà	djíndja	džíndža
change	ginja tjendji djendji		tjéntje	kjenji	kéngi	kjengi
						tšéndžín tšéndží

Let us first discuss the two forms revenge and challenge. The first of these items is doubly deviant - it has /v/ instead of /b/ for English /v/, and it has /ns/ instead of /ndj/ for English /ndʒ/. Additionally it lacks forms older than 1856. This suggests that it does not go back to Proto-Sranan times, and must be a later borrowing. challenge has again the unexpected /ns/. and is only evidenced in modern Sranan. We assume that this item, too, is a modern loan in Sranan.

The same situation that was found with the cases of English /ntʃ/ that had been subject to voicing in the Surinam languages (see previous section) appears here. We find hesitation in Indian between /íɲi/ and /índji/ in modern Sranan. Before the /a/ in ginger we find /dj/ in modern Sranan, but most frequently /j/ in older records. Focke (1855) is the only source to give both options.

In change we find no less than five reflexes of English /dʒ/ - /k/, /tj/, /dj/, /g/, /j/. The last three reflexes are those we expect by now, but the voiceless /k/ and /tj/ require explanation. The variation between /k/ and /tj/ does not require further explanation as this is expected before a front vowel.

As we have noted earlier the development of the various nasal clusters displays little uniformity. However, the case that would seem to be most relevant in this case is the development of /nk/. As we have already noted there is a complete overlap of /k/ and /tj/ in the Surinam creoles before front vowels.

What we seem to have in the case of change is a case of hypercorrection - a case where a historical process has apparently been reversed due to analogy. At some moment a process of voicing set in in the case of the cluster /ntʃ/, giving /ndʒ/. At this time then there were two groups of words involving clusters of /n/ plus /dj/. The first group derived from English items in /ndʒ/, the second derived from English /ntʃ/ and involved variation between /ntj/ and /ndj/. What we claim happened in the case of change is that this item became assigned to the wrong group, acquiring a variant in /ntj/. The reason why we have assumed the relevance of /nk/ is that change involves an epenthetic vowel that is front. This means that in fact /ntji/ is the same as /nki/. The date of the voicing in /nk(i)/ words has been assumed above to be around 1770. Of course such a change implies a period -

however short - of variability, rather than an overnight replacement. We can, I think, reasonably claim to find support for this posited date in the two sources from the end of the eighteenth century for Sranan. In 1783 Schumann gives tjendji with a voiced reflex of English /dʒ/; in 1798 Weygandt has kenkie with a voiceless reflex. If we take these dates as points at which the quoted forms actually existed - in the case of Schumann we are dealing with a dated manuscript, not a book involving unquantifiable delays in publication, after all - then we have to assume that the voicing in this cluster was at the very least still optional in 1783. This date does not differ to any significant degree from our date of around 1770 for the voicing of /nk/.

The variant /djendji/ in Schumann (1783) is isolated. We have to assume its correctness in view of Schumann's general accuracy however. It can be explained as an isolated case of remote voicing assimilation, or voicing harmony.

We have included the English item Indian as an example of English /dʒ/. Apart from the Krio parallel, which involves a case of near-identity with Schumann (1783) for Sranan, we have Cockney Injine quoted in Matthews (1938) from the eighteenth century, about which Matthews opines that there could be little doubt that the pronunciation was much older. Matthews (1935) quotes spellings like Endgiman "Indiaman" from a 1693 ship's log as evidence for seventeenth century sailors' pronunciation. Dobson (1957) quotes for standard English the 1670's form soger "soldier".

Something akin to the present Cockney variant /skwijdʒ/ for "squeeze" must lie behind the forms this word takes in some Bush Negro languages. Matthews (1938) quotes a source for squeedge in Cockney from 1803.

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>
squeeze	kwínsi	kwíensi	kwinsi	kpínji kpíndji kpíngi kwíndji gbíngi (US)	kunji	kwínsi
<u>Boni</u>	<u>Kwinti</u>	<u>Krio</u>	<u>Jamaican</u>	<u>Guyanese</u>	<u>Bahamian</u>	
kuintjin	kwínsi	kwis	kwiz	kwiz	squeege	

Although the nasal evidenced in all the Surinam forms does not appear in the basic form "squeeze" in the cited forms from other Atlantic creoles it does appear in related items, e.g. Bahamian squinch up "tight" (Holm with Shilling, 1982) where squinch must have originally been a form of our word.

We might posit two Proto-Sranan forms /*kwínsi/ based on the model /*skwi:z/, and /*kwíndji/ based on the model /*skwi:dz/. The nasalization cannot be accounted for, but its occurrence in other creoles suggests that its source might not be Proto-Sranan but that we have to look for a source in the English model.

The variation in Saramaccan between /nj/, /ndj/ and /ng/ is already familiar and requires no further discussion. The form /gbíngi/ recorded in Huttar (1972) for the Upper Surinam river dialect would seem to represent another case of remote assimilation, comparable to the case of djindji discussed above.

The Boni form /kuintjin/ would seem to be another case of hypercorrection parallel to the development of change to /kénki/ in Sranan. In connection with the date of 1770 suggested for the change of /nk/ to /ng/, and presumably also /ntj/ to /ndj/, and in connection with the apparent reverse process in change observed between 1783 and 1798, it is interesting to note that the Boni tribe was formed, according to Price (1975), between 1760 and 1780.

ii) Portuguese

In the Surinam creoles we find two reflexes of Portuguese /dʒ/ - /dj/ and /z/. In standard Portuguese - parallel to /tʃ/ - this sound has been deaffricated.

	<u>Portu- guese</u>	<u>Sara- maccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
i) <u>Initial</u>	g ^{em} er	dj ^e m ^e	tjemeh	gemé djemé	gemeh (Boni)	groan
	jardim	djaaí	djaraiì	-	-	garden
	jurar	djulá	djurà	-	-	swear
	juntar	zuntá	sundà suntà	djuntá	djuntá	assemble
	junto	zúntu	sundu suntu	-	-	close

	<u>Portu- guese</u>	<u>Sara- maccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
ii) <u>Medial</u>	ajudar	-	adjudâ	-	-	aid
	frigir	fiigí fiidjís		-	-	fry
	fugir	fusi	fussih	-	-	flee
	invejar	fedjá	wedja	-	-	envy
	mijar	miindjá minján ^s	minja	-	-	urinate
	sujo	súndju	sunju sonsu	-	-	dirty

Ignoring /fusi/ for the moment, we can see that the two reflexes /dj/ and /z/ do not depend on context. In fact Saramaccan has /zuntá/ corresponding to Sranan and Ndjuka /djuntá/. In addition it is possible that in the two alternative reflexes in 1778 - sunju and sonsu - we should see /sún(d)ju/ and /súnzu/.

A comparison with the Portuguese creoles is again instructive.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>São Tomé</u>	<u>Principe</u>	<u>Cape Verde</u>	<u>Gloss</u>
gemer	djemé	zémé	zemé	gemé/žemé	groan
jardin	djaai	žadi	žadi	žardi	garden
jurar	djulá		zwá	žurá	swear
juntar	zuntá		zúta	džuntá	assemble
junto	zúntu	zúntu	zútu	žuntá / žúntə	close
ajuda(r)	adjudâ (1778)	zúda		džudá	aid
frigir	fiigí fiidjís		fiží	ždá friží	fry
fugir	fusi	fuží	fuši	fží/fuží	flee
invejar	fedjá			ivéža (Noun)	envy
mijar	miindjá minján		mizá	mížá	urinate
sujo	súndju			súža/súžə súšu/súšu	dirty
<u>Portuguese</u>	<u>Guiné</u>	<u>Papiamentu</u>		<u>Gloss</u>	
jurar		(húrà)		swear	
junto	džuntu	(húntu)		close	
fugir	fúusi	(hú)		flee	
invejar		(envidiá)		envy	
sujo		suši/žuši		dirty	

In the same way as before, we can arrange the reflexes in terms of their relative age:

	<u>Original reflex</u>	<u>Later Influence</u>
Saramaccan	dj (z)	-
Sao Tome/Principe	z	ž
Cape Verde	dž	ž
Papiamentu	?	h/# _ V ø/V _ V (Spanish)

Note that an explanation of the /z/-reflexes in Saramaccan as borrowed from Sranan is not likely, since Sranan has in fact /dj/ for one of these items.

Note that the reflex of fugir is deviant in several languages. In Saramaccan the g is reflected by a voiceless /s/, in Principe by a voiceless /š/ (before /i/), and in Portuguese Guine creole - supposedly deriving from a form of Cape Verde creole (Lopes da Silva, 1957) (see however Morais-Barbosa, 1975) - by a voiceless /s/.

These deviant forms could be explained by deriving them from the Northern Portuguese/Galician form fuxir /fušír/. Note that this fact is a piece of evidence for the hypothesis that there was originally a single proto-Portuguese pidgin in the Atlantic area, and more importantly for our purposes, that the Portuguese items in Saramaccan come from some such source rather than from Portuguese itself.

iii) Comparative Notes

In the English-derived items we can see a distribution of reflexes that is parallel to that of the voiceless sound: in initial and post-nasal positions we find /dj/ (corresponding to the voiceless /tj/) while in the one case not falling under these two contexts we find the same /s/ as in the voiceless case. In the Portuguese-derived items, on the other hand, we find the reflex /dj/ in every context (parallel to the voiceless case) while in two (related) items we find an initial /z/, possibly reflecting an older stage, since this is the older reflex in the Gulf of Guinea creoles. Note that this /z/ is probably not paralleled by /s/ from

Portuguese /tʃ/. The two cases apparently reflecting this have more probable explanations in other terms.

c) /ʃ/

i) English

This is generally represented in the Surinam creoles by /s/. In a number of forms in Sranan /ʃ/ occurs.

	<u>Initial</u>	<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>
i)		ship	sípi	sípi	sipi	
		shake	séki	séki	séke	
		shingle	síŋri	síngi		
		shark	sárki	-	sáliki	
ii)	<u>Final</u>	mash	mási	-	mási	maši
		trash	trási	-		
		bush	búsi		búsi	buši
		English	inrísí		ingíísi	
iii)	<u>Medial</u>	ashes	asísi	-	asísi	
		fashion	fási	fási	fási	
		cushion	kúnsu	kúnsu	kunsu	kunsu

NB. In this section we depart from the Sranan orthographic convention sj, replacing this by ʃ.

Initially there is a small group with retention of initial /ʃ/. This group has apparently been shrinking over the last couple of hundred years. For this reason we will examine all words having initial /ʃ/ in the English model.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>	<u>1780</u>
shear/ share	siséj seséj	sesèi	seséi		sesej	sesei	
ship	sípi	sipi sibi	sípi	sipi	siepie	shippi shibbi sibbi	single
shingle shilling	síŋri sren	singli sren	síngri sren	singli	sreen	shelling sjelling	sheki
shake shave-	séki sebi- srebi-	seki sebi-	séki sébi-	seki sebi-	-sekie sebie-	sheki sebi-	

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>	<u>1780</u>
shame	ʒen	sjem	sjem siēm	sjem	sjem	shem sjem	
shove	ʒóbu						
shore	ʒóro	sjoro	sjóro	sjoroe	sjooro	sjorro sorro	
short	ʒátu	sjatoe	sjátœ siättœ	sjatoe	sjatoe	tschattu	
shangree	saŋri		sángri				(1777) sangaree
sharp	srápu	srapœ	srápœ	srapœ	siapœ	srabbo	
shark	sárki	sarki	sárki			sarki	
shoot	sútu	soetœ	sóetœ		soetœ	shutu shuttu	(1780) zoete
shoes	súsu	soesœ	sóesœ	soesœ	soesœ	sussu	

<u>English</u>	<u>Sara- maccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
shear/ share	seséi	sese seisei	séséj	seséi
ship	sípi	sippi shippi	sipi	
shingle	síngi			
shilling	seén			
shake	séki	shēki	séke	seki
shave- shame	sém(b)í- sen sin ^s	sebi- shem	sibi- ʒén	sin
shore	-	-	sóo	so
short	sáti	tschatti	sátu	satu
sharp	saápu	srabbo	saápu	saápu
shark			sáliiki	
shoot	súti	swütti	sútu	sutu
shoes	súsu		súsu	ʒušú

If we compare the 1783 source (Schumann) with later Sranan sources, we note a considerable difference with respect to the realization of the initial sound of these words. Ignoring the minor difference Schumann claims to distinguish by means of the digraphs sj and sh (see Kramp, 1983), we can express the facts as follows:

	<u>1783</u>	<u>Modern</u>
/s/	5	9
/s~ʒ/	2	-
/ʒ/	4	3
/tʒ/	1	-

Insofar as Schumann gives comparable items in his 1778 manuscript dictionary these items have the same distribution of /ʒ/ and /s/, as that of Sranan in 1783 with one exception - that of shoot, where Sranan has /ʒ/ and Saramaccan /s/. Modern Saramaccan has no trace of /ʒ/ in these words, in fact no trace of /ʒ/ in its phonological system. Since this is so, we will ignore Saramaccan in the following remarks.

As for the changes in Sranan, it would seem on the available evidence that these must have taken place in the period between 1783 and the end of the eighteenth century. Weygandt (1798) is a clear indication of this. The most likely interpretation of the facts is that /ʒ/ was present in all the items based on English models with initial /ʒ/ but that this underwent a gradual change to /s/ until the process ceased to be operative at about the end of the eighteenth century, since when things have remained pretty much unchanged.

It is possible that non-initial /ʒ/ was also originally reflected by /ʒ/ in Sranan, but that this was replaced by /s/ at an earlier period. Compare Fermin (1765) for an isolated occurrence of non-initial /ʒ/ in fischi "fish". That this is not just a mistake - as we have seen Fermin is not very reliable - is suggested by his representation cabisch "cabbage" suggesting that English /dʒ/ in non-initial position might first have been reflected by /ʒ/ before going to /s/.

The interpretation of the Ndjuka facts is more difficult. Ndjuka gives us a chance to get some idea of what Sranan was like in the early eighteenth century on the plantations. However we must always remember that this picture is obscured by changes that have taken place in Ndjuka more recently. Thus the fact that shame is the only Ndjuka item to retain /ʒ/ does not necessarily imply that this was already the case in some variety of early eighteenth century plantation Sranan, although this may well have been so.

ii) Portuguese

The usual reflex of this sound in the Surinam creoles is /s/. /z/ and /ʒ/ each occur in one item.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Gloss</u>
baixar	baziá	bassia	-	descend
deixar	disá	dissà	-	leave
puxar	pusá	pussà	-	pull
enxaguar	sawá	-	-	rinse
baixo	básu	bâsu	-	low
lagartixa	-	-	lagadísa lagadíša	lizard

/ʒ/ occurs sometimes as the reflex of English-derived items in /ʒ/ in Sranan, and thus it is not so strange to find /ʒ/ as an optional reflex of the equivalent Portuguese sound in the only relevant item - lagartixa - in Sranan.

We have already seen in our discussion of Portuguese /s/ that some intervocalic /s/ become voiced in modern Saramaccan, c.f. /paazáa/, /poozián/, /kazíán/. It would seem that the same explanation applies to the development of /baziá/ from bassia. However, this does not explain why we have /baziá/ and not /*bazá/.

How can we explain this form? Two pieces of evidence considered together suggest a possible explanation. Firstly there is evidence for an alternate pronunciation [siV] for [ʒV] in nineteenth century Sranan sources.

<u>Sranan</u>	<u>1855 (Focke)</u>	<u>English</u>
sjen	sjem ~ siëm	shame
sjatu	sjátœ ~ siättœ	short

Secondly in Saramaccan we find /si., su., tu./ corresponding to Sranan /sj (ʒ)., sw., tw./.

<u>Saramaccan</u>	<u>Sranan</u>	<u>Source Language</u>
basiá	bašá	overseer (English)
suági	swágri	zwager (Dutch)
suáki	swak	zwak (Dutch)
suámpu	swámpu	swamp (English)
tuálúfu	twárfu	twalf (Dutch)
túwénti ⁵	twénti	twenty (English)

In point of fact none of these forms is evidenced in Saramaccan in Schumann (1778), which suggests that they represent accommodations of the Sranan forms.

The existence of these two pieces of evidence makes the hypothesis at least feasible that at an early period /ʃ/ was also (in some cases) as it were, decomposed into /si/, as is apparently the case in 19th century Sranan, behaving as if it were /s+j/ in fact (cf. /tw, /sw/).

This in turn suggests a reinterpretation of what the most important eighteenth century source has to say about this. Schumann (1783) (Kramp, 1983) says in a note to his lemma she, sje:

"das sh zu Anfang eines Worts bedeutet, dass es harter als ein blosses s, aber gelinder als sch ausgesprochen wird: u. weil dieses schwer fällt, so werden fast allediese worte von sehr vielen mit sj ausgesprochen."

(the sh at the beginning of a word means that it is pronounced harder than a mere s, but more softly than sch, and since this is difficult, nearly all these words are pronounced by very many people with sj)

Let us compare this with what Wullschlägel (1856) says:

"sj wie ein leises schj, sjèm = schjèng. (Doch darf das sch ja nicht zu voll genommen werden.)"

(sj as a soft schj, sjèm = schjèng. (Yet the sch must not be pronounced too fully.))

We must take into consideration here that Schumann is basically following German orthographic conventions, while Wullschlägel is following Dutch conventions.

On this basis it seems that we must compare Schumann's sh with Wullschlägel's (and most other sources') sj. This leaves us with the question of what Schumann means by sj. We suggest that sj in fact meant /s+j/, i.e. something very close to Focke's (1855) si(V). In other words we can set up the equation:

<u>Schumann (1783)</u>	<u>Focke (1855)</u>	<u>Probable pronunciation</u>
shem	sjem	ʃ(j)...
sjem	siëm	sj...

A virtual confirmation of the correctness of this argumentation is provided by the three forms Schumann supplies for short:

tschattu:	probably	[tʃátu]
tschjatu:	probably	[tʃjátu] (cf. Wullschlägel)
tzjattu:	probably	[tsjátu]

The orthography tzi makes it virtually certain that what was meant here is [ts + j], not [t + ʃ].

To conclude, we consider that there is a fair amount of evidence for considering that the item baixar went through at least the following (creole) stages:

*bašá > *basjá > basiá > baziá

In the Portuguese creoles we find the following forms:

<u>Portuguese</u>	<u>Sara-maccan</u>	<u>São Tomé</u>	<u>Principe</u>	<u>Cape Verde</u>	<u>Papi-amentu</u>	<u>Gloss</u>
baixar	baziá		basá	bašá (=abaixar)	(báhà)	descend
deixar	disá	de sa	disá		(déhà)	leave
puxar	pusá			pšá	púsà	pull
enxaguar	sawá			(t)šagwá	(háwà)	rinse
baixo	básu/ báu-	básu		bššə (B) bášu (S)	bóu	low
lagartixa	lagadísa lagadísjá (Sranan)	lagatílsa	lagatísa	lagartíža	lagadiši	lizard

This gives us the following:

	<u>Original reflex</u>	<u>Later influence</u>
Saramaccan	s (ʒ)	-
São Tomé/Príncipe	s	ʒ (not illustrated)
Cape Verde	ʒ	-
Papiamentu	ʒ	h/#_V q/V__V

4) Palatal consonants

a) /ɲ/

i) English

Irrelevant

ii) Portuguese

This sound is variously represented in the Surinam creoles as /nj/ (/ɲ/) or /j/ - the latter with or without concomitant nasalization (or the alternative realizations of this) in the following vowel.

	<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Gloss</u>
a)	grunhir	guunjá	glunja	-	grumble
	apanhar	panjá	panja	-	pick up
	sonhar	sunjá	sonja	-	dream
	amanha	amanjá amaján ^s	amajja	-	tomorrow
	cunhado	-	kujade	-	brother-in-law
	espanhol	sipajólu	-	spanjóro	Spaniard
b)	bocadinho	-	-	bokadínju	bit
	caminho	kamía	gamja gammia	-	road
	casinha	kazían kasían ^s	kassínja	-	small house
	Coutinho	-	-	koetienjoe (1855)	pers. name

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Gloss</u>
faquinha	-	fakkinja	-	small knife
farinha	fanía(n)	fanija	-	flour
galinha	ganía	gannia	-	hen
peconha	poozían	possínja	-	poison
	poosíjan ^s	pussinja		
sardinha	saadíjan		-	sardine
	saadí ^s			
c) cunha	kúnja	kunja	-	wedge
estanho	sitánja	sitanja	-	tin
tinha	-		tínja	ringworm

The forms under a) are those where Portuguese /ɲ/ is followed by the accent and preceded by any vowel except /i/. b) comprises also preaccentual forms, but where the preceding vowel is /i/. c) consists of forms where the Portuguese /ɲ/ follows the accent.

The distribution of the reflexes of /ɲ/ in Saramaccan differs significantly as between the 18th century source and the modern sources. In 1778 the rule seems to be that the reflex is /ɲ/ unless a nasal precedes in the word, in which case the reflex is /j/ (sometimes not written after i). Note that the nasal does not have to be a reflex of a Portuguese nasal but may be the result of nasal assimilation, as in the case of /fanía/. These rules account for all the forms with the exception of kujade.

In modern Saramaccan we seem to have a less consistent distribution. With the forms under a) we have basically the same situation as in the 18th century, except that kujade has no modern reflex, while its place is taken by another form with an irregular development - /sipajólu/ "Spaniard". In the Lower Surinam River dialect of Saramaccan we also have an unexpected form - /amanjá/ "tomorrow" - with /nj/ instead of the expected /j/.

With the forms under b) we have evidence of a systematic change with respect to the 18th century situation. All forms now display the /j-Ø/ reflex, with compulsory nasalization of the following vowel if the preceding consonant is non-nasal, and normally no nasalization indicated if the preceding consonant is a nasal. One form displays optional nasalization - /fanía(n)/. In other words - if Schumann

was in fact recording a true palatal nasal, and not just the nasalized palatal glide which might be expected in such an environment - there has been a change in the forms where the preceding consonant was non-nasal from structures with an intervocalic palatal nasal, to structures with a final nasalized vowel:

		<u>1778</u>	<u>Modern</u>
/ C		<u>-inja</u>	-ían
[-nas]	_____		
/ C			
[+nas]	_____	<u>-i(j)a</u>	-ía

The forms under c) display /ɲ/ as in the 18th century.

The Sranan forms display /ɲ/ in all cases, but comparison is made difficult by the lack of examples with a preceding nasal consonant.

In other Portuguese creoles the reflexes are as follows:

Cape Verde: ɲ
Papiamentu: ɲ ~ ʃ

For the Gulf of Guinea creoles the reflexes are **more varied**. For this reason we will look at the reflexes of the individual items.

	<u>Portuguese</u>	<u>Saramaccan</u>	<u>São Tomé</u>	<u>Príncipe</u>	<u>Annobon</u>	<u>Gloss</u>
a)	apanhar amanha	panjá amanjá amaján ^s	paɲá amãɲá	amaɲá		pick up tomorrow
b)	caminho farinha galinha sardinha	kamía fanía(n) ganía saadían saadí ^s	gaɲá sãdžá	kumí/kumí fyá gɲá/gɲá se dyá	gaɲía	road flour hen sardine

Although certain of these items have reflexes reminiscent of the Saramaccan forms - e.g. Annobon /ganiá/; Principe /sedyá/ - the data available is too meagre to draw any significant conclusions from.

b) /j/

i) English

In general, prevocalic /j/ is retained in all positions. Postvocalic /j/ is discussed in the section on diphthongs. Some illustrations of prevocalic /j/ follow:

<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>
yellowback	jarabáka	-	jaabáka
yaws	jási	jási	jási
yonder	jána		
yard	jári		
you	ju		

Parallel to what happens with /w/, we see a merger of /j/ with front vowels, resulting in their effective disappearance.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>	<u>Earlier</u>
ye	jí		jí	-	-		jie (1718)
yet	éte	-	éte jéte ítte jítte	-	-	jette	
yesterday	ésrede ésde	ísredei	ésrede issredè	isredei	esredee	issredeh	

<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>
ye	i	-	i	i	
yet	éti jéti	-	éte	ete	et jet
yesterday	éside	isredè	ésíde	eside	ésíde jésíde

The loss of /j/ in both yet and yesterday that is recorded in **early modern English**

(mid-seventeenth century) (Dobson, 1957) depends on the raising of the stressed vowel to /i/ in these words, and thus cannot be identified with the loss of /j/ to be seen in Surinam. In fact for ye and yet /j/ is recorded in Surinam, so that we can conclude that its loss in these two items is post-Proto-Sranan and that the English models were /ji:/ and /jæt/, respectively. The lack of /j/ in yesterday however seems to be evidenced in early sources, which may mean that this derives from an English model. According to Wakelin (1972) the scattered distribution of /j/-less reflexes of yesterday represents a formerly more widespread area in southern England. Matthews (1935) quotes three cases from sailors' speech as evidenced in ship's logs:

esterday (1696) esterday (1694) isterday (1697)

At this juncture we must also mention the loss of /j/ in English thankee which represents of course thank ye, not an epithetic vowel as some authors seem to think. In this item /j/ is always absent in Surinam.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>	<u>1780</u>
thankee	taŋí	tangi	tangì	tangi	tangie	tangi	-tanki

<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Djuka</u>	<u>Boni</u>	<u>Krio</u>
thankee	tangí	tangi	tángi	tangi	téŋki

A number of items display /nj/ instead of English /j/.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1783</u>	<u>Earlier</u>
yams	jámsi		njámmisi		jámmessi	yamesy (1777)
usen (used)	njámsi njúsu	njoesoe	njóesoe njóensoe	njoesoe	jámsi njusu	

<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Krio</u>
yams	njámsi njámisi ^s	jammesi	njámsi	njams jams
usen	júnsu njúsu njúnsu	njusu		(yus) (cf. Jamaican: juuzn)

The explanation given for these forms in Smith (1980) is presumably the correct one - that the replacement of /j/ by /nj/ (= [ɲ]) represents a backwards nasal assimilation in these words.

ii) Portuguese

The only reflex of prevocalic /j/ in the Surinam creoles is /j/. For postvocalic tautosyllabic /j/ consult the section on diphthongs.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Gloss</u>
saia	sája	saija	skirt

5) Velar consonants

a) /k/

i) English

This English sound appears in general as /k/ in Surinam. Sranan at least has allophones of /k/: [tj] appearing before /i, e/. Before other vowels /k/ is [k]. Before /i, e/ [k] may also appear however. The optional allophone [tj] of /k/ overlaps with the same sound as a realization of the phoneme /tj/ before /e, i/ (in other words lacking the option [k]).

	<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>
i)	kick	kíki			kiki
	eg. creek	[kíki tjítji]			
	kill	kríki	kiíki	kiíki	kiíki
	cane	kíri	kíi	kíi	kíi
	week	ken	tjéni	kén	kjen
ii)	stick	wíki	wíki	wíki	wiki
	make	tíki	-	tíki	tiki
	knock	méki	mbéi	méke	meki
	liquor	náki	náki	náki	naki
iii)	bucket	líka	-		
	buckle	bokíti	bokéti	bokéti	
	jacket	bókru	bukéti ^s		
		djákti	-		
			djákti		

Initial /k/ before /a/ in words of English origin sometimes becomes /tj/. For this see section on Middle English /a/.

A development to /g/ is discernible in a number of items after V.

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1798</u>	<u>1783</u>	<u>Sara-</u> <u>maccan</u>	<u>1778</u>
tickle	tígri	tígri	kieglie	tikri tikkri (~tigri)		
six	síksi	síeksi	sieksie		síkísi	sikkisi sikisi

<u>English</u>	<u>Ndjuka</u>	<u>Boni</u>
tickle		
six	sigísi	sigíši

Very interesting is the statement in Schumann (1783) that tickle is not to be pronounced as tigri. In the light of the later development of this word, it is clear that this pronunciation existed in 1783, but most likely only as a minority pronunciation. The 1798 version - kieglie - has probably been influenced by Dutch kietelen "tickle".

Postvocalic /k/ is also represented by zero in a small number of items, underlined in the following table:

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Saramaccan</u>	<u>1805</u>	<u>1778</u>
make	méki <u>mej</u>	méki	meki	<u>mbéi</u>	<u>mee</u>	meki
take	téki	téki	teki	téi		teki
talk	táki	táki	takki	táki		takki
talk give	<u>táigi</u>	<u>ta'i gi</u>				
doctor	dátra	dátra	dattra	dáta		

<u>English</u>	<u>Ndjuka</u>	<u>Boni</u>
make	méke	meki
take	téke	teki
talk	táki	táki
talk give	<u>táági</u>	
doctor	dátáa	data

In the first three cases we seem to have dropping of /k/ in intervocalic position in a few frequently used items. The loss of /k/ in doctor or rather its absence has no clear explanation. The most likely would seem to be that, simply, /kt/ in English models simplifies to /t/. There are no other examples of English /kt/ in Sranan, however. That this word is in fact based on an English model is certain because of the relationship English /ɔ/: Sranan /a/. There are /kt/ clusters in words of English origin in Sranan, but these are derived from English items with /..kVt../, and we would claim that in Proto-Sranan these had the same structure:

English	Sranan	1855	1783	Saramaccan	1778
bucket	bokíti	bóktoe (Meerzorg)		bokéti (LS) bukéti (US)	
jacket	djákti	djákti	jakketi	djakiti	jakketi
crooked	krúktu	króek(oe)toe	krukkutu	k(u)úkutu	krukkutu

English	Ndjuka	Boni
bucket	bokéti	
crooked	kúkútu	kukutu

Postvocalic /ks/ has its cluster broken up, except in the recordings of Sranan since the late 18th century.

English	Sranan	1855	1783	1780	Sara- maccan	Ndjuka	Boni
axe	áksi	áksi	aksi			akísi	akísi
bricks	bríksi						
mix	móksi	móksi	moksi		mókísi		mókisi
six	síksi	síeksi		zikkezi	síkísi	sigísi	sigiŕi

There are three forms derived from English items in /sk/. These display a variety of developments.

English	Sranan	1783	1780	1765	Saramaccan	1778
ask	áksi	haksi	haksi hakkesi	hakisi	(h)ákísi	haksi hakkesi
basket	baskíta baksíta	baskíta				
mosquito	maskíta	maskita			masikíta ^s	

<u>English</u>	<u>Ndjuka</u>	<u>Krio</u>
ask	ákísi	aks
basket		baskít
mosquito	makisíta	maskíta

In all forms of the item ask there is an apparent metathesis of the /s/ and /k/. In the Bush Negro sources, as also in early Sranan, there is also epenthesis. In this case it may be assumed that the English model already had this metathesis, as this occurs both in many English dialects, including Cockney as "ax", as well as in most English-based creoles, of which we give Krio as an example.

In the other two items forms exhibiting metathesis do occur, but here this appears to be a change that has taken place in Surinam. In modern Sranan we find the form /baksíta/, while in Ndjuka we find /makisíta/.

In view of the striking parallelism between Krio and the Surinam creoles, as regards the metathesis in ask, the accentuation of basket, and the form of mosquito, it is quite likely that these three items came to Surinam from WAPE. The irregular epithetic vowel /-a/ in /*basíkíta/ is possibly analogical to /*masíkíta/.

In nasal clusters /k/ sometimes develops to /g/ which is then lost in Sranan.

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1798</u>	<u>1783</u>	<u>1780</u>
monkey	monkimónki	monkimónki			
drink	dríŋi	driéngi	driengie	dringi	drinki
stink	tíŋi	tiéngi		tingi	
drunk	drúŋu	dróengoe		drungu	
sunk	súŋu	sóengoe	soengoe	sungu	
thankee	taŋí	tangl	tangie	tangi	-tanki
handkercher	aŋísa	hangísa		hangissa	

<u>English</u>	<u>1777</u>	<u>1765</u>	<u>1718</u>	<u>Saramaccan 1778</u>	
monkey	monkeemonkee			-	-
drink		drinki (N)	drinkje	díngi	dringi
sink				síngi	sinki
					singi
stink	tingee	tinki (F)		tíngi	tingi-
think				tínga	tinga
				nínga	
drunk				drúnga	drungu
sunk				-	-
thankee				tángi	tangi
hankercher				(h)ángísa	hangisa

<u>English</u>	<u>Ndjuka</u>	<u>Boni</u>
monkey	móngi	monki
drink	díngi	díngi
stink	tíngi	tingi
drunk	duúngu	dungu
sunk	súngu	súngu
thankee	tángi	tangi
hankercher	angisa	

As we have stated above, we have argued in Smith (1982) for a dating of van Dyk (c. 1780) to 1770 or earlier, by reason of the occurrence in that work of forms with a more archaic appearance than the parallel forms occurring in Stedman (1796) and collected during this author's sojourn in Surinam from 1772 to 1777. This allows the change of /nk/ to /ng/ in Sranan to be dated to around 1770. monkey has an exceptional preservation of /k/ in both Sranan and Boni. In Saramaccan all the items have /g/ except sink which displays optional /k/ and /g/ in 1778. This item has only /g/ in modern Saramaccan, so that we may interpret the optional form in 1778 as meaning that the change of /nk/ to /ng/ has nearly worked its way through the Saramaccan lexicon. Ndjuka has only /ng/ in these words.

/kw/ becomes /kp/ in Saramaccan and Ndjuka. Saramaccan has also /kw/, especially in the speech of younger people (Rountree, 1972), while in Ndjuka /kw/ is in fact the favoured variant.

<u>English</u>	<u>Saramaccan</u>	<u>1778</u>
quite	kpéti-kpéti	kwetikweti
squeeze	kpíndji	kunji
	kpíngi	
square	kpéi	kwêri
		kwêli

Saramaccan /kpókpóosu/ "knock-knee" cannot as Alleyne (1980) claims be a reduplicated form of English cross for three reasons. The most important is that the vowel in cross would be /a/ in Surinam, and not /o/, cf. Saramaccan /kaásitéi/ "thwart" (cross-tie). Secondly, the tone pattern of the second part of the reduplication would be not /..kpóosu/ but /..kpoósu/. Thirdly, Donicie and Voorhoeve (1963) give an alternate form /kpókpóosú/ with a high tone on the final syllable, which would not be explicable in terms of an English model. This then is not an example of English /k/ giving Surinam /kp/ before a rounded vowel as claimed by Alleyne.

ii) Portuguese

By far the most common reflex of this sound in the Surinam creoles is /k/. Occasionally /g/ occurs, usually in the environment following a nasal.

	<u>Portu- guese</u>	<u>Sara- maccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
i) <u>Initial</u>	cair	kaí	kai	-	kaí	fall
	crua	kúa	glua grua	kruwá	-	raw
	crioulo	kióo kijóo	kreòl	krióro	kíoo	Creole
	carta	kaíta kaíta ^s		kárta	kaíta	card
ii) <u>Medial</u>	ficar	fiká	fikka	fiká	fiká	leave behind
	tocar	tuká	tukka	tuká	-	touch
	acabar	kabá		kabá	kabá	finish

A complete listing of cases with Saramaccan /g/ follows:

fincar	fingá	finga	-	-	fix
roncar	lonká	lungà	-	-	snore
-casa	gangása	grangkassa	-	-	house
escuro	zugúu sugúu ^s	sukru	-	-	dark

The first three cases involve the familiar nasal environment for voicing. The last case has no obvious explanation, but is reminiscent of Ndjuka /sigísi/ "six", which

also involves voicing after /s/. Whether these cases have anything to do with the English-derived items displaying /s-b-/ from /s-p-/ is not clear.

Schumann (1778; 1783) gives a number of forms with initial *g*, of which both the original Portuguese, and the modern Saramaccan and Sranan forms begin with /k/. These are presumably mistakes:

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>1783</u>	<u>Gloss</u>
crua	kúa	glua	kruwá	glua	raw
caminho	kamía	grua	-	grua	road
		gamja	-	-	
		gammia	-	-	
crescer	-	gressi	-	-	grow

One form exhibits an irregular change from /k/ to /tj/.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Gloss</u>
cobrir	tjubí	kubri	cover

This peculiar development must be ascribed to contamination from the alternative English-derived item recorded in 1778 (but not in present-day Saramaccan) - *kibri* (see section on English-derived /ʌ/). This must be presumed to have had the usual variant of /k/ preceding front vowels - [tj], cf. Sranan /kíbrí/: [kíbrí ~ tjíbrí].

b) /g/

English

This consonant appears in general as /g/ in Surinam.

i)	<u>Initial</u>	<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>
		give	gi	-	gi	gi
		gun	gon	góni	góni	goni
		gourd	gódo	gólu	godó	
		greedy	grídi	gíí	gííli	gííli

		<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>
ii)	<u>Final</u>	big beg hog dog	bígi bégi águ dágu	bígi bégi (h)águ dágu	bígi bégi águ dágu	bígi begi agú dágu
iii)	<u>Medial</u>	ugly	ógri	(w)ógi	ógi	ogi

Initial /g/ before /a/ in words of English origin sometimes becomes /dj/. For this see the section on ME /a/.

/g/ in Sranan, evincing similar behaviour to /k/, has different allophones from /g/ in English. Before /i, e/, /g/ can appear as [dj]. Before all the other vowels, and also optionally before /i, e/, it is [g]. The [dj] allophone of /g/ overlaps with the same sound as a realisation of /dj/ before /i, e/.

A development to /k/ is discernible in a number of items.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1844</u>	<u>1798</u>
goodbye	krobój	krobói	krobói	kroboi	kroeboi	krobooy kroboy
goodnight	kunéti	goenèti	koe néti	goeneti		
goodmorrow	kumára	goemara	koe mára	goemara		goemara
goddam	kadami	kadàmi	kádami			
eggs	éksi	eksi	éksi	eksi		exsie
bargain (forget)	bárki frigíti	barki vergiti frigiti	bárki frigíti	vergiti	vergiti	friegietie fergietie firgietie
dig	díki	diki	díki	diggi		

<u>English</u>	<u>1783</u>	<u>1780</u>
goodbye	kroboi	korbuy
goodnight	guneti	konetti
goodmorrow	gumarra	
eggs	eksi	
bargain (forget)	barki vergeti vergiti	
dig	diki dikki	diki

<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>(Jamaican)</u>
goodbye	kiibói	kruboi	kiibój	kibói	
goodmorrow (egg)	kumáa	gumarra	-	égi	hegz
bargain	báiki baíki ^s	barki	ígi	égi	
forget	fɛɛkétɛ	vergêti	feegéte	féegete	
dig	díki	diki	díki	diki	

A number of different explanations can be put forward to explain various of these cases. Firstly, in the case of the first four words there is a common factor - in each case the /g/ is in the initial position in an unstressed syllable (at least unstressed in the English model). This, to be sure, did not always result in a /k/ - compare ógroë Gádo (1855), ogroë gado (1780) for English "Oh good God". The /g/ in this case could however have been preserved by the fact that the preceding /ó/ as it were "cliticized" the following item - in other words the groë did not form one phonological word with the following sequence as was the case with the four items in which /k/ developed. That this process is unique to English /g/ and does not take place with other voiced stops is clearly indicated by examples such as:

<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>
believe	bríbi	biíbi	biíbi	
by'n'by	bambai			
below	bilò (1856)		biló	
because	biká(si)	biká	biká(a)	beka(n)
before	bifó(si)	bifó	bifó	

That this process is not connected with the absence of /g/ from the sound system of Dutch, and the consequent frequent interpretation of /g/ in other languages as /k/ in Dutch, is indicated by a number of facts. This Dutch adaptation of /g/ to /k/ is not context-sensitive, while the process as seen in the adaptation of English items in the Surinam languages is. Also this phenomenon is paralleled by MSL /kubáiti/ "goodbye t' ye" (Bilby, 1983), which, if we accept the thesis that Proto-Sranan and MSL have a common ancestry (see Bilby (1983) and above), would rule out the possibility of Dutch influence. There is a voiced velar in some styles of Dutch - the /ɣ/ - which is fricative. This is voiceless in most environments in the present-day Standard Dutch of Western Holland, but was originally voiced except in

final position. This has both voiced and voiceless reflexes in Sranan. At least some of the voiceless reflexes may be based on voiceless models, e.g. initially in unaccented syllables.

<u>Dutch</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Gloss</u>
gebit		kabé ^s ti ^s		teeth
gevaarlijk	k'falek		kofalíki	dangerous
gewoon		koónu	kuwónu	ordinary
geluk	kolóku	kolóku	kolóku	luck
getuige	kotógi			witness

Other reflexes of initial and medial Dutch /ɣ/ are by and large voiced, with a small minority of voiceless cases:

	<u>Dutch</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Gloss</u>
i) <u>Initial</u>	gulden	kólu	kólu	kólu	guilder
	griffel	gréfi	ge(l)éfi		
	goud	gówtu	góutu	goótu	gold
			goótu (US)		
ii) <u>Medial</u>	spiegel	spíkri			mirror
		spígri			
	papegaai	popokái	papakái	papakái (B)	parrot
	ongeluk	onolóku	onkulóku	ongooku	accident
	negen	néjgi	neégi	neigin	nine
	hagel	ágra	(h)ága	ágáa	hail/lead
					shot
	wagen	wági	wági ^s	wági	waggon

Of these /papakái/ might just as well be derived from Port. papagaio

The occurrence of /g/ in good-night and good-morrow in a number of sources clearly requires explanation. If this had been restricted to sources connected with the Herrnhutter church - Schumann (1783), Meyer (1850) and Wullschlägel (1856) - we could have assumed that it represented an error in Schumann which was carried over to the later dictionaries by reason of the influence this (manuscript) dictionary had, which is fairly obvious in other cases. However, the fact that Weygandt (1798) has the form goemara suggests that the forms in /g/ represented at least one style of Sranan. More probably then, we see here a case of an attempted but unsuccessful standardization, which by the mid-nineteenth century

had led in other cases as well (cf. the section on the liquids) to deviations from living Sranan as represented by Focke (1855). In the case of eggs the occurrence of /k/ in place of /g/ is surely to be interpreted as a case of voicing assimilation. A possible Proto-Sranan interpretation of the English model would be /*égisi/. This is supported by the 1855 variant egsi.

The case of forget in modern Saramaccan would seem to be an isolated case. Schumann (1778) gives a form with g, and Matawai has /fegete/ (de Beet & Sterman, 1981).

bargain and dig would seem from the evidence to have k-forms dating back to early Sranan times. Only Meyer (1850) gives a g-form for dig. It is conceivable that this is an etymologizing form. /bárki/ would seem to be an exceptional case of spontaneous devoicing, and this may be the case with /diki/ as well.

ii) Portuguese

The reflex of initial /g/ is /g/ in the Surinam creoles. Initially the reflex /ng/ also appears, in particular, in Saramaccan. Medially, however, the reflex /k/ is more frequent, with /w/ appearing in a couple of forms. The non-standard reflexes are underlined in the tables.

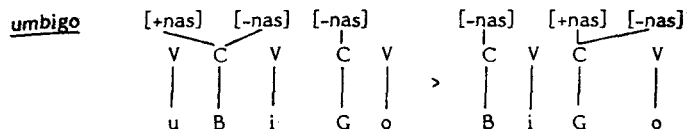
	<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Gloss</u>
i) <u>Initial</u>	gavião	gabián	gabiám	hawk
	goiaba	-	-	guava
	gago	<u>ngáku</u>	<u>gaku</u>	stammerer
	gatuno	<u>ngátu</u>		thief
	goma	góma	goma	gum
ii) <u>Medial</u>	brigar	biingá		quarrel
	amolgar	muungá	munga	bruise
	negar	-	ninga	deny
	sangrar	sangá	sangla	bleed
	umbigo	bíngo	bingo	navel
	magro	mángu	mangru	thin
	esburgar	buuká	bruká	peel
	chegar	tjiká	zikka (1805)	suffice, come
	escorregar	koogá	krokka	slide
	afogar	-	-	choke
	esfregar	feigá	frigà	rub
		feegá	frikà	

Portuguese	Saramaccan	1778	Gloss
pagar	pa <u>k</u> á	pa <u>k</u> ká	pay
pegar	pe <u>k</u> á	pe <u>k</u> ka	paste
salgar	sa <u>a</u> gá		salt
prego	pe <u>e</u> gu	pre <u>g</u> u	nail
barriga	ba <u>i</u> ka	ba <u>r</u> ika	belly
fogo	fó <u>o</u> go		fire
gago	ngá <u>u</u>	ga <u>u</u>	stammerer
lagartixa	-	-	lizard
mal pagador	-	-	bad payer
pagamento	pa <u>k</u> amé(n)tu	pa <u>g</u> amentu	payment
sinagoga			synagogue
agulha	ag <u>u</u> ja	ag <u>u</u> ja	needle
agora	awá(a)	awá	now
ensaguar	sawá		rinse

	Sranan	Ndjuka	Gloss
i) <u>Initial</u>	gu <u>j</u> ába	-	guava
	gá <u>g</u> u	ká <u>u</u>	stammerer
	goma	ngó <u>u</u> ma	gum
ii) <u>Medial</u>	fuga <u>g</u>		choke
	gá <u>g</u> u	ká <u>u</u>	stammerer
	lagad <u>i</u> sa	-	lizard
	lagad <u>i</u> sja		
	mau-pakadoroe		bad payer
	(1855)		
	snó <u>g</u> a		synagogue

We have only provided two forms illustrating the regular development of Portuguese initial /g/, but we have given all the forms displaying the development to a nasal-stop cluster. The reasons for the development of this cluster are mysterious - a transference of nasality from a later syllable could conceivably be appealed to in the last two cases, but could not provide any explanation in the first case. Note that this transference of nasality would be to the left, i.e. in the opposite direction to that which we can observe in the case of umbigo.

	Perceived Model						Modern Saramaccan				
	[-nas]		[-nas]		[+nas]		[+nas]	[-nas]		[-nas]	
<u>gatuno</u>	C	V	C	V	C	V	>	C	V	C	V
	G	a	t	u	D	o		G	a	t	u



This autosegmental representation serves only to render more clearly what has happened. It lacks however any explanatory value. A more satisfactory representation must wait until a searching analysis of nasality in Saramaccan has been performed. It is clear for instance, that the vowels also must be involved in this. However a possible explanation for the development of initial /#ng/ which has nothing to do with nasal transference will be given on p. 286.

Turning to the developments displayed by Portuguese medial /g/, and leaving aside for the moment the two cases of /w/, we have a number of items displaying intervocalic /g/ and others with intervocalic /k/. In the Saramaccan sources from 1778 and 1805 we have respectively four cases of g and eight cases of k; in modern Saramaccan we have six cases of /g/ and seven cases of /k/. In other words the /k/-reflex occurs more frequently than the /g/-reflex.

At first sight the replacement of /g/ by /k/ might seem reminiscent of the treatment of Dutch items with /g/ in the Surinam creoles, as we considered in our discussion of the developments of English /g/, but once again we can observe that the distribution of voiced and voiceless reflexes in the Portuguese words is not the same as that in the Dutch words.

Let us compare the reflexes of the /k/-items in the Portuguese creoles:

Portuguese	Saramaccan 1778	São Tomé	Principe	Cape-Verde	Papiamentu
esburgar	buuká	brukà			
chegar	tjiká	zikka (1805)	ʃiga	ʃigá	tʃgá (yégà)
escorregar	koogá	krokka	kɔga		skoregá
esfregar	feigá	frigà	fɛga	fɛgá	(s)fregá
	feegá	frikà			frégà
pagar	paká	pakkà		pagá	pagá
			pagá		págà

<u>Portugese</u>	<u>Saramaccan 1778</u>	<u>São Tomé</u>	<u>Principe</u>	<u>Cape-Verde</u>	<u>Papiamentu</u>
pagamento	pakaméntu	paggamentu	pagamẽtu	pagamẽntə	pagaméntu
pegar	peká	pekka	pé gá	pegá	pégà
(prego)	peégu	pregu	pé gu	prégu	préke
barriga	baíka	barika	béga	baríga	baríka
gago	ngáku	gaku	ugágu	gágu	gágu
(umbigo)	bíngo	bingo	bínku	bígu	lumbriši
				ĩmbígu	
				ũmbígu	
				bíku(Fogo)	

From this table one thing is clear. The Saramaccan development of Portuguese /g/ to /k/ cannot be explained in terms of developments in the Portuguese creoles. The only parallel is the occurrence of /k/ in Papiamentu /baríka/ "belly". Apart from this the only /k/ for /g/ is not a parallel - being that in the São Tomense and Fogo creole reflexes of umbigo.

We must look elsewhere for an explanation of this striking development. If we consider the phonological systems of the three most important African languages in the development of the Surinam creole languages - Gbe, Kikongo and Twi - we note that one of these - Kikongo - lacks initial and intervocalic /g/, although it does have /ng/. What is interesting is what happens to Portuguese loans in Kikongo containing initial or intervocalic /g/. Our examples are from the Kishikongo dialect (Bentley, 1887).

	<u>Portuguese</u>	<u>Kishikongo</u>	<u>Gloss</u>
i) <u>Initial</u>	goma	ngoma	gum
	guava	ngwava	guava
	agulha	nguya	needle
ii) <u>Medial</u>	Portugues	(ki)mputulukezo	Portuguese
	purgante	pulukante	purgative

If we compare these developments to those evidenced in Surinam we can set up the following equation:

<u>Portuguese</u>	<u>Kishikongo</u>	<u>Surinam</u>
#(V)g..	#ng..	#g../#ng..
..VgV..	..Vkv..	..Vkv/..VgV../..VwV..

In other words both the initial /ng/ encountered in three items, as well as the majority intervocalic reflex /k/ could find their explanation in terms of a Kikongo substratum. Probably fully a third of the slaves who were imported to Surinam in the 17th century probably came from the Congo/Angola region (Price, 1976). The Jewish plantation owners concentrated on the Surinam River, the upper reaches of which became the home of the Saramaccan tribe, hailed partly from Brazil, where most of the slaves imported in the seventeenth century were Bantu (i.e. from Angola and the Congo) the greatest linguistic influences being Kikongo and Kimbundu (Angola) (Bastide, 1978). We cannot therefore rule out such substratal influence. Compare also Smith (1982b) where it is claimed that a Kikongo phonological rule has left its traces in the Suriname creoles.

Let us now turn to the forms with intervocalic /w/ deriving from Portuguese /g/.

<u>Portu- guese</u>	<u>Sara- maccan</u>	<u>São- Tomé</u>	<u>Principe</u>	<u>Cape- Verde</u>	<u>Papiamentu</u>	<u>Gloss</u>
agora	awá(a)		wɔ	agɔra (a)gɔ	awó/awór	now, indeed
enxaguar	sawá			(i)ʃagwá	(háwà)	rinse

In point of fact the explanation of the occurrence of /w/ in these two cases is probably different. In the first case we can call on the non-lexical nature of the item to explain the abnormal phonological reduction, which is furthermore paralleled in Principe creole, as well as in Papiamentu.

In the second case we are not in fact dealing with intervocalic /g/ alone but in fact with intervocalic /gw/. Although this item is not evidenced from the Gulf of Guinea creoles, /gw/ - initial as well as intervocalic - gives /w/ in these creoles. Papiamentu displays the same reflex.

<u>Portuguese</u>	<u>Principe</u>	<u>Papiamentu</u>	<u>Gloss</u>
água	áwa	áwa	water
guardar	wadá	wárdà	watch, keep

The more Portuguese-influenced /gw/ occurs as well in Principe.

iii) Comparative notes

There is a clear difference between the developments of English and Portuguese /g/ in the Surinam creoles. We may represent the major and minor reflexes as follows:

	<u>English</u>	<u>Portuguese</u>
a) Initial in unstressed syll.	k	g
b) Initial in stressed syll.	g	g (ng)
c) Intervocalic	g	k/g
d) Postvocalic, pre-liquid	k (g)	k/g
e) Final	g (k)	-

Most striking are the differences in cases a) and c).

c) /x/

i) English

There is no trace of this sound in any source for the Surinam creoles. Compare the following examples:

<u>English</u>	<u>Sranan</u>
eight	ájtí
fight	féti
night	néti
right	léti
light	léti
enough	nófo
laugh	láfú

There is no suggestion in these examples that the Proto-Sranan forms of these words contained velar fricatives any more than the modern English forms. The

distribution of the zero and /f/ reflexes of /*x/ is precisely that of modern English. According to Dobson (1957) the available evidence favours the originally dialectal pronunciations lacking /x/ becoming normal in Standard English early in the seventeenth century.

ii) Portuguese

irrelevant.

d) /ŋ/

i) English

The treatment of this sound in Surinam does not seem ever to contrast with that of the group ng with which it is only marginally in contrast in modern English. The modern reflex is /ŋ/ in Sranan, and /ng/ in all the other languages. The realisation of /n/ preceding /g/ (and /k/) is of course [ŋ].

In most cases, /ng/ gave way around 1600 to /ŋ/ in conservative Standard English, while in more advanced Standard English and Cockney the change took place earlier. The reflex of this sound in Proto-Sranan was presumably /ng/ - as it was of remaining English /ng/ - to judge by Saramaccan, Ndjuka, and Boni /ng/, and also sporadic alternations between /ŋ/ and /ndj/ in Sranan (see the section on /dʒ/ above).

The only apparent exceptions are formed by a group of items corresponding to English words in unstressed -ing where we find the usual reflex of postvocalic nasals (i.e. a nasalized vowel, a final [ŋ], or both), if a nasal element is present at all, but mostly a zero-reflex.

Examples reflecting English /ng/ in stressed syllables would be the following:

<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>
long	láŋa	láŋa	láŋa	lana
strong	tráŋa	taáŋa	taáŋa	taáŋa
hang	áŋa	héŋgi	éŋe	
ring	líŋa	-líŋa	líŋa	

Items reflecting -ing in unstressed syllables would be the following:

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1798</u>	<u>1783</u>	<u>Sara-</u> <u>maccan</u>	<u>1778</u>
shilling	sren	sren	sreen	shelling	seen	
herring	elén	sring herén heríng	heren	sjelling		
nothing	nóti	nóti		notti	-nóti	noti
cunning	kóni	kóni	konie	kuni	kóni	kunni
dumpling	adómprí	adompri			dómbi	dumbru
something	saní	sani		sanni	soní	sani
pudding		poedoen (1856)			sondí	

<u>English</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>
herring			jerín
nothing			nátin
cunning	kóni	kóni	kóni
dumpling	dómíí		
something	sáni	sani	sontín

The replacement of unstressed -ing by -in is a widespread dialectal feature in modern English, even spreading over into certain styles of Standard English. It is normal for Cockney. Compare shilling /šilin ~šelin/, morning /mównin/, something /sónθin/ (although this word does not always have /n/), building /búldin/ (Sivertsen, 1960). Also Matthew (1938) quotes older sources - belongyn (1591), diggin (1643), remaynyn (1496) etc. For the speech of seventeenth century sailors Matthews (1935) has many examples: lightnin "lightning", mornen "morning", rigin "rigging". Dobson (1957) gives a number of sources for Standard English in the second half of the seventeenth century giving such pronunciations. According to Dobson such pronunciations became more general in the eighteenth century.

A striking feature in the above table is that /n/ of the English model is lost precisely when there is a preceding nasal consonant in the word. The cases where nasals are lost are: nothing, cunning, dumpling, and something.

We have taken for granted in our discussion so far that the model for the above items was in /-n/. There are two problems with this. First is the eighteenth century recording of shilling as shelling (Schumann, 1783). This suggests that final -ng - which cannot involve a pronunciation [ŋg] as this would require an epithetic vowel - did imply a final /ŋ/. The later orthography with n implies a collapse of /n/ and /ŋ/. Secondly, and perhaps more significantly, the neat relationship observed above, between forms lacking a preceding nasal in the English model, and therefore retaining final /n/, or more strictly nasalization of the final vowel, and/or final [ŋ], and forms with a preceding nasal in the model, which therefore drop all nasality in the coda of the final syllable, is not present with forms derived from final /n/ (in an unstressed syllable). It is the case that the three forms with preceding nasals in their English model - Indian, linen, and woman - do not have any final nasality in present-day Sranan. However, woman does display this in Ndjuka and Boni, as well as nineteenth century Sranan. This could be explained in terms of the influence of the item man, with which it obviously has a close semantic relationship. However, in 1783 Indian also displays a final nasal, despite the preceding nasal.

On the other hand, we could add to these the forms that acquire nasality in an earlier syllable by displacement - poison, cushion, and usen. These never have nasality in more than one position. cushion, which is the only example with variable nasality, has /kúnsu/ and /kusun/. So that we can say that these forms obey the rule that final nasality in the English model is lost when an item acquires nasality in a preceding syllable.

The only problem in this respect is the doubtful item /kankan-/. Here our explanation would require to be that this form has been reinterpreted as a reduplication, in which case our restrictions on nasality would probably not hold.

The real problem is four examples not showing any trace of nasality at all - fasten, fashion, garden, and bargain. If we are to assume that all these forms, both those

considered under /n/, and those considered under /ŋ/, derive from Proto-Sranan forms in /-n/, then we have to regard these four items as irregular. This does not seem entirely satisfactory, but on the other hand we cannot say that the evidence is entirely clear. We will provisionally regard the n-words, and the ng-words as representing Proto-Sranan forms in /-n/, and /-ŋ/ respectively.

ii) Portuguese

This sound only occurs in Portuguese preceding /g/ and /k/. The reflex of this in the Surinam creoles is /n/, realised as a nasal homorganic with the following velar stop, except in cases where the whole syllable was lost, as in an initial stressless syllable without onset.

	<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Gloss</u>
a)	fincar	fiŋá	fiŋa	fix
	roncar	lonká	lungà	snore
	sangrar	sangá	sangla	bleed
b)	engolir	guí	guì	swallow

e) /w/

i) English

In general this is retained in all positions. In a certain number of cases it merges with the following vowel, resulting in rounding of the vowel.

We will first illustrate its occurrence in a variety of environments:

i) <u>Initial</u>	<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>
	we	wi	wi	wi	wi
	wasp	wasiwási	wási	wási	waši
	week	wíki	wíki	wíki	wiki
	weary	wéri	wéi	wéi	weli

However some of the forms in Schumann (1778) suggest the likelihood of intermediate stages:

wi > wū > u eg. swūtti (sweet)
 we > wō > o eg. woenje (wench)

The form wonje also evidenced in 1778, rather than the expected onje, would be explicable in terms of the modern Saramaccan variation between /o/ and /wo/ which is quite frequent (see the section on the reflexes of Ø).

A quite consistent lack of /w/ is represented by the following two items:

English	Sranan	1856	1855	1850	1798	1783	1780	Earlier
wood	údu	hoedoe	hóedoe	hoedoe	hoedoe	hudu		woodo (1777)
woman	úma	oeman	óeman hóeman	oeman	oema	uman	homan	woma (1777)

English	Saramaccan	1778	Ndjuka	Boni	Krio
wood	údu	hudu	údu	udu	wud
woman	-	-	úman	uman	úman

These two items both have w in 1777 but this seems unlikely to be an accurate representation of the facts in view of the fact that Saramaccan also lacks the semivowel, which suggests an earlier loss.

Although the loss of /w/ in English before /u/ is nonstandard, it is recorded for Cockney. Matthews (1938) gives Odam as a sixteenth century writing of "Woodham", while he says that the pronunciation of woman as 'ooman was still employed by many old Cockneys. Wakelin (1972) gives the form without the semivowel for many southern dialects of English, including the counties of Surrey and Sussex to the south of London. It is therefore reasonable to assume that in this case the lack of /w/ in these forms is due to the English model rather than to any change occurring in Surinam.

ii) Portuguese

This sound occurs in all forms of Standard Portuguese following velar stops. In Saramaccan these clusters either remain as /kw/ etc., or develop to labial-velar simultaneously articulated stops. For the reflexes of postvocalic /w/ see the section on diphthongs.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Gloss</u>
quadriolho	kpátiwójo ^s kwátiwójo ^s	kwatriwóijo	marsupial rat

6) Other Consonants

a) /h/

i) English

This in general has a zero reflex in Sranan, and varies between /h/ and zero in the Bush Negro languages.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>	<u>1780</u>	<u>Earlier</u>
heap	ípi	hipi	hípi	hipi		hipi	hippi	
here	-	-	hía iã		-	-	ija	
hit	íti	hiti	híti	hiti	hietie	hiti		
him	en	hem	hem	hem	em	hem	hem	em (Schouten, 1783/5)
haste(y)	ési	hesi	hési	hesi	heesie-	hessi	hessi	
hooray	uréj	hoeree	hoéré			hurèh		
hare	ej	hei	hei			hei		
head	éde	hede	héde	hede	hedee	heddi	hede hedi	hedi (1765F)
heavy	ébi	hebi	hébi	hebi	hebie	hebbi		
herring	elén	hering	heríng	heréng	heren			
high	ej	hei	hei	hei	hey	heh		
honey	óni	honi	hóni	honi		honi		
hungry	ánri	hangri	hángri	hangri	hangrie	hangri		

English	Sranan	1856	1855	1850	1798	1783	1780	Earlier
hunt	ónti	honti	hónti	honti	hontie	hondi	hoendi	
hurt	áti	hati	hátti	hati		hati		-hatty (1777)
hole	ólo	horo	hólo		olo	hollo	holle	
howdie	ódi	odi	hódi ódi	odi	odie	hodi		oudy (1718)
house	óso	hoso	hóso óso	hoso	hoso hosso	hosso	hosse	hosso (1765N) house (1718)
hot	áti	hati	hátti					
hawk	áka	haka	háka					
hog	águ	hagoe	hágoe	hagoe	hagoe	hagoe		hago (1765F)
haul	ári	hali	háli hári	hali	halie	hali		
horse	ási	hasi	hássi	hasi	hasie	hasi	hasi	assi (1765F)
hat	áti	hatti	hátti	hatti				
half	áfu	hafoe	háfoe	hafoe	afoe affoe	haffo	haffe haffi	
have	ábi	habi	habi	habi	abie	habi	habi	
hangkercher		ha	hangisa	ha		hangissa	habbe	
hand	anjisa ánu	hangisa han	hangisa han	hangisa han	hanoe	hann		
handsome		hanoe	hánoe	hanoe				hansom (1765N) hantsum (1718) hansum (1718)
hark	árki	harki	háarki	harki	harkie	harki		
heart	áti	hatti	hátti	hatti	hatie	hatti	hatti	hatty (1777)
hook	úku	hoekoe	hóekoe	hoekoe		huku		

English	Saramaccan	1778	Ndjuka	Boni	MSL	Krio
heap	hípi ípi		hípi ípi ^s	ípi		ip
here	-	-	já	ja		ja
hit	híti íti	hiti	íti			
him	hén én	hem	en	en		
haste(y)	hési ési	hessi	hési ési			
hare	-	-	hé	he		
head	hédi édi	heddi	éde	hede ede	éde	ed
heavy	hébi	hebbi	hébi ébi	hebi		ébi
high	héi	heh	héj	héi		
honey	hóó ni ^s			honi		óní
hungry	hángi	hangri	ángíi	angi		ángri

hunt	hóndi ɔndi	hondi	hónti ónti ^s	hónti	ɔnt
hurt	hátí átí	hati hatti	átí	haati	at
hole	-	-	ólo	olo	oi
howdie	ódi	-	ódi	hodi	hódio ódio
house	ósu wósu	hosso	ósu	ošu	os
hot	-	-	átí	-	ɔt
hog	hágu águ	hagu	águ	agú	ɔg
haul	háí	hali	háli áli	hali	-
horse	hási ^s	-	ási	háši	has as ɔs
hat	-	-	átí	hati	at
half	háfu	haffo	áfu	háafu	af
have	hábi ábi há á	habi ha	ábi á	abi bi	-
hankercher	(h)ángísa (Li) (h)ángísa (Lo)	hangisa	angisa	-	inketšá enkíntšá
hand	-	-	ána	ana anu haan (Kumentí)	hánú an
handsome	hánso/hánse	hansem	-	-	-
hark	háika aíka	harka	-	-	harik arik
heart	hátí átí	hatti	átí	hati	at
hook	húku	huku	húku úku	-	uk

The great majority of Sranan forms up to the nineteenth century display h. As we have remarked above we have an indication that this represents a genuine /h/, and not just an orthographic convention, by reason of the occurrence of pseudometathesis in herring. Forms lacking h occur in here, him (probably due to the lack of stress), hit, hole, howdie, house, horse, half. Perhaps the most notable of these is howdy, which in every case has at least the option of the zero reflex.

Saramaccan has usually an optional /h/. The various Ndjuka sources disagree on the occurrence of /h/. Source "s" has no /h/. On the other hand (1972) gives optional forms for a number of words. Boni has /h/ in the majority of cases.

Before we proceed to link up the occurrence of /h/ with English /h/ it behoves us to examine English items lacking an initial consonant.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>	<u>1780</u>	<u>Earlier</u>
if	éfu éfi	efi	íffi	efi		effi		
in	íni	ini	ini	ini	ienie	inni	ini in	
English Indian	inrisi- íngi	ingi	iéngri iéngi			indji indjin		ingi- (1777)
eight	áiti	aiti	aíti		aitie	aiti		
egg	éksi	eksi	éksi egsi	eksi	exsie	eksi		
every	íbri	ibri	íbri	ibri	jebrie	ebri- ibri-		
any	íni-	ini-	íni-	ini-		ini-		
aye	aaj	ai	ai	ai	ai	ai	ai	aay (1765N) ay (1718)
eye	aj	hai	hai ai	hai	hay	hai (~) hei	hay	
ugly	ógri	ogri	hógrie ógrie	ogri	ogrie	ougri	ogeri	
over	ábra	abra	ábra	abra	abra	ábra	abere aber	
old	ówru	ouroe	óuwroe	ouroe	ouloe ouwloe ouwroe	oure	ouwere	oule (1765)
ask	áksi	haksi	háksi áksi	haksi	haksie	haksi	haksi	hakisi (1765N) hakkesi akesi (1718)
axe	aksi	aksi	áksi	aksi	axie	aksi		
after						attara	attere	
ashes	asísi	ásesi	ásisi	asessi	assiesie	ásessi hánsre		
answer		ansre				huds		
wood	údu	hoedoe	hóedoe	hoedoe	hoedoe	hudu		woodo (1777)
woman	úma	oeman	óeman hóeman	oeman	oema	uman	homan	woma (1777)

<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>MSL</u>	<u>Krio</u>
if	é e éi éfi	effi	éfu	efi efu		éf
in	-	-	íni	ini		
English			ingiísi			inglís (obs)
Indian	íngi	ingri jingri	íngíi	ingi		índžin
eight	áiti áiti ^s	aiti	aíti aítin	aéti		
egg	-	-	ígi	égi		eg egz
every	íbi	ebre-	íbi			ébri
any	híni íni-	ini-	íni			éni
aye	aái	ai	aai			
eye	-	-	aín ^s áin	ai		jaj
iron	-	-	ájee	aje		ájen
ugly	ógi wógi ^s hógi	ougri	ógi	ogi	hógli/ hógri ógli/ógrí	wogri
old	awoo	oure				ol
over	aaba	abra	ábáa	haba aba		wol
ask	hákísi ákísi hakísi akísi	haksi hakkesi	ákísi		aksi	aks
axe	-	-	akísi	akísi		
ashes	-	-	asísi			ásis
ants	hánsi ánsi	hansi				ant
wood	údu	hudu	údu	udu	hudu	wud
woman	-	-	úman	uman	udu	úman

It is clear from the comparison of these various forms that we must recognize h-words and non-h-words in Proto-Sranan, as in English. However, the distribution of these words is not identical in the two systems. All the h-words in English must also be assumed to have /h/ in Proto-Sranan. The eight forms displaying h-less forms in earlier Sranan, also all have h-forms. Of the words in English beginning with vowels, two thirds have no forms in h, and therefore can be assumed not to have had Proto-Sranan forms in h. One third of the vowel-initial forms have h in

various Surinam sources and therefore can be assumed to have had h in Proto-Sranan.

Certain items that display forms in h appear to have very few such forms in the various languages. Examples would be howdie, ugly, over. A possible explanation of this might be that these items represent words that had variable h in Proto-Sranan, in other words, alternative forms with and without /h/.

The skewed distribution of /h/ in comparison to standard English is suggestive of Cockney influence. Sivertsen (1960) says of the distribution of /h/,

"[h] before the syllable peak as a contrasting segment with a distribution parallelling that of RP belongs to a somewhat formal style of speech, and occurs particularly when the informants make an effort to speak 'correctly'. Most adult informants know where there 'should' be [h], but even when they are on their guard there are apt to be 'slips' and erratic pronunciations, the same words being sometimes pronounced with and sometimes without [h].... However, most commonly there is great inconsistency in the use of pre-peak [h], and in really colloquial style its presence or absence cannot be considered contrastive".

On the other hand it is quite clear that the reflexes of h-full and h-less items cannot be purely a reflection of Cockney, as there is a clear statistical bias:

	English:	<u>h</u> -words	<u>h</u> -less words
Proto-Sranan	/h/	31	6
	/h- \emptyset /	1	2
	/ \emptyset /	-	13

This then tends to support our general thesis that a mixture of types of English were spoken in Surinam. The h-less items may well be a reflection of WAPE. Krio for instance lacks all /h/. The items with /h/ are presumably from Standard English, on the other hand. The early existence of variable forms - cf. hakis from

1765N - would then either indicate a body of substandard speakers - in itself nothing to be wondered at - or a hypercorrect result of the confrontation of WAPE and Standard English (on Barbados).

b) /hw/

i) English

There is hardly any trace of /hw/ ([hw ~ ʍ]) in the Surinam creoles. This was retained in English standard English until the seventeenth century according to Dobson (1957), but was replaced much earlier in vulgar London English by /w/. Matthews (1935) gives many spellings indicating no distinction between /w/ and /hw/ (i.e. neutralization to /w/) in the speech of sailors in the late seventeenth century.

Let us first examine the forms of the two items deriving conceivably from English words in /hw/.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>	<u>1780</u>	<u>Earlier</u>
whip	wípi	wipi	wípi	wipi		wippi	wipi wippi	
white	wéti	weti	wítiti	weti	weti	weti		wity (1777)

<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>
whip	húpi		wípi		wip
white	wéti wéti (US)	weti	wéti	weti	wet

Of these white is in fact doubtful, as the Surinam form **could also represent Dutch wit**.

The forms recorded as /wípi/ do not indicate any other pronunciation than [w]. However, the Saramaccan form /húpi/ cannot be completely explained in terms of the merger of /w/ with /i/. This would give /úpi/ which also occurs. As far as words with optional initial /h/ in Saramaccan are concerned these are all to be

interpreted as being derived from Proto-Sranan /h/. This suggests that whip may have given Proto-Sranan /*hwípi/, at least as an option to /*wípi/.

ii) Portuguese

Not relevant

c) /Ø/

i) English

English items lacking an initial consonant have already been examined inasmuch as they result in Ø-initial or /h/-initial forms in Surinam. However, there is also one item which has a Surinam creole reflex with an initial semi-vowel.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>
ears	jési	jesi	jési	jesi	jessie	jessi

<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>
ears	jési jési ^s	jessi	jési	ješi	jes es

Initial /j/ in this item is recorded for Cockney - Matthews (1938) yer "ear". This orthographic notation is identical to the widespread dialectal [jə:], which results from the shift of the accent within the diphthong. Whether this accentual shift can be appealed to in this case is less obvious. The dialectal English development appears to proceed as follows: [e̯] > [ĩ ẽ] > [jə:] (Wakelin, 1972). The problem is that we would expect this to result in /*jási/, since schwa normally gives /a/ in Surinam. Compare the development for example of here to /já/ in Ndjuka and Boni.

This example should probably not be considered separately from a number of forms in which a glide seems to be pronounced instead of /h/. There are a number of such forms, probably not all of the same origin.

English	Sranan	1856	1855	1850	1798	1783	1780
hear	jére	jeri	jére jéri	jere jeri (helpi)	jerree jerrie (repie)	jeri (helpi)	jerri (helpi)
help	jépi (lépi)	jrepi jerepi (helpi)	jerépi (herépi) (héipi)	jrepi (1835)			

English	Saramaccan	1778	Ndjuka	Boni	Matawai	Krio
hear	jéi	jeri	jée	je		jerí (εp)
help	(heépi) (hεépi ^s)		jeépi			
head	(hedi) (edi)	(heddi)	(éde)	(hede) (ede)	jedi	(ed)
ugly	wogi (ogi) (hogi ^s)	(ougri)	(ógi)	(ogi)	(hogi)	wogrí
house	wosu (osu)	(hosso)	(ósu)	(ošu)	wosu	(os)
Indian	(ingi)	jingri (ingri)	(íngíi)	(ingi)	(ingi)	(índžin)

There are two cases that appear to be misprints: jéngi- (1855) (for iéngi) "Indian", and jebrie (1798) (for iebrie) "every".

The semivowel in hear is undoubtedly Proto-Sranan. In fact it has so many parallels in other Atlantic creoles, that it can be assumed to derive from WAPE. Compare Jamaican /jéri/, BG yerry, Bahamian yerry, and Gullah /jéri/. In other words the model could well have been something resembling /jéri/ rather than English hear directly.

The development of the semivowel in head (Matawai /jedi/), ugly (Saramaccan /wógi/), house (Saramaccan and Matawai /wósu/) and Indian (Saramaccan 1778 jingri) appears to represent the sporadic development of homorganic glides preceding vowels. The case of /w/ before /o/ occurs with words of other origins in Saramaccan.

The only case out of these that would seem to go back to Proto-Sranan is the case of help, where the evidence suggests that Proto-Sranan probably had dual forms /*jélepi/ and /*hélepi/.

ii) Portuguese

A zero onset to a word is usually reflected by a zero onset in the Surinam creoles. There are, however, a few exceptional forms.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Gloss</u>
abrir	jabí jabí (DG)	jabri	open
assar	jasá	jassà	roast
entrar	dendá dendáa	dindra	enter
ôlho	(w)ôjo	oijo	eye

A comparison with the Portuguese creoles is useful in some of these cases.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>São Tomé</u>	<u>Principe</u>	<u>Cape Verde</u>
abrir	jabí, etc.	jabri	bilí	bí	(a)brí
assar	jasá	jassà			(a)sá
entrar	dendá, etc.	dindra	lětlá	lětá	intra entra dentra (Fogo)
ôlho	wôjo, etc.	oijo	wé	uwé	ódžə

<u>Portuguese</u>	<u>Guiné</u>	<u>Papiamentu</u>
abrir		hábrì
assar	jáasa	(h)ásà
entrar	jěntra	dréntà
ôlho		wowo

The prothetic /j/ in abrir and assar is paralleled for Guine creole in assar, and slightly less closely with a prothetic /h/ for Papiamentu. The Gulf of Guinea creoles delete the initial vowel of abrir, which also optionally applies in Cape Verde. In both cases the changes lead to the same effect - that words do not begin with unstressed low-toned vowels.

entrar exemplifies the same tendency, except that the adverb dentro "inside" has extended its initial /d/ to this form in Saramaccan, Papiamentu, and the Fogo dialect of Cape Verde creole. Guiné creole displays /j/ again. The initial /l/ to be

found in the Gulf of Guinea creoles is **possibly from /d/ by assimilation to the /l/** later on in the word in Proto-Gulf.

In ɔlho the modern optional /w/ is a purely Saramaccan feature. In words of various origins a /w/ is optionally inserted before /o/. The /w/ in the Gulf of Guinea creoles is derived as /we/ < /oj/, and is therefore an unassociated phenomenon, although of course it does have the same effect - avoiding onsetless words.

That the option of an initial /w/ presumably existed in this word in the 18th century - although not directly recorded - is suggested by quadriolho - in 1778 kwatriwojjo.

SECTION TWO

The Development of the English and Portuguese Liquids in the Surinam Creoles

In this section we will deviate from the pattern of treatment adopted up till now. The reason for this is that the developments involving the liquids are so varied and complex that to continue to treat the reflexes of each sound monolithically would involve such a loss of clarity that only a confused picture would result. For this reason we will deal with the liquids by splitting their treatment according to the phonetic context. We will globally divide the developments of the liquids into four sections

- a) single liquids
- b) liquid clusters (liquid first)
- c) liquid clusters (liquid second)
- d) double liquids

introducing further subdivisions where this seems convenient for the ease of the discussion.

Single Liquidsa) Initial

ii) English /#l/

The normal development of this is to /l/ in all languages.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>	<u>1777</u>	<u>1765</u>	<u>1718</u>
leave	líbi	libi	líbi	libi	liebie	libi	liby		
live	líbi	liebi	líbi	liebi	liebie	libi	leeby	libi	liewy
lazy	lési	lezi	lési		leesie	lesi			
					lesie				
lie	lej	lei	lei		ley	lei			

English	Sranan	1856	1855	1850	1798	1783	1780
light	léti	letti	léti	letti		letti	
like	léki	leki	léki	leki	lekie	leki	liki leki likkie
laugh	láfu	lafoe	láfoe	laffoe	laffoe	laffo	
long	lánga	langa	lánga	langa	langa	langa	
lost	lási	lasi	lási	lasi	laasie	lasi	lassi
louse	lóso	losó	lóso	losó	losó	losso	
lie-down	didón	lidom	didón	lidom	didon	liddom	lydom
liquor	líka		lika				
look	lúku	loekoe	loekoe	loekoe	loekoe	lukku	locke
loose	lúsu	loesoe	loesoe	loesoe		lussu	loese
				loessoe			
				loesse			
land(ing)-place	lanprési		lan-prési				

English	1777	1765	1718
like	likee		
long	langa		
louse	-louso-		
look	looko	loekoe	loeke

English	Saramaccan	1778	Ndjuka	Boni	Krio
leave	-	libi			lef
live	líbi	libi	líbi	líbi	lib/liv
lazy	-	lèsi	lési	leši	les
lie	-	lei	léj	léi	laj
light	-	-	léti	léti	lajt
like	-	leki	éke	eke	léka/lak
				leke	
laugh	láfu	laffo	láfu	láfi	
long	lánga	langa	lánga	langa	lánga/longa/long
lost	lási	lasi	lási	laši	los
louse	lósu	lossu	lósu	lošu	los
lie down	didón ^s		didón	didon	lidóm/ledóm
look	lúku	lukku	lúku	luku	luk
loose	lúsu	lussu			lus
land(ing) place	lanpeési		lanpé	lanpe	

The results of this comparison show quite clearly that English initial /l/ is in almost all cases represented by /l/ in the Surinam creole languages. The variability typical of the Surinam reflexes of English /r/ (see p. 310) as between /l/ and /r/ is completely absent. The only deviations from /l/ can be simply explained.

Ndjuka and Boni display loss of initial /l/ in the preposition like. The same behaviour appears in the preposition along in these two languages.

<u>English</u>	<u>Ndjuka</u>	<u>Boni</u>
like	éke	eke
along	ánga	anga

English /l/ becomes Surinam /d/ in the one item lie down, presumably by assimilation to the /d/ that precedes the stressed vowel in this word. The first Sranan source to show this /d/ is Weygandt (1798). Schumann (1783) does not have it - and this presumably explains the retention of /l/ in the sources 1850 and 1856. We could then assume that this change is to be dated to the end of the eighteenth century were it not for the fact that it also appears in Ndjuka and Boni. This suggests an earlier date in the eighteenth century, before these Bush Negro tribes were formed. Its occurrence in one form of modern Saramaccan would seem on the other hand to be due to the influence of Sranan, as the item is absent altogether from Schumann's 1778 word-list.

Note that initial English /l/ and /r/ seem to have been gradually falling together in Surinam. The sources for 1783 and 1855 seem to indicate that English /l/ was always represented by /l/ in Sranan as it is at the present, while /r/ is in these two sources generally variable - /r/ or /l/. In the modern language the variability has been much reduced, resulting in /l/ in most cases. For Saramaccan the picture is similar - variability in 1778, and neutralization to /l/ in the modern language.

liv) Portuguese /#l/

The normal development of this is to /l/ in **Saramaccan** and Sranan.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
lacerar	-	lassara	lasrá	-	tear
lamber	lɛmbɛ	lembeh	-	-	lick
limpar	limbá	limba	-	-	cleanse
la	aá/alá	ala	-	-	there

This group of words does not present any problems. Initial /l/ remains in Saramaccan, except in the one example la "there" which on the analogy of aqui "here" acquires an initial /a/, and thus effectively involves a medial /l/.

III) English /#r/

The normal development of this in the Bush Negro languages is to /l/, while modern Sranan has /l/ mostly, but occasionally /r/.

English	Sranan	1856	1855	1850	1837	1798	1783	1780	1777
ring	líŋa	ringa	líenga	ringa			linga		
red	rédi	redi	rédi lédi	redi		redie	ringa ledi		
ready			rédi						
right	léti	reti	léti réti	reti		retie	leti reti	retti	
ripe	lépi	repi	répi	reepie		repie	lepi repi		lipee-
rub	lóbi	robi lobi	lóbbi róbbi	lobbi		roobie	lobi lobbi		
run	lon	ron	lon ron	ron			ronn lonn	ron	
row (n)	lo	lo	lo ro	lo			lo		
row (v)	lo		lo	lo			lo		
round-	rom-	rom-	lóm-				rom-	ron-	
root	lútu	loetoe	lóetoe	loetoe		roetoe	lom- lutu		
rotten	ratín	latin	ratíen				latin		
rat	aláta	arata	arátta	arata		arata	alatta arátta		latta
rain	alén	arèen	arén	areen		arren	aleen areen		
river	líba	liba riba	ríba líba	riba	liba	riba	riba liba		
English	Sranan	1765F	1718	Saramaccan	1778	Ndjuka	Boni		
ring				-línga	línga ringa	línga			
red				-	-	-			
right				léti	leti reti	léti	leti		

English	Sranan 1765F	1718	Saramaccan	1778	Ndjuka	Boni
ripe			lépi		lépi	lepi
rub			lóbi	lobi	lóbi	
run			-	-	lón	lon
row (n)			lɔ	loo	ló	
row (v)				loh		
round-			lóm-	lom-	ló	
root			lútu	lutu	lútu	lutu
rat	rata		-	-	aláta	aláta
rain			-	-	alén	len
river		riba	-	-	líba	liba

The various sources for Sranan provide the following picture of the development of the words containing initial English /r/ in that language.

	1718	1765	1777	1780	1783	1798	1850	1855	1856	Modern
	<u>r</u>	<u>r</u>	<u>l</u>	<u>r</u>	<u>l~r</u>	<u>r</u>	<u>r</u>	<u>l~r</u>	<u>r</u>	<u>l</u>
<u>r</u>	1	1	-	3	-	7	7	3	7	2
<u>l~r</u>	-	-	-	-	9	-	-	12	3	2
<u>l</u>	-	-	2	-	4	-	4	-	3	10

Under the dates corresponding to the various sources we give the number of cases displaying the three possible reflexes: /r/, /l/ and /r~l/. Directly under the date we indicate what the majority reflex is in each case.

Obviously, despite the low number of items evidenced in the earlier sources, we can see that there cannot be said to be a gradual development from /r/ in the older sources to /l/ in the more modern sources. The sources for 1783 and 1855 both suggest that the normal situation with English-derived items which had /r/ in the source language was variable /l~r/. At the present the norm is /l/. Significant must be the fact that there is a clear relationship to be seen between the sources for 1783 and 1850. Insofar as the cases are comparable, where 1783 has /l~r/, 1850 has /r/, and where 1783 has /l/, 1850 indicates the same. Less clear, but still evident is a relationship between these two sources and the source for 1856. Where

the first two have /l/, 1856 has /l/ in three out of four cases. Where 1850 has /r/, and 1783 /r ~ l/, 1856 has /r/ in seven cases, and /r ~ l/ in two cases. There are in total three forms disturbing the pattern. It would seem to be the case that we must seek the explanation for these agreements in an attempt at the standardization of Sranan in a religious context, as all these sources are associated with the Herrnhutter Church. We can assume that Schumann (1783) represents a reasonable approximation to the spoken language of the time, but that 1850, 1856 represent such attempts at standardization. Focke (1855), in contrast, would seem to indicate that the spoken language still had a great variability in its reflex of English /r/ - a variability which 1850 and 1856 tried presumably artificially to reduce, by choosing one or other variant. That the modern language has generally chosen the /l/ variant suggests that the attempt at standardization did not succeed since we would in that event have expected /r/ in a greater number of cases.

Schumann's recording of Saramaccan (1778), inasfar as the items are comparable to those of his 1783 Sranan manuscript dictionary, displays an identical distribution of forms given a variable liquid, and those given /l/. The most likely interpretation of this is that in fact all items were variable. It is highly unlikely that the two languages would have preserved a common distribution of liquids after a hundred years of separate development.

Modern Saramaccan, together with all the other Bush Negro languages has /l/ in these items.

III) Portuguese /# r/

The normal development of this is to /l/ in Saramaccan.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Gloss</u>
rato	alátu	alattu	rat
rio	lío	lio	river
ralar	lalá	lalà	grate
rolar	lolá	loilà	roll

These cases do not require much discussion. The reflex in Saramaccan of

Portuguese initial /r/ is /l/ in all cases. The only form that requires discussion is rato which has a prothetic /a/, as do some English and Dutch-derived forms:

	<u>Saramaccan</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
rain	-	alén	alén	
rat	(alátu)	aláta	aláta	
rijst	alísi	aléjsi	alísi	rice

However the motivation for this prothesis is not clear to us at the present.

IIiii) Comparative Notes #r/

There is a difference between the reflex in 1778 of Portuguese words with initial /r/ and their English counterparts. The Portuguese items all have /l/, while of the six English items, half have /l/, and have /l ~ r/.

b) Medial

li) English /VIV/

The normal development of this is /r/ in modern Sranan. /Ø/ in Saramaccan, and /Ø/ between identical vowels and /l/ between non-identical vowels in Ndjuka and Boni.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>	<u>1780</u>	<u>Earlier</u>
believe	bríbi	bribi	bríbi	bribi	briebie	bribi	bljibi	
alike			aléki			alleki		
shilling	sren	sren	sren		sreen	shelling		
vanilla			sring			sjelling		banilla (1777)
belly	bére	bele	bére	bele	bélee	belle	billi	belly- (1777)
			béle		bélee	berre	bille	-beli (1765F)
yellow-	jara-		jara-			jara-		

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>	<u>1780</u>	<u>Earlier</u>
dollar	dála							
swallow	swári	swali	swári	swali		swali		
cully	kóri	kori	kóli	kori	kolie	swari		
bully-	botrí		kóri			koli		
tree	botrí		botrí					bullet- tree (1777)

<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>
believe	biíbi		biíbi		biífi
alike		alléki			
shilling	seén				
belly	béé	belle	bée	bee	bɛlé
yellow-			jaa-		
dollar	dálas		dála		
cully	kóis		kóli		kóri
bully-	botíí	bullitiri			
tree					

We will be discussing the development of shilling later on in the context of "pseudometathesis" on p. 364. As we explain there this form satisfies the conditions for the application of pseudometathesis. This results in a change from a structure of the type CVLVC.. to CVLVC.. The modern Sranan form is then derived by syncope giving CLVC..

It is uncertain whether believe in fact belongs here at all. It is quite possible that the model was b'lieve /bli:v/, which is recorded for present Cockney (Matthews, 1938).

dollar would seem to be a recent loan. Apart from the lack of older sources, it has a deviant reflex /l/ in Sranan, Saramaccan, and Ndjuka. The normal reflex of intervocalic /l/ is /r/ in Sranan, /Ø/ in Saramaccan, and /Ø/ between identical vowels in Ndjuka.

iii) Portuguese /VlV/

The normal development of this is /l ~ Ø/ in Saramaccan, and /r/ in Sranan. The

Ndjuka developments are too disparate to allow of separate conclusions based on these facts alone.

	<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Gloss</u>
a) V ₁ -V ₁ (Port)	ralar	lalá	lalà	grate
	caiar a boca	ka búka	krabúka	be silent
	falar	fan	fa	talk
	balata	baatáʂ		rubber
	bala	-	bála	bullet
b) V ₁ -V ₁ (Sur)	la	aá/alá	alà	there
	amolar	maá	malà	sharpen
	aletria	anatiá		vermicelli
	melancia	baasia		watermelon
	crioulo	kióo	krêol	creole
c) V ₁ -V ₂	bulir	bulí	buli	move
	demolir	dimbolíʂ		demolish
	engolir	gulí	gulí	swallow
	rolar	lolá	lolà	roll
	bôlo	-	-	cake
	chocolate	sukaáti		chocolate
	erisipela	-	siprà	rose
	estrela	teéa	teréja	star
	galinha	ganiá	gannia	hen
	grilo	-	-	cricket
	mole	móʂi	moli/molli	soft
	perola	-	pellula	pearl
	raio	láiu	láiu	grater
	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>	
a) V ₁ -V ₁ (Port)	-	balatá	rubber	
b) V ₁ - V ₁ (Sur)	alatria	alatelía	vermicelli	
	krióro	kióo	creole	
c) V ₁ - V ₂	gori	gwilí	swallow	
	bóru	-	cake	
	skráti	sukaáti	chocolate	
	grío	-	cricket (Ptg. grilo)	

The first subgroup comprises items with an intervocalic /l/ surrounded by identical vowels in Portuguese. Only two forms with liquid reflexes in 18th century Saramaccan survive in modern Saramaccan. One of these exhibits loss of the liquid, while the other retains this. falar will be discussed in the section on /ɛ/.

The second subgroup comprises items with an intervocalic /l/ not surrounded by identical vowels in Portuguese, but where this is the case in Surinam. Here there are five relevant cases in Saramaccan - deletion takes place in four cases, and optional deletion in the fifth case.

The third subgroup comprises cases where the flanking vowels are non-identical in Portuguese and in Surinam. Here we find retention of the liquid in five cases in Saramaccan, alteration of the liquid to a nasal in one case (already present in 1778), and deletion of the liquid in three cases. However, of these three one has no liquid in 1778 and we shall see later that the loss in this case has nothing to do with the present phenomenon.

Ndjuka, which also displays a fairly systematic loss of liquids in English words - although to a lesser extent than Saramaccan - only has five words of Portuguese origin with original intervocalic /l/. All five have identical vowels surrounding the /l/-site - in two the /l/ is lost. However in /gwil/, the development of /*u/ to /wi/ appears to be a back formation based on the recorded development of /wi/ to /u/.

The loss of the second liquid in Sranan /grío/ will be discussed later.

III) English /VrV/

The normal development here is to /r/ in Sranan, /∅/ in Saramaccan, and to /∅/ between identical vowels, and /l/ between nonidentical vowels in Ndjuka and Boni.

Let us now turn to an examination of items with an intervocalic /r/ in English.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>
wear	wéri	weri	wéri	weri	weerie	weri
carry	tjári	tjari	tjári	tjari	tjarrie	tjarri
	tja		tja'			tjerri
			kjári			

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>
quarrel	kwári	kwari	kwári		kwarrie	kwali kwari
sorry	sári	sari	sári	sari	saarie	sari
tomorrow	tamára	tamara	tamára	tamara	tamara	tamarra
guarantee/ guaranty	djaranti					
narrow	nára					
very	béri	beri	béri	beri		beri
bury	tóri	tori	tóri	tori		tori

<u>English</u>	<u>1780</u>	<u>Earlier</u>
carry	jarri	
sorry	zarri	
tomorrow		tamara (1777)
very		belle-/bel- (1765)
		belle (1718)
story		tory (1777)

Here we only find /r/ as the reflex with the exception of one form of quarrel in 1783 and the item very. The sources for this latter item are earlier than all the other sources, which makes this difficult to interpret. The evidence for the Bush Negro languages follows:

<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>
weary	wéi	wêri	wéli	wéli	wíri
carry	tja	tjarri	tjáj	tja	kéri
quarrel			kwáli	kwali	kwárel
sorry	sái	sari			sóri
sorrow	sáa	sara			
tomorrow			tamáa ^s	tama	tamára (obs) tumára
very	-	bere-			bere-
bury	béi	beri	béli	beli	
story	-	-	tóli	toli	torí storí

The only deviant development is represented by Ndjuka /tjáj/ with irregular liquid loss. The expected development would be /*tjáli/. Boni has a truncated form here, as do Saramaccan and (optionally) Sranan.

II ii) Portuguese /V ɹ V/

The normal development of this in Saramaccan is to /θ-ɹ/, and in Sranan to /r/. Only one example is evidenced for Ndjuka.

	Portuguese	Sara- maccan	1778	Sranan	Ndjuka	Gloss
a) V ₁ -V ₁	vara	-	walla	-	-	rod
	carapuça	-	kaapúsa	krapussa	-	stocking
	escuro	-	zugúu	sukru	-	hat
		-	sugúu ^s		-	dark
	maduro	-	mandú	mandru	-	ripe
	-	periquito	piikútu	prikittu	-	parrot
b) V ₁ -V ₂	capoeira	kapéé	kappewiri	kapuwéri	kapuwéi kapuwéli ^s	new bush
	vassoura	basóó	bassorre	-	-	brush
	perola	-	pellula	-	-	pearl
	pera	-	-	péra	-	pear
	mentira	-	mitira	-	-	lie
	materia	mateéa	-	-	-	matter
	pólvora	poóba	proba	-	-	powder
	inteiro	télu	télu	-	-	whole
	farinha	fania(n)	fanija	-	-	flour
	erisipela	-	siprà	-	-	rose
	buraco	baáku	blaku	-	-	hole
	agora	awá(a)	awà	-	-	now, indeed
	birar	biá	bilá	-	-	turn
	tirar	-	tira	-	-	pull out
	esperar	-	supia	-	-	wait for
	parir	paí/palí	pali	-	-	give birth to
	lacerar	-	lassarà	lasra	-	tear
	jurar	djulá	djurà	-	-	swear
	furar	fulá	fulà	-	-	bore
	curar	kulá	kulà	-	-	cure
temperar	-	-	temprà	-	temper	

In all cases the liquid has been lost in the a) group of forms. Referring back to the section on /l/ we recall that there, intervocalic /l/ was lost in the majority of cases between identical vowels. There are problems however with two forms.

In the case of escuro the problem is not so much with the present-day form, but

with the form in Schumann (1778), which exhibits a cluster - sukru. We have adopted, and from time to time provide evidence for, Voorhoeve's hypothesis that Schumann omitted to note brief "unaccented" vowels, and thus recorded orthographic clusters that were not in fact clusters at all. This explanation cannot be the correct one in the case of sukru, however, as the vowel that is omitted here is precisely the accented vowel. If this form were isolated we could just assume it was a mistake. Although this remains a possibility - especially if one is attempting to record a tone language as if it were an accent language as Schumann presumably did - there is a parallel form within the same group. This is maduro, which has the 1778 rendition mandru, with again the - orthographic - loss of the Portuguese accented vowel. What makes the situation different in this case is the fact that the modern Saramaccan form of this item - /mandú/ - suggests a derivation from an earlier form /*mand(u)rú/, where we assume that the vowel between brackets would have normally gone unrecorded by Schumann. This corresponds well with Schumann's actual recording mandru. What is the explanation for this peculiar development? One possible explanation for this - and this explanation could also obtain for sukru, if this corresponds to /*sukurú/ - is that we have here an irregular application of pseudo-metathesis (see p.343), which strictly requires a CVLV structure. The present day forms /sugúu/ etc. would then represent the regular development.

The forms in group b), derived from Portuguese /ɛ/ flanked by non-identical vowels display two different types of reflex in Saramaccan. In some forms the Portuguese vowel structure is retained, while in others the modern Saramaccan reflex suggests that the original Portuguese environment of non-identical vowels was replaced by a situation of vowel identity. The 1778 form normally has the usual orthographic cluster which we have interpreted as representing a sequence CVL where V has the same quality as the following vowel. We may ask ourselves what the source of the assimilation of the originally non-identical vowels was. One answer is that the direct model for the earliest stages of the creole was in these cases a form with the structure CLV₂ instead of CV₁LV₂. In this connection it is instructive to compare the relevant forms with their counterparts in the Portuguese creoles.

	<u>Portuguese</u>	<u>Sara-</u> <u>maccan</u>	<u>1778</u>	<u>São</u> <u>Tomé</u>	<u>Principe</u>	<u>Cape</u> <u>Verde</u>	<u>Papiamentu</u>
i)	buraco	baáku	bláku	bláku	ubáku	bráku	buráku
	lacerar	-	lassarà			-	lástrà
ii)	capoeira	kapéε	kappewiri			kapwéra	
	vassoura	basɔɔ	bassorre	basɔla	bɔswá	basóra	basóra
	perola	-	pellula			pé rula	pérla
	mentira	-	mitira		mĩš(y)á	ɔmtíra	mentíra
	farinha	fania(n)	fanija		fyá	fariŋa	(hariŋa)

The forms under i) are forms which are candidates for a derivation from structures -CLV-. The first form buraco has precisely this structure in São Tomé and Cape Verde creole, while the Principe form also has or rather derives from an assimilated vowel structure. The second case lacerar is not orthographically represented as lasra in Schumann (1778) presumably because /sr/ is not a possible cluster in German. Note that this is evidence for Voorhoeve's (1961) view that these orthographic clusters were not in fact clusters. The only occurrence of this item in an Atlantic Portuguese creole that we have been able to find is Papiamentu /lástrà/- with epenthetic /t/ - once again the desired cluster structure.

The items under ii) have in the Portuguese creoles forms with no evidence of clusters. The identical vowels in kappewiri (1778) do not involved a derivation from a cluster as the first vowel - that is the vowel between the liquid and the preceding (in this case) semivowel - is in fact the high-toned vowel. The final /i/ is to be associated with a group of forms with irregular final /i/ - cf. burríco Saramaccan /buiíki/, and further the section on vowels (p. 423).

There are two forms - one involving /ɛ/ and one involving /i/ - displaying a nondissimilatory loss of the liquid, already present in the eighteenth century records.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>São Tomé</u>	<u>Angolar</u>	<u>Principe</u>	<u>Annobon</u>
falar	fan	fa	fla/fa	fála/fa	falá/fá	falá
querer	ké	kêh			-	ke

<u>Cape Verde</u>	<u>CV Fogo</u>	<u>CV Brava</u>	<u>Guiné</u>	<u>Senegal</u>	<u>Pap. Curacao</u>	<u>Pap. -Aruba</u>	<u>Gloss</u>
falá	frá	fra/frə fla/flə	fala	fala	-	-	talk
kré	kre	kre		kere	ke	kje/kjer	want

The Saramaccan reflex of falar is to be compared with the short form of three of the four Gulf of Guinea creoles - /fa/ or /fá/. Günther (1973) in his description of Principe describes /fá/ as the older of the two forms. If this is true we have here possibly another link between Saramaccan and the Gulf of Guinea creoles.

The reflex of querer in Saramaccan is virtually identical to that of Curacao Papiamentu - the only difference is that Saramaccan has a low mid vowel in this word, and Curacao Papiamentu a high mid vowel. This is possibly one of the rare words where the Saramaccan form is not derived from the infinitive form, but from the third person singular present - quer [kɛr]. See further the appendix to this chapter on the origin of the Portuguese-derived verbal forms.

II iii) /VrV/

The normal development here is to /Ø-l/ in Saramaccan, /r/ in Sranan, and /Ø-l/ in Ndjuka.

a) V₁ - V₁

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
derreter	-	dretta	-	-	dissolve
amarrar	-	-	-	mana (B)	moor
carrapato	-	-	krápáta	-	castor oil bean
carrapato	kaapátu	krabbatu	krápá	-	tick

b) V₁ - V₂

aborrecer	buusé	brussèh	-	-	loathe
escorregar	koogá	krokka	-	-	slide
correr	kulé	kulèh	-	-	run
morrer	-	mulèh molèh	-	-	die

Portuguese	Saramaccan	1778	Sranan	Ndjuka	Gloss
varrer	baí	bali	-	-	sweep
arriba	líba	liba	-	-	above
barril	baíf	bari bali	barí	balí	barrel
barriga	baíka	barika	-	-	belly
burrico	bulíki	-	buríki	bulíki	ass's foal
catarro	katáu katáo	katharrha	-	-	catarrh
ferro	félu	feru	-	-	iron
marrom	-	-	-	maa (B)	brown
terra	téla	tera téla	-	-	land
panturrilha	pantéa panté(j)a ^s	panríã	-	-	ankle

The forms under a) do not require much discussion either. There is a zero reflex in the only form evidenced in modern Saramaccan, once again indicating that this is the normal reflex of liquids flanked by identical vowels. Sranan has an /r/ - the normal postconsonantal liquid. Boni appears to supply us with an example of an /r/ that has undergone nasalization in the environment of a preceding /m/.

Once again we find among the forms derived from Portuguese /r/ flanked by non-identical vowels - group b) - some forms suggestive of derivation from a cluster. A comparison with the Portuguese creoles is, in this case too, enlightening:

	Portuguese	Sara- maccan	1778	São- Tomé	Prin- cipe	Cape Verde	Papiamentu
i)	aborrecer escorregar	buusé koogá	brussèh krokka	blosé kíɔga		burisé skoregá	burusí(du) (-ido)
ii)	barriga barril	baíka balí	barika bari bali	béga balili	bwéga bwé	baríga barril	baríka barí
	burico	bulíki					buríku

Once again the correspondence between the Saramaccan cases and their Gulf of Guinea counterparts (in this case in São Tomense) is striking.

Let us now compare the retention or deletion of the three Portuguese liquids /l/, /ʎ/ and /r/ in the intervocalic position, as this is where there is variation.

	/l/		/ʎ/		/r/
Portuguese	Sara maccan	Portuguese	Sara- maccan	Portuguese	Sara- maccan
ralar	lalá	carapuça	kaapúsa	carrapato	kaapátu
calar	ka búka	escuro	zugúu	aborrecer	buusé
a boca					
balata	baatás	periquito	piikútu	excorregar	koogá
la	aá/alá	capoeira	kapéé	correr	kulé
amolar	maá	vassoura	basó	varrer	baí
melancia	baasía	materia	mateéa	barril	balí
crioulo	kióo	inteiro	télu	barriga	baíka
bulir	bulí	buraco	baáku	catarro	katáu
demolir	dimbolís	birar	biá		katáós
engolir	gulí	parir	palí/paí	ferro	félu
rolar	lolá	jurar	djulá	terra	téla
chocolate	sukuáti	furar	fulá	panturrilha	pantéa
mole	móí	curar	kulá	colher	kujéé
ralo	lálu			mulher	mujéé
anel	andélu				
espanhol	sipajólu				

Taking the three liquids together we can draw up the following table.

V ₁ V ₂	i	e	ɛ	a	ɔ	o	u	total V ₁	V ₁ = V ₂	V ₁ = V ₂
i	1:0:0			1:0:0				2:0:0	1:0:0	1:0:0
e		1:0:0		0:0:1			0:0:3	1:0:4	0:0:4	1:0:0
ɛ			3:0:0					3:0:0		3:0:0
a	2:1:1			7:1:1		1:0:0	1:0:1	11:2:3	4:1:2	7:1:1
ɔ	1:0:0				1:0:0			2:0:0	1:0:0	1:0:0
o	0:0:1			0:0:1		2:0:0	0:0:1	2:0:3	0:0:3	2:0:0
u	0:0:3	0:0:1		1:0:3			2:0:0	3:0:3	1:0:7	2:0:0
total V ₂	4:1:5	2:0:1	3:0:0	9:1:6	1:0:0	3:0:0	3:0:4			
V ₁ = V ₂	3:1:5	0:0:1		2:0:5		1:0:0	1:0:5			
total									7:1:16	17:1:1

x:y:z - x = deletion, y = optional, z = retention

Note that there is an obvious difference between deletion between identical vowels, with deletion in 90 per cent of the cases, and that between non-identical vowels, with deletion in less than a third of the cases. In fact deletion between identical vowels would be much more frequent if we had counted in the results of deletion in Portuguese clusters.

This result confirms what Sebba (1982) has to say regarding deletion between identical and non-identical vowels, and also suggests that Voorhoeve (1961) was correct in assuming that 18th century Saramaccan had epenthetic vowels breaking up liquid clusters.

Let us now proceed to test Sebba's statements regarding the effect of differences of height and backness on the deletion of liquids, that the more similar the vowels concerned are in terms of these two dimensions the greater the potential for deletion.

First height difference.

<u>Height difference</u>	<u>deletion:</u>	<u>optional:</u>	<u>retention:</u>	<u>total</u>
0: u/i	-	-	3	3
1: u/e, o/i, o/u, e/u	-	-	6	6
2: a/o, o/a, e/a, ɔ/i	2	-	2	4
3: a/i, i/a, a/u, u/a	5	1	5	11

The results are obvious - the greater the difference in height, the more chance there is that liquids will be deleted between non-identical vowels. In this case then Sebba's prediction appears to be falsified.

Now we will examine backness difference.

<u>Backness difference</u>	<u>deletion:</u>	<u>optional:</u>	<u>retention:</u>	<u>total</u>
0 o/u	-	-	1	1
1: a/o, o/a, e/a, a/i, i/a, a/u, u/a	6	1	7	14
2: u/i, u/e, o/i, e/u, ɔ/i	1	-	8	9

Here the results are somewhat different - the greater the difference in backness, the less chance that liquids will be deleted between non-identical vowels. This is in agreement with Sebba.

Sebba claimed that where vowels differ both in backness and height, /l/ - the Saramaccan liquid - is almost always preserved. Let us examine this prediction:

<u>Difference in backness;</u>	<u>height</u>	<u>deletion:</u>	<u>optional:</u>	<u>retention:</u>	<u>total</u>
+	+	7	1	11	19
+	-	-	-	4	4
-	-	18	-	1	19

Sebba's statement is in fact true for less than two thirds of the cases involving a difference of both backness and height. The small number of cases involving a difference in only one of the two dimensions - although statistically insignificant - has the greatest proportion of retention of a liquid.

Let us finally examine another vowel parameter - rounding.

<u>Roundness difference</u>	<u>deletion:</u>	<u>optional:</u>	<u>retention:</u>	<u>total</u>
+: a/o, o/a, a/u, u/a, u/i, u/e, o/i, e/u, ɔ/i	4	-	12	16
-: [+round]: o/u [-round]: e/a, a/i, i/a	3	1	3	7

In other words a difference of rounding favours retention of the liquid.

It might appear as if preservation of the liquid was favoured by the position immediately preceding the high tone, since in fact the greatest number of intervocalic liquids are retained here. In fact this effect appears to be due directly to the fact that most cases of rounding difference involve precisely the pre-high-tone environment.

III i) Portuguese /ʎ/

This sound is represented by /j/ in practically all cases in the Surinam creoles. In a few cases we apparently find /ɲ/.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
embrulhar	-	-	brujá	buujá	confuse
escolher	-	kuleh	-	-	choose
molhar	munjá	-	-	-	wet
	munján ^s				
espalhar	pajás ^s		panjá	-	spread
agulha	agúja	agúja	-	-	needle
bacalhau	bakajáu		batjáw	bakiáw	dried cod
bulha	búja	búja	-	-	disorderly shouting
colher	kujéε	kujeri	-	-	spoon
ilha	-	hia	-	-	island
mulher	mujéε	mujêre	-	-	woman
		mojêre			
ôlho	(w)ójo	oijo	-	-	eye
panturrilha	pantéa	pantrífa	-	-	ankle
	pantéja ^s				
	pantéija				
	(Huttar)				
pioelho	piójo	pioijo	-	-	louse
	pijójo ^s				
quadriolho	kpátiwójo ^s	kwatriwóijo	-	-	marsupial rat
espelho	sipéi	sipêi	-	-	mirror

In one of two cases where /ɲ/ appears, we find a parallel form in Sao Tome creole:

<u>Portu- guese</u>	<u>Sara- maccan</u>	<u>1778</u>	<u>São Tomé</u>	<u>Principe</u>	<u>Cape Verde</u>	<u>Papiamentu</u>	<u>Gloss</u>
molhar	munjá munján	muija	moɲá mɲá	mwâ	modžá	(múhà)	wet

In this case we can point to the reason for the nasal reflex. This is the initial nasal consonant, which is often the source of assimilatory nasalization, as is demonstrated in Smith (1980). The fact that the form in 1778 does not have a nasal is not problematic for the existence of such a relationship. Compare the sections on /ɲ/.

The form espelho displays a loss of final /u/, which seems to have parallels in the Gulf of Guinea creoles:

Portuguese	São Tomé	Principe	Cape Verde	CV-S.Antão	Gloss
espelho	supé	supé	spedzə		mirror
trabalho	tlabá	tabwé	trabódzə		work
milho	mi	imí	mídzə	mi	maize
velho	ve	vé	bédzə	vej	old
coelho		kwé	kwédzə		rabbit
ôlho	wé	uwé	ódzə	oj	eye
filho	-	-	fídzə	fi	son

also

Portuguese	São Tomé	Principe	Cape Verde	CV-S.Antão	Gloss
feio		fé			ugly
papagaio		pagé	papagój		parrot

There seems to be a deletion in these forms of /-u/ or /-ju/. In fact we should probably just assume a loss of /-u/, as the Gulf of Guinea creoles do not have diphthongs /ej/, /ɛj/, or /ij/ - the /j/ would be lost with front vowels. Note that Principense /wé/ is to be derived from Proto-Gulf /*aj/ - probably via /*ɔj/, while /we/ may be derived from an older stage /*oj/ (see the section on vowels on pp. 472/473).

The Cape Verde forms hailing from Santo Antão, while on the face of it very similar to the Gulf of Guinea forms, are probably not especially relevant, since final /-u/ is dropped in a wider set of contexts in Cape Verde creole.

If we examine the Principense forms we can restore the following Proto-Gulf equivalents:

Portuguese	Port. pron.	Proto-Gulf	Principe	
espelho	ispélu	supé(j)	supé	(cf. Guenther, 1973, p. 238)
trabalho	tlabálu	tlabáj	tabwé	
milho	mílu	(i)mi(j)	imí	(cf. Guenther, 1973, p. 209)
velho	vélu	vé(j)	vé	
coelho	kuélu	kój	kwé	

<u>Portuguese</u>	<u>Port. pron</u>	<u>Proto-Gulf</u>	<u>Principe</u>	
ôiho	ólu	(u)ój	uwé	(cf. Guenther, 1973, p. 245)
feio	féju	fé(j)	fé	
papagaio	papagáju	pagáj	pagé	

Our putative Proto-Gulf /*supé(j)/ is very close to Saramaccan /sipéi/.

c) final

ii) English /Vɪ #/

The normal development of English /l/ in this context is /r/ in Sranan, /Ø/ in Saramaccan, and /Ø/ between identical vowels and /l/ between nonidentical vowels in Ndjuka and Boni.

Let us now turn to the case of final /l/ in stressed syllables:

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>
feel	fíri	fili	fíli fíri	filli	fielie	filli/fili
peel	píri	pili	píli píri	pilli pili		pili píri killi
kill	kíri	kili	kíli kíri	kili		killi
mill	míri	mieli	míri		mielie	
still	tíri	tiri	tíri	tiri	tierie	tiri
tail	tére	tere		tere		tereh
sell	séri	seli	séri	seli	seerie	seli seli seri
smell	sméri	smeri	sméri	smeri	smelie	smeri
spell (take turn)	spéri	spele	spéri			
swell	swéri	sweli sweri	swéli	sweri	zweerie	sweli swelli sweri
tell	téri		telli téri			teli telli teri
hole	ólo	horo	hólo		olo	hollo horro
boil	bóri	boli	bóli bóri	boli	boolie bolie	boli bori

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>
spoil	póri	pori	pori	pori		poli pori
fowl	fówru	fouwloe	fówloe	fouwloe	fouloe	voel
call	kári	kali	káli	kali	kaalie	kali
haul	ári	hali	kári háli hári	hali	halie	hali
bawl	bári	bari	bári	bari	baalie	bari
bull	búru	boeloe	bóeroe-		boeroe-	
full	fúru	foeloe	fóeloe	foeloe	foeloe	fulu
fool	-fúru	-foeroe	fóeroe	-foeroe	-foeroe	-fulu -furu
pull	púru	poeloe	póeloe	poeloe	poeloe	pulu

<u>English</u>	<u>1780</u>	<u>Earlier</u>
peel	pile	
kill	kili	kiry (1777)
kieli		
hole	holle	
boil	boli	
spoil	poli	
fowl		fowlo (1777) vauel (1765F)
call	kalli kalle kale	
full	foele	
fool	voele	
pull	poele	

<u>English</u>	<u>Sara- maccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>
feel	fíi	fili	fíi	fíi	fil
peel	píi	píli piri	píi	píi	pil
steel	tíi	tíri			(flint)
kill	kíi	killi	kíi	kí:	kil
mill	mbíi	mili	míi	míi	mil
tail	-	-	tée	te	
sell	-	selli	séli	seli	
smell	suméi	smēri	sumée	sume	smɛl
swell	sói soópu (...-up)	sweli sweri	soópu (...-up)	soópu (...-up)	swɛl

English	Sara-maccan	1778	Ndjuka	Boni	Krio
boil	bóí	boli	bóli	bóli bo'li	bwɛl
boil (n)	bóí	boli			
spoil	póí póli	poli	póli	poli	pwɛl pwɔjl
fowl	fóu fóo ^s	vool vól	fóo	fóo	fɔl fawɔl
call	káí kaáí (US)	kali	káj	kali	kɔl
bawi	bái	bari/bali	báli	báli	
haul	háí	hali	(h)áli	háli	
full	fúu	fúlu	fúu	fúu	ful
fool	-vúu -fúu ^s	-furu -fure			ful
pull	púu	pulu	púu	púu	pul

The various sources for Sranan contain the following reflexes:

	1765	1777	1780	1783	1798	1850	1855	1856	Modern
$\frac{l}{r}$	$\frac{l}{l}$	l	$\frac{l}{9}$	$\frac{l \sim r}{7}$	$\frac{l}{11}$	$\frac{l}{10}$	$\frac{l \sim r}{4}$	$\frac{l}{13}$	$\frac{l}{l}$
$\frac{l \sim r}{r}$	-	-	-	8	-	-	8	1	-
$\frac{r}{r}$	-	1	-	4	5	6	9	7	21

Under the dates corresponding to the various sources we give the number of cases displaying the three possible reflexes: /r/, /l/ and /r~l/. Directly under the date we indicate what the majority reflex is in each case.

On the basis of the discussion on p.312 we regard Schumann (1783) and Focke (1855) as reliable sources. Schumann was the first Herrnhutter missionary to make a study of Sranan and so was not so liable to be influenced by previous work. Focke was a native speaker. Van Dyk is only approximately dated to 1780, and as we have argued in Smith (1982b), is rather to be dated to 1770 or earlier. His data is clearly more archaic than Schumann (1783), and also more archaic than the material gathered by Stedman in his period in Surinam (1772-1779). For this reason we will only consider these three older sources:

	<u>1780</u>	<u>1783</u>	<u>1855</u>	<u>Modern</u>
<u>l</u>	9	7	4	1
<u>l~r</u>	-	8	8	-
<u>r</u>	-	4	9	21

From this we can clearly see that items with original final /l/ - intervocalic in Surinam - replace this gradually by /r/.

iii) Portuguese /Vl#/

The normal development of this - sparsely evidenced - type is /l/ in Saramaccan, /r/ in Sranan, and /l/ in Ndjuka. All the resulting vowel environments involve nonidentical flanking vowels.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
anel	andélu	aneru	-	-	ring
español	sipajólu		spanjóro	-	Spaniard
barril	balí	bari	barí	balí	barrel
		bali			

I iii) Comparative Notes

There is an unexplained difference in the development of the English and Portuguese items in Saramaccan. In the English words there is deletion of the liquid in all cases, while in the Portuguese words there is retention in the three cases evidenced.

III) English /Vr#/

Here we have two kinds of developments. In the first there is no sign of a liquid. Where we would expect a liquid we have either /a/ or /Ø/. In the second development an original liquid has given /Ø/ in Saramaccan, /r/ in Sranan, and

/l/ between nonidentical vowels and /Ø/ between identical vowels in Ndjuka and Boni.

English	Sranan	1856	1855	1850	1844	1798	1783
deer	día	dia	día	dia		dia	dia
here	dja	dia	d'íá híá iä		deja	deeja déjà	dea
overseer	basjá	basja	basjà basiä	basja		basian -basjan	bassia
shear/ share	seséj siséj	sesèi	seséi			sesej	sesei
hare	ej	hei	hei			hey	hei
care	ke	ke	kè	ke		kee	ke/tje
there	de	de	dè				de
ears	jési	jesi	jési	jesi		jesie	jessi
fire	fája	faja	fája	faja		faya	faija
before	bifósi bifó	bifósi bifó	bifósi bifò	bifossi bifo		biefó bievo	bevo
four	fo	fo	fo		fo	foo	fo
power	pówa						
sour	suwa swa	soewa	sóewa	soewa		soewa	sua soa sowa
flour	frúwa frówa	froa	fróewa				
for	fu	vo	foe		vo	foe	vo va po- (no morro)
poor no more	poo- nómo	po-	pô- nómo	po- nomo			
English	1780	Earlier					
deer		diar (1765F)					
here	ija						
there	de						
before	befossi befou						
for	fo	fo (1777) for (1765N) ver (1718)					
poor		po- (1777)					

<u>English</u>	<u>Saramaccan 1778</u>		<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>
deer	-	-	día díja		díja
here	-	-	já	ja	ja
overseer	basíá		basía		obasía
shear/ share	seséi	seisei sese	séséj	sesei	
hare	-	-	hé	he	
care	-	-			kíja
there	de		de	de	de
ears	jesi	jessi	jési	ješi	(j)es
fire	fája	faija	fája	faja	fája
before	bifó ufó	bevo	bifó		bifó
four	fó	vo	fó	fo	fo
power					pówa páwa
sour	sóa súa	sowa suwa	súa súwa	súa	sówa sáwa
flour	foówa				fláwa
for	fu u	vo	fu fi	fu fi	fó
poor	poo- ^s	po-	poó-		po
no more	nó		námo		nómo

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>
square	kwéri	kweri	kwéri kwéli	kweri		kweri
wear	wéri	weri	wéri	weri		weerieweri werie
more	móro	moro	móro	morro		moro morro
shore	šóro	sjoro	sjóro	sjoroe		sjooro sjorro sorro
sore	sóro	saoro	sóro	soro		sooro sorro
man o' war	manwári		mannoewári			
far	fára	fara	fára	fara		fara varre-

<u>English</u>	<u>1780</u>	<u>Earlier</u>
more	more	moro (1765N)
morre	morre	moore (1718)

English	Sranan	1856	1855	1850	1798	1783	1780	Earlier
star	stári	stari star	starri		starrie	staar		
seven- star	sejbintara sejbistara sisibistara							
tar hear	tára jére	tara jeri	tárra jéri/ jére		jere/ jerrie/ jeri jerree	jeri	jerri	

English	Saramaccan	1778	Ndjuka	Boni	Krio
square	kpéi	kwèri kwéli	kwéli	kweli	
wear more	- móó móón (Hut) móón ^s	- morro	wéj móó		wér mó
shore snore sore	- - -	- - sorro	sóo sinólu sóo	so són	šo so
man 'o war far star	- - -	- - -	fáa sitáli stáli	faa:	manawá sta
seven- star tar hear	sébitaa sebitáa ^s táa/tála jéi	sebentera sebenterra tára jeri	táa jée	je	ta jerí

The items for and deer in the first table with forms indicating final /r/ are probably to be ignored as etymologizing forms.

While there seem to be examples of forms lacking epithetic vowels where we would expect them, this would seem unlikely to be accurate in those two cases as such items otherwise appear later with epithetic vowels. Compare:

English	Sranan	Saramaccan	
star	stári	-	Sranan (1856) <u>star(i)</u> (1783) <u>staar</u>
fowl	fówru	fou	Sr. (1783) <u>vool</u> (1765) <u>vauel</u> Sar. (1778) <u>vool</u> , <u>vó</u>
please	prísi	-	Sr. (1783) <u>plís</u> , <u>prís</u> (1718) <u>ples</u> Sar. (1778) <u>blís</u> , <u>brís(i)</u>

The examples in the first two tables can then be assumed to derive from an English model representing a dialect in which final /r/ had been lost. This model can be tentatively identified with WAPE because of the general "r"-less nature of this - cf. the Krio forms in the table.

The cases in the first two tables involving high vowels or diphthongs show a final /-a/. This corresponds to the schwa which most frequently developed between such segments and a following /r/. Compare Dobson (1957) and Barber (1976), and also the section on vowels. This schwa was often a separate syllable (Dobson, 1957). The development of such items is in fact then rather to be compared with forms illustrating English structure /CVCər/.

The reflexes /ɛ/e/, /ɔ/o/ presumably correspond to English models with the diphthongs [ɛə], [ɔə].

The items hare and share/shear have a problematic vocalic development associated with their r-loss.

English	Sranan	1783	Ndjuka	Boni	Saramaccan	1778
hare	ej	hei	hé	he	-	-
share/ shear	sesej sisej	sesei	séséj	seséí	seséí	seisei sese

The occurrence of the expected reflexes in /e/ in hare in Ndjuka and Boni, and in share/shear in Saramaccan in 1778 as an alternative, strengthens the presumption that these forms in the Surinam creole languages are in fact derived from the putative English models. It still remains necessary to attempt an explanation of the diphthongal developments.

In Cockney Ward (1958) claims that the vowel in hare, etc. is phonetically [eə] or occasionally [e:jə]. However Sivertsen (1960) did not observe the latter sound, as she specifically states. In dialects to the south of London (Sussex and particularly Kent) the reflex [ɛə] is sometimes observed. However, if this forms the model for /ej/ etc. it is unclear why the Surinam forms were not /héja, seséja/, with a final /-a/, since at least the Cockney form [e:jə] observed by Ward clearly suggests disyllabicity.

One conceivable solution might be the following. Ward (1958) discusses the parallel Cockney sequence with a back vowel [o:wə] (used in words like poor, your). Gimson (1970) in referring to the same sequence gives a slightly different notation [ɔ:wə]. Sivertsen (1960), however, refers to variation between [ɔə] and [ɔ^oə], which latter sound is described as "a monosyllabic two-directional vocoid glide, where tongue and lips move briefly through the position of a closer back rounded vocoid before ending in a neutral position; the medial element is shorter and less prominent than the final part." Inasmuch as Sivertsen has carried out the most detailed phonetic analysis of Cockney so far made (Sivertsen, 1960) we choose to favour her interpretation of this sound over that of Gimson or Ward.

Now this back rounded diphthong is clearly - assuming that Ward is correct in referring to a front sound [e:jə] - parallel structurally to this latter sound. Sivertsen describes /eh/ ([eə] or more correctly [ɛə]) and /oh/ ([ɔə] or [ɔ^oə]). What Ward is trying to describe here with [e:jə] would appear to be a parallel two-directional sound to Sivertsen's [ɔ^oə], only a front unrounded sound. If this exists, it should then be [ɛ^eə] or [ɛ'ə]. Note, however, that the question of the existence or non-existence of such a sound becomes more credible in the light of the existence of [ɛə] beside [eə] in words like hair, etc. in Southern England.

We could conclude from the above discussion that phonetic schwa only appeared as Surinam creole /-a/ when it formed a separate syllable in the English model. When it was tautosyllabic as in true diphthongs or triphthongs (i.e. monosyllables) it left no trace. Note that this conclusion is independent of the tentative conclusions reached in the above discussion, as [ɛə] and [ɔə] become, as we have seen, /ɛ-e/ and /ɔ-o/ respectively in the Surinam creoles. Thus we have:

	<u>Model</u>	<u>Surinam Creole</u>
a) <u>bisyllabic</u>	aɪə/əɪə	aja
	auə/ʌuə/(u:ə)	owa/(uwa)
	i:ə	i(j)a
b) <u>monosyllabic</u>	eə	ɛ/e
	ɔə	ɔ/o
	ɛ'ə	ɛj

The thesis that Surinam creole /ej/ etc. derives from an English model incorporating a triphthong, while remaining tentative, gains added strength from the neat way it would fit into the above scheme. As it seems highly likely that Sranan /ej/ is to be related to English hare (personal communication, Jan Voorhoeve) - one of the animals denoted by this term's Dutch name translates as "Surinam Hare" - it is difficult to see what other explanation would work.

In the two tables displaying reflexes that clearly derive from English models with final /r/, we see that there are no examples involving high vowels. We do have Sranan /bíri/ "beer" and /díri/ "dear" but these could equally well be derived from Dutch bier and duur as from the English items (Schumann (1783) gives dúri which suggests a derivation from Dutch duur). For this reason they are not considered here.

II ii) Portuguese /ʎr#/

Portuguese	Sara- 1778 <u>maccan</u>	Sranan	Ndjuka	Gloss
colher	kujéE kujeri	-	-	spoon
flor	foló floro froro fłoli	-	-	flower
mau pagador	- -	mau- pakadóroe (1885)		bad payer
mulher	mujéE mujêre mojêre	-	mújée	woman

Final Portuguese /r/ results in the addition of an epithetic vowel as the 1778 forms, and the one Sranan form indicate. This originally final /r/ is lost everywhere.

The 1778 recording shows that colher:kujeri and mulher:mujêre-mojêre did not originally have the same epithetic vowel. However, there is a tendency for structures /..E..i/ to develop to /..E..E/ (see also Smith (1977a, p. 14), where this is due to a suggestion by J. Voorhoeve). /i/ as an epithetic vowel would not really be expected after /E/ in this case. English items show /E/ after /r/. flor will be dealt with in the section on double liquids.

The only Sranan case - mau pagador: mau-pakadóroe (Focke, 1855) - also has an unexpected epithetic vowel. We would rather have expected /o/ in this case (see further Smith (1977a)).

One problem we have not yet addressed in detail concerns the verbal forms derived from Portuguese in the Surinam creoles. Did these have a final /r/ in the model or not? There are two internal reasons for thinking that this was not the case.

In the first place the few forms of nominal origin retain their final liquid in eighteenth century Saramaccan, and in Sranan of whatever period. It would therefore appear unlikely that verbs should not do the same. Phonological rules applying to a particular syntactic category are not of course unknown, but are very much the exception.

In the second place infinitive forms in /CLVr/ behave just like forms belonging to a variety of other categories which end in Portuguese in /-CLV/. Compare:

<u>Portuguese</u>	<u>Sara, 1778</u>	<u>Saramaccan</u>	<u>Category</u>
sombra	sombra	sómba	N
dentro	dindru	déndu	Adv
outro	otro	óto	Q
magro	mangru	mángu	A
v. dobrar	dubla	dubá	V
etc.			

In an appendix at the end of this section we will go into the question of the source of these verbal forms more deeply.

b) Liquid Clusters (liquid first)

Here we deal with the developments of clusters involving /r/ first, as examples of these are much more numerous, and they are more easily explicable.

1) English /VrC/ → /VC/ (pre-coronal only)

The first set of cases we will examine concerns the treatment of /r/ before

alveolars and palato-alveolars. In most of the relevant cases this /r/ disappears without a trace in Surinam.

English	Sranan	1856	1855	1850	1798	1783	1780	1769	1765	1718
search	sási									
curse	kósi	kosi	kósi			kossi	kosse			
first	fósi	fosi	fósi	fosi		fossi	fossi			
dirt	dóti	doti	dótti	doti	dotie	dotti	dotti			
hurt	áti	hati	hátti	hati		hati				
						hatti				
curtsey	kósi	kosi	kósi			kossi				
fort	fóto	foto	fóto	foto		fotto				forte
Portuguese	potogísi									
short	sjátu	sjatoe	sjátœ siátœ	sjatœ	sjatœ	tschattu				
						tschjatu				
						tzjattu				
mortar	máta	matta-	mátta		matta					
horse	ási	hasi	hássi	hasi	hasie	hasi	hasi	assi		
heart	áti	hatti	hátti	hatti	hatie	hatti	hatti	hatti		
arse	lási	ras-	lási			lasi				
gourd	gódo		gódo	goddo			gollo			

English	Saramaccan	1778	Ndjuka	Boni
curse	kósi	kossi	kósi	koši
burst			bási	
first	fósu	fossu	fósi	foši
dirt	dóti	dotti	dóti	doti
hurt	háti/áti	hati	áti	haati
		hatti		
fort	fóto	fotto	fóto	
Portuguese	potigé			
short	sáti	tschatti	sátu	satu
mortar	máta	matta	máta	
horse	hási ^s		ási	háši
heart	háti/áti	hatti	áti	hati
arse			lási	laš
gourd	gólu	gollu golu goru	godó góo	

These are the only environments in which preconsantal /r/ following a stressed vowel is lost without trace. This restriction to the environment before aveolars and palato-alveolars links this up to the well-known sporadic loss of /r/ preceding /s/,

/s/, /t/ etc. in sixteenth and seventeenth century Standard English. Dobson (1957) quotes such dissimilatory loss for burst, curse, horse, and hurt, among others. Cuss, bust, hoss, and ass are to a greater or lesser degree still present in Standard English. This loss of /r/ is assumed to be older than the later general loss of /r/ in syllable final position that took place in Standard English.

Cockney forms displaying this dissimilatory loss of /r/ occur as "rougher" variants of items showing the normal development of /Vr/ groups. (Sivertsen, 1960). The alternate forms display the compensatory lengthening that accompanied the loss of the liquid.

burst: /bɔ̃st/ ~ /bɔ̃:st/
 cur se: /kɔ̃s/ ~ /kɔ̃:s/
 first: /fɔ̃st/ ~ /fɔ̃:st/
 etc.

As is the case in present Standard English this phenomenon is limited to the environment preceding /s/. Matthews (1938) gives a greater variety of forms from earlier Cockney apart from the usual cuss and fust, etc. Most of these however date from the nineteenth century and are from literary sources, and so are not so reliable.

For the speech of seamen Matthews (1935) gives a large number of examples from the late seventeenth century of the preconsonantal loss of /r/. Very nearly all of these occur before dentals, alveolars, and palato-alveolars, and so can be associated with the earlier dissimilatory loss rather than the later more general loss of /r/. Examples include:

<u>chuch</u>	church	<u>noth</u>	north	<u>oders</u>	orders
<u>machant</u>	merchant	<u>pusser</u>	purser	<u>quatter</u>	quarter
<u>hoss</u>	horse	<u>Dochister</u>	Dorchester		

Hill (1940) is a study of the dissimilatory loss of /r/. He describes the change as being of general distribution. In the lists of examples given by Hill, we find the

following cases from the Home Counties:

burst	[bʌst]	(Essex)	[bʌst]	(Sussex)
church	[tʃʌtʃ]	(Sussex)		
curse	[kʌs]	(Essex)	[kʌs]	(Sussex)
dirt	[dʌt]	(Essex)		
first	[fʌst]	(Essex) (Surrey)		
girl	[gɛl]	(Surrey) (Essex)	[gɛl]	(Essex) (Kent)
word	[wʌd]	(Sussex)		

The vowel qualities displayed in these examples indicate again that at the time of the general loss (by vocalization) of postconsonantal /r/, the liquid had already been lost.

Our conclusion is then that in these cases involving pre-coronal contexts the English model already lacked /r/. In the following section we will see that if /r/ was present in the model it is either preserved (in Sranan), or leaves visible effects (the Bush Negro languages).

III) English /VrC/ (general)

The normal development here is metathesis of the /r/ and the vowel in Sranan, with the exception of those cases where C is /m/ (for this see p. 361) or /k/. In the Bush Negro languages the normal result is a double vowel with concomitant loss of the liquid.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>	<u>1780</u>	<u>older</u>
spermaceti	pramaséti		pramaséti					
burn	bron	bron	bron	bron	bron	bron	bron	brun (1777)
turn	tron	tron	tron	tron	trom	tronn	trom	
work	wróko	wroko worko (obs)	wróko woróko	wroko	wroko	worko wrokko	worke	
court	krútu	kroetoe	króetoe	kroetoe		kruttu kroetoe		
sharp	srápu	srapoe	srápoe	srapoe	slapoe	srabbo		

<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>
burn	boónu	bronn	boón	boon	bɔn
turn	toón	tron	toón		tɔn
work	woóko	wrokko worko	woóko	woko	wok (worok)
court	kuútu	kruttu	kuútu	kuútu	kot
sharp	saápu	srabbo	saápu	saápu	šap

Unlike the development involving the absence of English /r/, the metathesis development is paralleled by forms containing English /l/, as we shall see below. This development is entirely without parallel in the history of Standard English or related forms of English, and must be regarded as a Surinam development.

The third significant development involving preconsantal /r/ is its apparent retention in that position:

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1844</u>	<u>1798</u>	<u>1783</u>
hark	árki	harki	hárki	harki		harkie	harki
mark	márki	marki	márki	marki			marki
shark	sárki	sarki	sárki				sarki
bargain	bárki	barki	bárki				barki
affairs	aférsi	afeersi					

<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>
hark	haíka/aíka	harka	álíki alíki ^s		
mark		marki	maíki	máiki	mak
shark			sáiki		
bargain					bágin

This development is restricted to forms deriving from English items in /-ark/ or /-arg./ at the time of transfer. This is a rather peculiar restriction. /aférsi/ is most likely a borrowing. Its late occurrences make this likely.

In the case of velars, labials, and those cases of alveolars where the English model had a cluster, the Surinam creoles appear to have had a rule which in Sranan has resulted in an apparent metathesis. In actual fact its operation appears to have been more complicated. We will come back to this point later, as the explanation

given here has been disputed, but we will content ourselves with stating it for the moment. Our interpretation of the facts is as follows:

<u>English model</u>	<u>Proto-Sranan</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Saramaccan</u>
CVrC	→ CVrVCV	→ CVrVCV	→ CrVCV	→ CVVCV
		→ CVVCV	→ CVVCV	
		→ CVrCV	→ CVVCV	

Our view of what happened is as follows. All clusters except nasal clusters are broken up in Proto-Sranan. A tonal displacement of high tone (corresponding to English stress) from the first syllable to the second starts - possibly in the alveolar or labial cases - and spreads slowly through the relevant items. Before this process can be completed it ceases to operate, leaving the items in /-ark/ unaffected. In Sranan there is an extensive syncope of unstressed vowels affecting both epenthetic vowels, and etymological vowels like those of sit down /sdon/ and believe /bríbi/ alike. This results in the modern forms in that language. In Ndjuka and Saramaccan liquids are lost under conditions we will presently examine.

Evidence of the first post-Proto-Sranan stage is present in Focke (1855) in the form woróko (a variant of wróko). It is difficult to interpret the modern Ndjuka forms that preserve the liquid as the tonal marking of these forms is variable depending on the source.

We follow Voorhoeve (1961) in his remarks on Schumann (1778): "at present some interconsonantal vowels may be shortened considerably especially when a vowel of the same quality follows, and I think that the translator failed to hear these shortened vowels". Sebba (1982) does not agree with this evaluation of the eighteenth century recordings, regarding them as having represented clusters - in other words he is of the opinion that when the recorders noted clusters, this was in fact what they had heard. We are of the opinion that there are various types of evidence against this stance of Sebba's.

Firstly we can count as evidence for Voorhoeve's position two groups of facts. In the eighteenth century records of Saramaccan, and in various Sranan sources we

find liquid clusters broken up by vowels. We have firstly cases here a CL cluster is broken up by an echo of a neighbouring vowel - normally the post-cluster vowel.

<u>English:</u>	bully-tree	<u>Saramaccan</u>	(1778):	bullitiri
<u>Portuguese:</u>	estrela	"	"	teréja
"	mostrar	"	"	mussula
"	criar	"	"	kiljà
"	embrulhar	"	"	bulja

Then we have cases where an LC cluster is broken up by an echo-vowel, or /i/ or /u/:

<u>English:</u>	silver	<u>Sranan</u>	(1777):	siliba (modern: srĩba)
<u>Portuguese:</u>	alfange	<u>Saramaccan</u>	(1778):	lefangi (modern: ufangi)
"	jardim	"	"	djaralĩ
"	barba	<u>Sranan</u>	(1855):	baroéba (Hall (1948) + bárĩba)

Thirdly we have cases that are comparable in the source language, and in modern Sranan and Saramaccan, but which show differing developments in Schumann (1778). We are of the opinion that this demonstrates that the 1778 forms were also most likely comparable.

<u>Portuguese</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>1778</u>	<u>reconstructed 1778</u>
paliçada	prasára	paazáa	parrasarra	*parasára
carrapato	(krapáta)	kaapátu	krabbatu	*karapátu
jardim		djaaĩ	djaralĩ	*djaralĩ
carvão	-	kaabán	kramaù	*karamáun/karabán

Fourthly we have forms where the 1778 Saramaccan form must be wrong in its recording of a cluster. A clear case would be the following:

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Expected 1778</u>
poraquè	polaké	plakkeh	polakkeh
	pulaké ^s		

Here Schumann's recording of the first part of the word as a cluster pl is clearly erroneous. If it had been correct modern Saramaccan would have been expected to have /*paaké/, with the normal double vowel corresponding to an orthographic eighteenth century cluster.

In Sranan, as Sebba notes, the principal evidence for broken-up liquid clusters comes from the eighteenth century sources, in particular Van Dyk (1780).

<u>English</u>	<u>Sranan</u>	<u>1783</u>	<u>1780</u>	<u>1777</u>
(?)hundred ugly	óndro ógri	hondro ougri	hondere ogeri	
<u>African</u> (ochro)	ókro	okro		ocro okero
adru (Ewe)	adrú	adru	1855 adróe adoeròe	
<u>English</u> cookroom	kúkru	koekroe	1780 koekrom koekeroe	
shangree	sángri			sangaree

In every case here we have a medial cluster. And there is evidence from Sranan that unstressed vowels in the environment between consonants and liquids were retained longest in the medial position.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>	<u>1780</u>
master	másra	masra	máss'ra mássera	masra		massra	mastra
over	ábra	abra	ábra	abra	abra	ábra	abere
cover	kíbri	kibri	kíbri	kibri	kiebrie	kibri	kiepere
remember	mémre	memre	mémre	memre	memree	membre	memere
together	tigédre		mémbre tigédre				tegedere

<u>English</u>	<u>1777</u>	<u>1765</u>
master	masera	masra
	massera	
cover	kibry-	
together	togeddere	

Besides the presumptive brevity of such cluster-epenthetic vowels, the recorders' knowledge of the source languages conceivably played a role. It would seem unlikely to be due to chance that virtually the only examples of initial clusters in stressed syllables in the source languages that are given in epenthesized form in Schumann (1778) are from Portuguese, and not from the presumably better-known Dutch or English. Where we do get epenthesized clusters in English-derived items it is virtually only in the less prominent ambisyllabic post-stress environment.

It also seems to us that the most natural explanation of the patterns:

<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>
CLV..	CrV..	CVV..	CVV..	CVV..
CVL	CVrV	CVV	CV(1)V	CV(1)V
Cárk	Cárki	Ca(l)íki	Ca(l)íki	Cáiki

is to assume that the original Proto-Sranan pattern involved epenthesized clusters. To assume, as Sebba (1982) does, that the original pattern involved non-epenthesized clusters reduces the great similarity of the Eastern and Western Bush Negro languages to coincidence. This follows from the connected conclusion that the clusters of Schumann (1778) are indeed clusters.

At this stage it is relevant to ask why clusters were epenthesized. If we restrict ourselves to a consideration of the two most important sources of African forms in the Surinam creoles - Gbe and Kikongo - then we find that the first of these now has liquid clusters, while the second does not. If we examine the source of Dutch slaves between the 1640s and 1700 (Price, 1975) we find that two-thirds came from the ports of the Gbe-speaking Slave Coast, and one-third came from the Congo and Angolan coast ports. While in the second case it seems most likely that the

majority were Kikongo (or Kimbundu) as the tribal territories of these extend a long way inland, in the first case we cannot assume that all were Gbe, although the linguistic and cultural evidence would seem to indicate a preponderance of this group. According to Price (1975) a significant number of the Slave Coast slaves came from wars between the Gbe and their eastern neighbours, especially the Yoruba. These latter would, according to Goodman (1986), probably have spoken at least some Gbe (learned in the slave depots).

Yoruba is another language not allowing initial clusters. So we have at least one language - Gbe - represented among the probable earliest slaves in Surinam, that does admit liquid clusters, at least in its modern form. We have however other groups - Kikongo (and Kimbundu) and Yoruba - whose languages do not admit such clusters. The most likely result, in a contact-language developed due to the confrontation between this mixture of African groups, and European languages possessing clusters would be the epenthesis of liquid clusters. Although many slaves - those of Gbe linguistic background - might have no problems producing these clusters (although Gbe has only one liquid - either /l/ or /r/ - in such structures), all slaves would be able to pronounce CVLV.. structures.

However there are still some significant problems with our assumed analysis. Adaptations of Dutch words involving the structure CVLC appear to involve epenthesis of /i/ or /u/ depending on the phonological environment:

<u>Dutch</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Kwinti</u>
zilver	sórf(r)u	sólúfu sóófu	solúfu	sólufu	
vliegveld		fiigíféíti fiigífelíti ^s			
melk	mérki	méiki melíki (Hut) méiki	melíki méíki ^s		meeki
berg			béligi béligi ^s elufu		béegi
elf	érfu	elufu-			élúfu
werk	wérki	wéiki		wéiki	
kerk	kérki	kéiki	kéifki ^s	kéiki	
verf	férfi		felffi ^s	féifi	

<u>Dutch</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Kwinti</u>
tergen	térgi	teegi-teegi téégi ^s téligi ^s	teligi ^s	teligi	
waard	wárti	wáiti			
kalk	kárki	káiki	káiki ^s		
half			alufu		
kwartje		kwáiki	kwáiki		
hark					alíki
wolk	wórku	wóluku wóluku	wólúfu wólúku	holufu	wólúku
dambord	dambórtu	dambóútu dambóótu ^s			
sport			sipóútu	sipoutu	
vork	fórku		foluku fólúku ^s		fólúku
gordijn	gardén	gaidé		gaiden	
soort	sórtu	sóóti	soutu	soutu	
kurk	kórku	kóluku	kolúku ^s		kolúku
twaalf	twárfu	tuálúfu tuwalúfu (Hut) tualúfu ^s	twálúfu	twálufu-	twálúfu

Note that here we cannot claim that all these /i/'s and /u/'s are the result of adaptation to the existent patterns of whatever stage the relevant items entered the various languages. Dutch itself has a rule - not applying in all registers - inserting a schwa to break up such clusters. This does not however apply to the case of liquids followed by coronal obstruents. We have examples of such cases here: vliegveid, waard, kwartje (compare however substandard kwarretje), dambord, sport, gordijn, soort. The development of epenthetic vowels in this case must be a purely Surinam creole feature. Examination of the data shows that the results of epenthesis in this case do not significantly differ from what we find in the other cases where Dutch has epenthesis (in certain styles). Both types of epenthesis result in the following types of structure:

- i) if the Dutch stressed vowel is interpreted as a front vowel, then the epenthetic vowel is /i/ (the epithetic vowel too)
- ii) if the Dutch stressed vowel is interpreted as a round vowel, then the epenthetic vowel is /u/ (the epithetic vowel too)
- iii) if the Dutch stressed vowel is interpreted as /a/, then the

epenthetic vowel depends on the second consonant in the cluster. If this is nonlabial then epenthetic and epithetic vowels are /i/; if it is labial then epenthetic and epithetic vowels are /u/.

This obviously bears a strong resemblance to the results of epithesis with Dutch items ending on a single segment, although these display more variability.

In the table we can find three types of reflex in the Bush Negro languages:

CV ₁ LV _{ep} CV _{ep} :	Sar.	sólúfu; melíki
CV ₁ V _{ep} CV _{ep} :	Sar.	méiki; dambóutu
CV ₁ V ₁ CV _{ep} :	Sar.	sóófu; dambóótu

In cases of the third type we appear to have an echo-epenthetic vowel. This occurs in six cases: silver, melk, berg, tergen, dambord, and soort. As we have no examples of the form /CV₁LV₁CV_{ep}/ it seems reasonable to assume a development:

$$CV_1LV_{ep}CV_{ep} > CV_1V_{ep}CV_{ep} > CV_1V_1CV_{ep}$$

Now clearly our first group of words on p. 341 for which we have assumed the development (cf. p.343):

$$CV_1rV_1CV_{ep} > CV_1rV_1CV_{ep} > CV_1V_1CV_{ep}$$

forms at first sight a problem.

The most obvious way of getting round this problem is to claim the first of these two developments (p. 348) represents a later treatment of adopted items than the treatment just illustrated. This is not an isolated fact. We have seen in Section One that Dutch items may be subject to different modifications from English ones.

The reason why this is not an adequate explanation of the situation lies in the examples at the bottom of p. 342. These forms show that where the (pseudo-)metathesis did not apply in English-based items we do not get "English"-type

epenthesis but "Dutch"-type epenthesis. This requires to be explained. The weakest possible explanation would be to claim that these items were borrowed later from English. Apart from the fact that this group is definable in phonological terms so that such an explanation makes a very weak impression, it is not likely that there was any major influence from English between the seventeenth century and modern times. The two brief periods of British domination round the turn of the eighteenth and nineteenth centuries were really too brief to involve any influence on the creole languages although a number of English items do appear first in Wullschlägel (1856). In any case for the items at issue the evidence, directly or indirectly, predates these periods.

Note that a Sebba-type explanation would have no problem in explaining these different developments:

(sharp):	sárpú	›	srápu	›	saápu	(Ndjuka)
(mark):	márki	›	máriki	›	máiki	(Ndjuka)
						(we ignore the incorrect tone in the second case)

Apart from the evidence we have already examined against this proposal by Sebba (1982), there is another very significant piece of evidence we have ignored up till now. This concerns the development of the item work.

Let us repeat the forms given on p. 341 illustrating the history of the development of this item.

<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>	<u>1780</u>	<u>Sara-</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
							<u>maccan</u>			
wróko	wroko	wróko	wroko	wroko	worko	worke	woóko	wrokko	woóko	woko
	worko	woróko		wrokko			worko			
	(obs)									

We do not have to trouble ourselves too much about the form worko in 1856. We have seen other evidence that this source is influenced by Schumann (1783), and this seems to be another case of this. In addition this form is given explicitly as

obsolete. More important is the testimony of Schumann (1783) itself and van Dyk (c. 1780). This forms clear evidence that the normal form in Sranan was /wórk/or at least something interpreted as this at the end of the eighteenth century. The interpretation of Schumann (1778) for Saramaccan we have assumed means that we have to interpret his wrokko and worko as /woróko/ and /wóroko/ respectively. This has a number of implications. Firstly if we compare the Sranan forms for 1783 and 1798 - worko and wroko - we see an apparent metathesis. Our conclusion from all these forms would be that the tone-shift rule responsible for the forms given on pp. 341/342 was still spreading through the lexica of the Surinam creole languages towards the end of the eighteenth century.

Now this form - although interesting - would not be of such significance if the cluster involved was not /rk/. This is of course precisely the cluster involved in hark, mark, and shark. In other words we can see that we have caught the end of the spread of the tone-shift rule responsible for the pseudo-metathesis.

English	Proto Sranan	Proto Sranan'	1780's	1855	Modern
sharp, etc.	sárapu	sarápu	s(a)rápu	srápu	srápu
work	wóroko	wóroko	wór(o)ko	w(o)róko	wróko
mark, etc.	máriki	máriki	mar(i)ki	márki	márki

Note that the tone-shift rule nothing to do with the quality of the epenthetic vowel. We can see this from the evidence of the Bush Negro languages where in some /-ark/ words the high tone is attached to the epenthetic vowel and not to the vowel corresponding to the original stressed vowel of the English model.

Note that the variations of tone among these forms supply us with a clue about the progress of the tone-shift rule.

CVlíki > CVlíki > CVlíki > CVíki

In other words if these various tone recordings are accurate, then they seem to indicate that the tone-shift rule is still alive in the Bush Negro languages, and that

the high tone does not directly shift from the one syllable to the other, but that there is an intermediate stage at which the high tone is associated with both syllables.



If this is correct, that is, if these various tone recordings are accurate, and if this is to be associated with the same process responsible for turning work into wróko, then we have discovered evidence bearing on the questions whether Proto-Sranan was a tone language or a stress language. We ignore for the moment the question of African items which obviously bore tones - we will come back to this later. Obviously, since stress is a relative property, it is not possible to have two (main)-stressed syllables in a word, so that intermediate representations like */*Cv́líki/* cannot exist in a stress language. Note that there is no question of any of the Surinam Creoles ever having been a "multiple stress system" in the sense of Pike (1974). The question of secondary stress does not arise, as we would not expect a secondary stress to arise in a syllable next to a main stress in a syllable-timed language. In a mora-timed language it is conceivable that after a long vowel with an accent on the first mora we could have an accent on the next vowel mora in the following syllable. But note that Proto-Sranan could not have been a mora-timed language since it did not possess long vowels. We know this since the distinction in English between long and short vowels is neutralized everywhere in the Surinam creoles as well as in the MSL vocabulary not deriving from ordinary Jamaican Creole.

Note that the variation in the Dutch-derived items on pp. 347/348 presumably has the same explanation, although the manner in which the various items develop in the various languages may vary. The oldest items may go back to a period before the creation of Saramaccan, though this is not necessarily so. Other items may represent loans into Saramaccan from Sranan. The most modern accretions probably represent direct loans from Dutch. Once interpreted in terms of the morpheme structure rules of the various languages they will be capable of undergoing any living processes of those languages, of course.

We still have to present an explanation for the difference in epenthetic vowels between the cases such as burn Proto-Sranan /*bóron/, work Proto-Sranan /*wóroko/, etc. and hark Proto-Sranan /*háriki/, shark Proto-Sranan /*ʒáriki/, etc.

An explanation divorcing the developments in hark, etc. from the later developments in Dutch loans (as kalk Saramaccan /kálíki/), and accounting for the epenthetic vowel in the same terms as those lying behind the epithetic vowel faces severe problems. In the first place, we have counterexamples like Saramaccan /saápu/ instead of /*saúpu/. In the second place, hark appears in Saramaccan as /h)áika/ not /*(h)aáka/ or /*(h)aíki/. In 1778 this was harka, presumably representing /hárika/.

Our explanation is in fact rather tame - it is that between /r/ and /k/ following /a/ the epenthetic vowel that developed was /i/. Note that the relationship that holds at present - Sranan /C'VrCV/: Bush Negro /C'V(l)uCV/: : Sranan/Cr'V_iCV/: Bush Negro /CV_iV_iCV/ - which suggests the unity of the first group in phonological development with the Dutch loans, did not hold at earlier periods in the history of the Surinam creoles, as various eighteenth and nineteenth century recordings of work indicate. There was a spelling worko but there is no evidence in the Bush Negro languages to indicate that this should be interpreted as /wóruko/ rather than /wóroko/. The very fact that this form has the epithetic vowel /o/ in fact indicates that the Sranan form cannot be interpreted as containing epenthetic /u/ as parallel forms also occur with epithetic /u/, cf. kurk Sranan /kórku/, Saramaccan /kóluku/, wolk Sranan /wóрку/, Saramaccan /wóluku/. The recording worko in Sranan is furthermore related in terms of accent-shift to the 1855 form woróko (Focke). This tends to support the idea that the apparent resemblance between the developments of English hark, etc. and the later Dutch loans is coincidental.

III) Portuguese /VrC/

The normal development of these forms includes the loss of the liquid and a concomitant double vowel in Saramaccan, metathesis of the vowel and liquid in Sranan, and loss of the liquid in Ndjuka.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
esburger	buuká	brukà	-	-	peel
dormir	duumí	drummi	-	-	sleep
ferver	fɛɛ bɛ	frebbèh	-	-	boil
marcar	maaká	marka	-	-	mark
partir	paatí	plati	pratí	paatí	divide
		prati			
apertar	peetá	pretta	-	-	tighten
torcer	toosá	trussa	-	-	twist
tornar	tooná	tronna	-	-	return
barba	-	-	bárba	báiba	beard
carvão	kaabán (Lo) koobán (Li)	kramat	-	-	charcoal
comborça	kambósa	gambossa	kabósa	-	co-wife
fermentu	-	-	frementu (1783 Dju)	-	yeast
garganta	gangáa	grangánda	-	-	neck
jardim	djaai	djarai	-	-	garden
lagartixa	-	-	lagadísja lagadísja	-	lizard
marca	maaka	marka	-	-	mark
parteira	-	-	plattiri plattérin (1783 Dju)	-	midwife
sardinha	saadián saadí ^s	-	-	-	sardine
torto	tɔɔ	trotto	-	-	twisted

The only example deserving of comment is /báiba/ in Ndjuka. This word, which is also recorded in older varieties of Sranan as /bariba/ and /baruba/, has Dutch-style epenthesis rather than English-style epenthesis. If it had behaved as expected we would have had /*baaba/. However this item is bizarre for another reason. The normal distribution of English and Portuguese items, where both are extant, is as follows:

<u>Saramaccan</u>	<u>Sranan</u>	<u>Ndjuka</u>
Portuguese	English	English

Here we find precisely the opposite case (Saramaccan has /bía/ beard). This suggests that barba was probably borrowed into Sranan from Portuguese after the formation of the Saramaccan tribe. This would explain its conformity to Dutch style patterns of vowel epenthesis.

IIIi) English /VIC/

The normal development here can be assumed to be identical to that in section II i). This is metathesis with /r/ in Sranan, and /o/ in Saramaccan, with doubled vowel, and the same in Ndjuka and Boni.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>	<u>1780</u>	<u>Earlier</u>
self	sréfi	srefi	sréfi	srefi	srefie	srefi	sleffi	
			seréfi		srevie		zlifi	
help	jépi	helpi	hépi	helpi	reppie	helpi	helpi	
	lépi	jrepi	herépi		repie			
		jerepi	jerépi					

<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>
self	seéi	srepi	seéfi	seéfi	sef
	seépi				
help	heépi		jeépi		εp
	heépi ^s				

That these items, or at least those realizations exhibiting pseudo-metathesis, are of English origin is suggested by the fact that no certain Dutch item exhibits this feature in the stressed syllable.

A most illuminating example of this type is the following:

<u>English</u>	<u>Sranan</u>	<u>1777</u>	<u>Ndjuka</u>
silverbait	sríba	siliba	siíba

The model for the Proto-Sranan form has obviously been silver which has been interpreted as /*síliba/, with the accent interpreted as a high tone on the first

syllable, in our vision of things. Note that this example would be inexplicable in Sebba (1982)'s theory. This assumes a metathesis, which would in this example presumably involve a change from /*síba/ to /*síba/ (this would later change to /sríba/).

Note that help has undergone simplification of the rare and marked initial cluster /jr/. That simplification has taken place in reppie "help" (1798) indicates that syncope of the epenthetic vowels breaking up English clusters had taken place at least in some cases in Sranan by that date. A form like siliba (1777) suggests that we must date this syncope to around 1790.

The simplification of /jr/ took place in two ways:

$$\begin{array}{l} /jr/ \rightarrow /r/ \ (\rightarrow /l/) \\ \quad \quad \quad \hookrightarrow /j/ \end{array}$$

The fact that jrepi is only found in 1856, while reppie is found in 1798, need not trouble us as we have discussed the fact above that the source for 1856 is archaizing.

IIIii) Portuguese /VIC/

The normal development of this is /Ø/ in Saramaccan.

Portuguese	Saramaccan	1778	Sranan	Ndjuka	Gloss
faltar	faatá	flattà	-	-	be lacking
amolgar	muungá	mungà	-	-	bruise
salgar	saagá	-	-	-	salt
alfange	ufangi	lefangi	-	-	machete
alfinête	finéta	fineti	-	-	pin
gueira	geéia	-	-	-	gill
	geéja ^s				
pólvora	poóba	proba	-	-	powder

In these examples where we assume the breaking-up of the clusters (in nearly all

cases) by epenthetic vowels identical in quality to the vowel on the liquid side of the cluster, deletion of the liquid follows. A number of cases are however worthy of commentary. The cases of flor, guelra, and pólvora will be discussed shortly. Another interesting case is amolgar. The Saramaccan forms for this item from the eighteenth and twentieth centuries are difficult to reconcile. The 1778 forms suggests a Surinam interpretation of the Portuguese model of /*mungá/ with the /l/ of the model reinterpreted as a nasal under the influence of the initial /m/. The modern Saramaccan form on the other hand suggests an earlier /*mulungá/ which would probably have meant an eighteenth century orthographic representation as *muingà or *mlungà. A possible alternative explanation of the modern form would be an eighteenth century form /*muniugá/ (ie. [mũlugá]). The loss of the liquid and the collapse of the first two vowels into a single long vowel would result in the extension of the nasality over the whole syllable - as nasal-nonnasal diphthongs are forbidden in the Surinam creole languages. It is quite possible that the eighteenth and twentieth century recordings represent different dialects.

Another form requiring explanation is alfange. If we assume that initial al-behaves like es- (see the section on /s/) then we might expect the liquid to be preserved, but the vowel to be lost, as the vowel following the next consonant is accented/high-toned. This would give us /*lVfáŋgi/. The quality of the epenthetic vowel - possibly determined by the following consonant - would presumably be either /i/ or /u/. Compare the discussion of epenthetic vowels on pp. 348/349. That labial consonants did not always trigger off a rounded epenthetic vowel is demonstrated by the varied epenthetic vowels occurring in the word barba "beard":

<u>Sranan (1855)</u>	<u>Ndjuka</u>	<u>Boni</u>
baroéba	báiba baíba ^s	báiba
/u/	/i/	/i/

The two early recordings of alfange:

<u>Schumann (1778)</u>	<u>Wietz (1805)</u>
lefangi	lefanje

are ambiguous as regards the choice between /i/ and /u/. The fact that the modern form /ufangi/ has an initial /u/ does not necessarily exclude an earlier form /*lifangi/, in view of such cases as kibenge (1778) > /tjubɛngɛ/. The loss of the initial /l/ is unexpected, but not unparalleled in view of lukwangi (1778) > /lukpáŋgi/ (Lombé dialect); /ukpáŋgi/ (Goló dialect).

In contrast to alfange, which has the accent on the syllable beginning with the consonant after al-, alfinête "pin" has the accent one syllable further to the right. We expect al- to disappear here (see the discussion on es- in the section on s), which is what happens.

IV) English /Vid/

We have already referred in the section on /d/ to the fact that items with the final cluster /ld/ lose the /d/, or rather that the English model in the relevant words apparently did not possess the /d/. We still require however to explain the developments preceding the liquid in a number of these words.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>	<u>1780</u>	<u>Earlier</u>
field	fíri	firi	fíli fíri	firi	vielie		fiele	
hold	óri	holi	hóli hóri	holi	holie	holi		
old	ówru	ouroe	óuwroe	ouroe	ouloe	oure	ouwere	oule (1765F)
cold	kówru	kouroe	kúroe	kouroe	ouwloe ouwroe	koulou	kouloe	koure

<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>
hold	hói	holi	hóli óli	hóli	ol
old	awoo	oure			ol/wol
cold	-	-	kóo	kóo	kol

We have studied the latter two items in detail in Smith (1982c). In that article we

derived the items old and cold from models with diphthongs, well-known from dialectal English. According to Dobson (1957) this was a common variant in seventeenth century London English. Matthews (1938) also gives examples, quoting for example the spellings owide "old", towid "told", sowid "sold", etc. Matthews states also that this pronunciation occurs in modern Cockney, but it does not seem to occur in Sivertsen (1960). It must also be stated that Matthews (1935) in discussing the evidence for seamen's pronunciation states in reference to examples such as:

ould "old" 1684 cowld "cold" 1691 hould "hold" 1701

that these spellings are equivocal between one or other variant of the modern standard pronunciation of these words, and the above-mentioned dialect pronunciation. Why he interprets these spellings differently in the two cases is not clear.

It is reasonably clear that the English model in these items must have been [kʌʊ] "cold" and [ʌʊ] "old". Compare the parallel development to these words of Sranan /fɔwru/ "fowl". Such models would be susceptible to two adjustments to render them well-formed in terms of Proto-Sranan phonotactics. Firstly the addition of an epithetic vowel; and secondly the insertion of an epenthetic vowel to break up the cluster /w/. The evidence for a Proto-Sranan structure /...ʌwulu/ runs more or less parallel to that for epenthetic vowels in what are now clusters in Sranan.

English	Sranan	1855	1798	1783	1780
"owld"	ɔwru	ɔuwroe	ouloe ouwloe ouwroe	oure	ouwere
cover	kíbri	kíbri	kiebrie	kibri	kiepere
remember	mémre	mémbre mémre	memree	membre	memere
after	ábra	ábra	abra	attara	attere
over	ábra	ábra	abra	ábra	abere

Van Dyk (c. 1780) in particular is fairly consistent in recording these epenthetic vowels, although his notation of what are unaccented vowels does not provide information on their quality. Later sources normally have syncope of this vowel.

V) English /Vrd/

The normal development of this has already been examined in connection with the developments of English /d/. We shall not repeat all the evidence here, but content ourselves with giving one typical example:

<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Krio</u>
garden	djári	djái	djáli	gádin

It is unclear whether the /d/ has been lost leaving only the liquid, or whether the liquid had been lost by the dissimilation process discussed in Section I with subsequent liquefaction of the /d/ to a liquid.

The only example that is not opaque is gourd - /gódo/ in Sranan - where we seem to have a case of the dissimilatory loss of /r/ before /d/. This rule seems in fact to be of infrequent occurrence with /d/ in English. The old-fashioned m'lud "my lord" is one of the rare cases of its occurrence.

VI) Portuguese /Vld/ and /Vrd/

There are so few cases of this, displaying such varied developments that it makes little sense to refer to any as the normal development.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
toldar	tolá		-	-	mar
jardim	djaai'	djarali'	-	-	garden
sardinha	saadián		-	-	sardine
	saadi ^s				

toldar exhibits loss of /d/, reminiscent of what happens with English items with the same structure. That this is by no means necessary is illustrated by jardim, Saramaccan /*djaradi/ > /djarali/ > /djaai'/, with epenthesis and liquefaction. sardinha, Saramaccan /*saradián/, displays epenthesis but not liquefaction, on the other hand.

VII) English /VrN/

Here we cannot strictly characterize a particular development as "normal". The two cases deriving from English words in final /-rm/ display pseudometathesis. Exceptionally in terms of Sranan developments they do not exhibit syncope of the first syllable to a /Cr/ cluster. In Saramaccan the liquid is preserved - unusually - although this may merely indicate that the word concerned is a recent loan from Sranan. In Ndjuka and Boni the intervocalic liquid has been lost, between identical vowels in Ndjuka, and between nonidentical vowels in Boni where the original stressed vowel of the English form has been replaced by /u/, following the initial /w/. In burn and turn (see pp. 341/342) normal pseudometathesis has occurred.

In the other two cases pseudometathesis has not taken place. In corn the liquid is preserved in all languages, as /r/ in Sranan, and as /l/ in the other three languages. iron is only evidenced in Ndjuka and Boni. The presence of a liquid in this item originally is confirmed by the double /e/ in Ndjuka.

English	Sranan	1856	1855	1850	1844	1798	1783	older
worm	worón	worom	woróm				worm	
warm	warán	wáram	warám		waran	waran	warm	
corn	káru	karo	kâroe	karóe		kaaroe	karo	cara- (1777)
			karoe					

Eng-lish	Sara-maccan	1778	Ndjuka	Boni	Krio	Jamaican	Bahamian	Gullah
worm	-wolón		woón	wuon	wóróm rɔ́róm	wórom wom	wóram vójam	βΛΓΑ m
warm	-		waán	wuan	wam	waam		βΛ m
corn	kálu	káro	kálu	kálu	kɔ́n	kaan		
iron	-	-	ájee	aje	ájɛn	hájan		ájən ajn

The main reason for assigning the first two items to English models, and not to Dutch worm/wurm [vɔ́rəm/vʏ́rəm] and warm [vʌ́rəm], is the parallel development in the first item in Krio. Assuming this interpretation to be correct, both the first two items and the last two must develop from forms where a /ə/-

glide had developed between liquid and nasal in the English model. Evidence for such a development, which is widespread in English dialects, is found for early modern Standard English as early as 1580 (there are also ME spellings indicating the same phenomenon) (Dobson, 1957) in words such as storm, turn, etc.

In the light of our conclusions regarding the pseudometathesis items, we can set out what would be predicted for these forms. Let us illustrate the two types with the words warm and corn. Our prediction would involve the following stages in Sranan:

	I	II	III	IV	
<u>warm</u>	wáram	wáran	wárán	warán	wrán
<u>corn</u>	kárun	kárun	kárún	karún	krún

We have not indicated the first stage with a Roman numeral as the change between this and the next stage concerns the neutralization of final nasals and is nothing to do with the question at issue. warm has in fact only developed as far as stage III, unlike most items in Sranan. corn has developed to /káru/, which resembles stage I most of all. Note that iron (Proto-Sranan /*ájeren/) would not be subject to pseudometathesis as it does not conform to the pattern CVLVC.

Let us examine the warm type of development first. Why has this item failed to develop to /*wran/? Let us examine nineteenth century forms for which a stage III development is evidenced.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1844</u>	<u>Gloss</u>
warm	warán	wáram warm	wárám	waran	-
worm	worón	worom	woróm		-
work	wróko	wroko worko (obs)	wróko woróko	wrokko	-
help	jépi lépi	helpi jrepi	hépi herépi	reppi	-
self	sréfi	srefi	sréfi seréfi	srefi	-
<u>Carib</u> jo:rokáy	jórka	jorka jroka	jorokà		ghost, "jorka"

We notice immediately that five out of these six forms would involve awkward clusters of semivowel plus liquid if stage IV forms were formed in every case. These would be /wr/ in the first three cases, and /hl, hr, jr/ in variants of the item help and /jr/ in the case of jorka. In this connection note that /wróko/ is the only item involving such a cluster in present Sranan, apart from the modern Dutch loan /wrak/. The clusters in the case of help have been simplified to /j,l/ - i.e. one of the two elements in the cluster has simply been dropped. In the case of /jórka/ the stage IV form evidenced in 1856 has been lost. In all these items all the Bush Negro languages have derivatives of stage III reflexes (i.e. with loss of the liquid).

Our conclusion in this case is then that a cluster of semivowel and a liquid was felt to be difficult, and that it was avoided or simplified in four out of the five cases quoted here. That the form for work ended up as /wróko/ and Wullschlägel (1856) gives jroka and jrepi means that such clusters are/were not impossible in Sranan, only highly marked. This markedness or difficulty was sufficient to inhibit the working of the rule deleting unstressed vowels in other cases which would normally have resulted in /*wran/ and /*wron/.

Why did the rule of loss of /n/ referred to on p. 243 not apply in these two cases? This would have resulted presumably in forms /*wára/ and /*wóro/. This in turn would have inhibited pseudo-metathesis as it appears that minimally /CVCVC/ is required for the operation of this rule. tother is the only form that looks as if pseudometathesis has applied with /CVCVC/ i.e. /tará > tra/.

The answer to this question is presumably that /n/-loss and pseudo-metathesis were operating at the same period and interfered with each other. warm and worm were subject to pseudo-metathesis, thus bleeding /n/-loss. corn and iron (Proto-Sranan /*kárun/ and /*ájeren/: the quality of the low-toned vowels is unexplained) were on the other hand subject to /n/-loss, which removed corn from the sphere of pseudo-metathesis. Note that we cannot simply appeal to the fact of final /n/'s indicating (sometimes) nasality in the preceding vowel. There is clear evidence that these represented final nasals at least optionally, as in fact is the case today.

We are now in a position to explain the difference in behaviour in a group of forms, discussed on p. 314.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1844</u>	<u>1798</u>	<u>1783</u>	<u>Krio</u>
shilling	sren	sren	sren sring	sreen	sreen	shelling sjelling	
herring	elén	hering hereng	herén hering		heren		jerín

Both shilling and herring fulfill the conditions for the application of pseudo-metathesis. shilling is presumably Proto-Sranan /*šéleŋ/ (see p. 291) on the question of the final nasal), while herring is presumably /*héreŋ/. We would forecast the following developments of these items (ignoring the details of the final nasal).

šélen > šélén > šelén > srén
 héren > hérén > herén > hrén > (lén)

Here we have another example of the failure of a semivowel-liquid cluster to develop. /herén/ (evidenced in 1855) fails to lose its first vowel because a marked cluster would develop. Later the /h/ is lost, and neutralization of liquids results in /elén/.

We have of course not provided an explanation of why a semivowel-liquid cluster did develop, and remained in /wróko/. We confess that we are not able to resolve this problem.

c) Liquid Clusters (liquid second)

ii) English /Cl/

The normal development here is to /t/ in Sranan and /θ/ with vowel doubling in Saramaccan, Ndjuka and Boni.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>	<u>1780</u>	<u>Earlier</u>
sleep	sríbi	slibi	sííbi	slibi	slebie	slibi	slibi	slipi (1765) slepe (1718)
please	prísi	pliesi	sríbi prísi	pliesi	pliesie	prís prís		ples (1718)
clean	krin	krin krini	krien kríni	krin krini	krien	krin krini	krien	
fling play	fríngi prej	fringi pre	fríngi plei	fringi pre	pley	fringi pre preh pleti	pree	play (1777)
plate	préti	pleti	préti pleti	pleti	pletie	pleti	pletti	pleti (1769)
place	prési	pleisi	prési plési	pleisi	presie pleesie	pleisi	piessi	pleisi/pleisi (1765N) plesje/plesse ples (1718) bresse (1777)
bless	brési	blesi	brési	blesi	blesie	blesi		
fly (v)	frej	flei	flei frei	flei	fley	flei frei		
fly (n)	frejfréj -fej	flei	flei frei	frei		flei frei		-fly (1777) vly (1765F)
close(by)	kros-	klosi-	krósi-	klosi-	klosie- krosie-	klossi- krossi-		
blind	bréni	blini	blínni brínni	blini				
blow	bro	blo	bro blo	bro blo	blo(o)	bro blo		
clothes	krósi	klosi	krósi klósi	klosi	klosie kloosie	klossi krossi	klossi	
flour	frúwa frówa	froá	fróewa					
black	bláka	blaka	brákka blákka	blaka	blaka	blakka brakka	blake blakke	blaka-(1765F)

<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>
sleep	-	-	siíbi	siibi	slip
please	-	brís blís brísi		piíši	
clean			kiín	kíin	klin
fling	-	fringi	fiíngi		
play	peé	pre	peé	peé	ple
plate	-	-	peéti		
place	-		peési	peéši	
bless	-		beési		
fly (v)	-		feé	fai	flaj
fly (n)	-feéi		feetée	-fée	flaj

English	Saramaccan	1778	Ndjuka	Boni	Krio
close (by)	-	klossi- krossu-	koúsu-		
blind	-		beéndi	béeni	blɛn
blow	bɔɔ	bro blo	boó	boo	blo
clothes	koósu	krossu klossu	koósi	koóši	kɔs
flour	foówa				fláwa
black	baáka	blakka brakka	baáka	baáka	blak

To reach a better overview of the Sranan developments it is useful to examine the data from each source quantitatively in terms of the two possible reflexes - /r/ and /l/.

	Modern	1856	1855	1850	1798	1783	1780	1777	Earlier
/l/	1	12	1	10	10	3	5	2	6
/l-r/	-	-	9	1	2	8	-	-	-
/r/	15	4	6	4	1	4	1	1	-

We can interpret this data as follows. Initially the reflex of English /l/ in clusters was /l/. Gradually towards the end of the eighteenth century an alternative with /r/ developed. The sources for 1798, 1850 and 1856 have by and large /l/, which may represent a combination of etymologization and an attempt at standardization. Focke (1855), as we have seen, a more reliable guide to mid-nineteenth century Sranan, shows us however that the situation was tending towards the /r/ reflex, which is of course supported by the present-day development, where we have virtually exclusively /r/.

In the other languages we cannot tell to what extent a development to /r/ existed. In 1778 Saramaccan has basically a situation of variability between /l/ and /r/. In the modern language, as in Ndjuka and Boni, the liquid is represented by zero.

A comparison with Sranan /Cr/-clusters shows a gradual tendency to neutralization. These latter have virtually universally /r/ in Sranan.

iii) Portuguese /Cl/

The normal development here is /θ/ with **vowel doubling** in Saramaccan.

Portuguese	Saramaccan	1778	Sranan	Ndjuka	Gloss
plantar	(paandi)	planta pranta	-	-	plant
flamma	-	flamma	-	-	flame
flor	foló	floro froro fioli	-	-	flower
pluma	puúma	pluma	-	-	feather

The only exceptional form is flor where the /l/ of the original cluster is retained. This is unique for Saramaccan. That it is the /l/ and not the /r/ that is retained is demonstrated by the fact that the vowel following the liquid bears the high tone.

Portuguese	Saramaccan 1778	Modern Saramaccan
flor	*folóro	foló

The **loss of the final syllable** here will be discussed in section on double liquids.

Note that this form also provides evidence against Sebba's interpretation of the **developments of clusters** discussed above on p. 343.

iii) English /Cr/

The normal development here is retention of /r/ in Sranan and /θ/ with **double vowels** in Saramaccan, Ndjuka and Boni.

English	Sranan	1856	1855	1850	1798	1783	1780
-tree	-trí	-trì	-trí			-trì	
creek	kříki	kriki	kříki	kriki	kriekie		
dream	dren	drem	drem		dreen	drem	
string	tríŋi		tríengi		drem		

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>	<u>1780</u>
grate	gríti	griti	gríti			gretti	
grave	grébi	grebi	gréfi	grebi		grebbi	
break-	bréki	breki	bréki	breki	brekie	breki	
dress	drési	dresi	dréssi	dresi		dressi	
ground	gron	gron	gron	gron	gron	grunn	gron
scratch	krási	krasi	krássi	krasi		krassi	krassi
true	tru	troe	troe	troe	troe	tru	troe
broth	bráfu	blafoe	brafoé	blafoe		blaffo	

<u>English</u>	<u>1777</u>	<u>1765F</u>	<u>1765N</u>	<u>1718</u>
-tree	-tree			
string	tringee-			
dress	dressy			
scratch	crassy	cras-		
true			troe	trou
broth	braf			

<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
-tree	-tií	-tiri		
creek	kiíki	kriki	kiíki	kiíki
dream			deém(i)	den
grate			giíti	
dress	deési		deési	deesi
ground	goón	grun	goón	goon
scratch	kaási	krassi	kaási	kaási
true	tuú		tuú	tuú
broth	baafu	blaffo		

English /r/ as the second element in an initial cluster displays a completely different behaviour from initial English /r/. In Sranan, with one exception, we seem always to find /r/. The only exception concerns broth. This item has /bl/ in sources connected with the Hernhutter Church.

In Saramaccan, we find no trace of /r/ in the modern records, although it is consistently present in the eighteenth century source, again with the one exception of broth, which has /bl/.

Ndjuka and Boni have, like Saramaccan, no trace of the liquid. All three languages have an extra low-toned copy of the stem vowel preceding the stem vowel however.

III) Portuguese /Cr/

The normal development here is /r/ in Sranan, and /Ø/ in the other languages. Saramaccan displays the usual CVV-reflex, except in final syllables where we find CV.

Portuguese	Saramaccan	1778	Sranan	Ndjuka	Gloss
abracar	baasá	brassa	-	-	embrace
embrulhar	-	-	brujá	buujá	confuse
crescer	-	gressi	-	-	grow
criar	kiiá	kiljà	kriá	kijá	bring up
drenar	diiná	-	-	-	drain
	diiná ^s				
esfregar	feigá (Lo)	frigà	-	-	rub
	feegá (Li)	frikà			
gritar	giitá	grità	-	-	growl
	giintá				
grunhir	guunjá	glunja	-	-	grunt
preitear	-	-	prèta (1855)	-	do homage
provar	poobá	probà	-	-	test
atravessar	tobesá	trebessà	-	-	cross
tremar	teemε	tremeh	-	-	tremble
trocar	tooká	trokka	-	-	change
aletria	anatiíá		alatria	alatelíá	vermicelli
			artria		
cabrita	kaabíta		krabíta	kaabíta	kid
crioulo	kíóo	kreðl	krióro	kíoo	creole
crua	kúa	glua	kruwá	-	raw
		grua			
estrela	teéa	teréja	-	-	star
	teéja ^s				
frita	-	-	fríta	-	fried
fruta	fuúta	fruta	-	-	fruit
grilo	-	-	grío	-	cricket
grosso	-	grossu	-	-	big
prato	paátu	plattu	-	-	plate
prego	peégu	pregu	-	-	nail
pressa	peesa	pressa	-	-	haste
pronto	-	-	prontoe (1855)	-	quick
tripa	tiípa		trípa	-	intestines

atravessar is trebessa in 1778, probably /terebesá/. Normally this would develop to /*teebesá/ or /*toobesá/, where the low-toned vowel is rounded by the following labial (compare 1778 kibenge > /tjubεngε/). Instead of a long vowel in the first

syllable we find a short vowel. One possible explanation for this could be a restriction on phonological words containing long vowels more than one syllable removed from a high tone. In Donicie and Voorhoeve (1963) only two such words occur - /maamaadósu/ and /saasaamekú/ - both of which involve a repeated long vowel.

crioulo would normally develop to /*kiióo/ in Saramaccan. However, four consecutive vowel morae in succession do not seem to occur except in ideophones. This is presumably the explanation why the actual form of this word is /kióo/ in Saramaccan. Why Ndjuka /kíoo/ has the tone pattern it has is not clear.

The third problematic form is crua /kúá/. Why this is not /*kuúá/ is not clear.

IIIi) English /CrVD/

The normal development in words of this type involves loss of both the liquid and the stop in Saramaccan, and loss of the liquid and liquefaction of the stop in Ndjuka and Boni. In Sranan the basic consonant structure is the same as in English - although this does not imply that the English structure did not change in Sranan.

English	Sranan	1856	1855	1850	1844	1798	1783	1780
greedy	grídi	gridi	grídi	griddi		griedie	griddi	
afraid	fréde	frede	fréde	frede		frédee	fredde	vredi
proud	pródo	prodo	pródo	prodo		prodo	pródo	
brother	bráda	brada	bráda	brara	brarra	brada	brara	
	brára	brara	brára			brara		
broad	brádi	bradi	bráda	bradi		brada	bradi	
			brádi					
already	aréde	alrédi	aréde				aréde	alreddi

English	Saramaccan	1789	1778	Ndjuka	Boni
greedy	gííi		griddi	gííli	gííli
afraid	feéé		frédde	feéle	feéle
proud	poólo		prolo	poólo	poolo
			proro		
brother	baáa	brala	brara	baála	baala
		brara			

<u>English</u>	<u>Saramaccan</u>	<u>1789</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
broad	baái		brali brári bradi bladi	baála	
already	-		arêre		

There are three modern developments. In Sranan the basic consonantal structure of the English model has been retained, with the exception of the case of brother (for this item see further the sections on /d/ and /ð/). In the Bush Negro languages the /d/ has been subject to a process of liquefaction (see Smith, 1978), resulting in /l/ in Ndjuka and Boni. In Saramaccan the resultant liquid has been deleted by a later rule except in proud. Eighteenth century Saramaccan shows us the process of liquefaction caught in the act of working its way across the lexicon. Two items appear to be unaffected, in two the process has been completed, and in one we have both affected and unaffected forms. Only one form - one of the four variants of broad - displays an initial cluster involving /l/. It may be of significance that of the liquified forms all have eighteenth century forms where the second liquid appears to vary between /l/ and /r/.

The word already although not strictly /CrVd../ seems to undergo a similar liquefaction, and so has been included in the data given here. The evidence is unclear as to whether it is the fact that there is a C (i.e. /l/) preceding the /r/ that causes the liquefaction in this item or not.

When we look at the forms displaying two liquids in eighteenth century sources, we notice an interesting point. The distribution of /l/ and /r/ is not totally random. We find the following distributions in the data:

	<u>CrVrV</u>	<u>CrVlV</u>	<u>ClVrV</u>	<u>ClVlV</u>
<u>Sranan</u>	1	-	-	-
<u>Saramaccan</u>	4	3	-	-

In respect of the Sranan data we have an alternation between /d/ and /r/ in our

earliest sources. As we have already said it is not certain whether the variation in the item brother is due to the same process of liquefaction as in other cases here, or is the direct result of a minority interpretation of English /ð/, parallel to the case of tother (see the section on /ð/). If it is due to d-liquefaction, then we can set up the derivational sequence

$$r-d > r-r$$

even though this only applies to one item.

In the case of Saramaccan, by trying to construct a derivational-historical sequence whereby we look for the minimum changes between the various stages in the sequence, we reach the following result:

$$r-d > r-r > r-l > \emptyset-l > \emptyset-\emptyset$$

↙
l-d

Just these reflexes are evidenced and no others. All the reflexes can be arranged in sequence with the exception of /l-d/ which cannot be fitted in. Note that this incorporates both the above Sranan sequence, and the normal Eastern Bush Negro (Ndjuka and Boni) reflex. Are we in any sense justified in asserting that this model corresponds to what actually happened? We will postpone further discussion until we have discussed the parallel cases involving /l/ of the English model.

IIIii) English /Clvd/

As in the previous group we find a development involving the loss of the liquid and the stop in Saramaccan, and loss of the liquid and liquefaction of the stop in Boni and Ndjuka. In Sranan we have /r/ and /d/, while in Kwinti we find the same development as in Ndjuka and Boni.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1844</u>	<u>1798</u>	<u>1783</u>
blood	brúdu	broedoe	bróedoe	broedoe		bloedoe	brudu
flood	frúdu	floedoe	fróedoe			floedoe	fludu/frudu

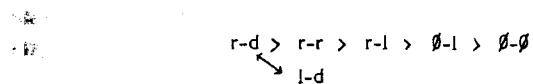
<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Kwinti</u>
blood	buúu		buúlu	buúlu	buúlu
flood	foóo foóu	fludu frudu frolo frolo	fuúdu		fuúlu

The modern developments of words of this type are virtually identical to those of /CrVd../. There are four developments of which three occur regularly. In Sranan the basic consonantal structure of these words is retained. In the Bush Negro languages the /d/ has undergone a process of liquefaction (see Smith, 1978) resulting in /l/ in Ndjuka, Boni and Kwinti. In Ndjuka the item flood appears to have escaped this liquefaction, exceptionally as we can see if we take the forms in /CrVd/ into account. In modern Saramaccan the effect of liquefaction is no longer present as the liquid has been deleted by the process of liquid deletion. That it was optionally operative in the eighteenth century can be seen from the data of Schumann (1778).

If we look at the forms containing two liquids, these are really too few to tell us much by themselves, but if we add them to the distributions already found for the /CrVd../ words no new patterns appear.

	<u>CrVrV</u>	<u>CrVlV</u>	<u>ClVrV</u>	<u>ClVlV</u>
<u>Sranan</u>	1	-	-	-
<u>Saramaccan</u>	5	4	-	-

If we take the derivational-historical sequence we had tentatively suggested to account for the various developments in the case of /CrVd../ words, this can be extended to take account of the facts observable in the case of /ClVd../ words.



It is not clear how the unique Ndjuka reflex / \emptyset -d/ can be fitted into this scheme, i.e. whether the most likely precursor of this is /l-d/ or /r-d/.

IV) English /VCər/ (i)

Words of this type seem, at least partially, to exhibit parallel developments to those displayed by words in /VCLV#/. For this reason we discuss them here.

However, two different developments are involved, the first of which does not exhibit this parallelism. Here the normal development is to final /a/.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1844</u>	<u>1798</u>
river	líba	liba riba	líba ríba	riba		riba
liquor bitter	líka bíta	bita	líka bíta	bita		bita bieta
timber	tímba					
finger	fíŋa	finga	fíenga	finga		fienga
sister	sísa	sis	sísa	sis		siesa
dinner	-dína	dina	dína	dina		
never	neba					
feather	féda	fed	féda			
driver	dréba					
alligator	aligeta					
supper	sápa	saba	sápa	sapa saba		saba
brother	bráda brára	brada	bráda brára	brara	brarra	brada brara
tother	tra	tra	tra tára	tra		tra
copper	kápa	kapa	káppa			
bother	báda					
mortar	máta	matta-	mátta			

<u>English</u>	<u>1783</u>	<u>Earlier</u>
river	liba riba	riba (1718)
bitter	bita	
finger	finga	
sister	sis/sissa	
dinner	dina	
supper	sabba-	
brother	brara	
tother	tarra	tara (1765)
mortar	matta	matta (1777)

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1844</u>	<u>1798</u>
yonder	jána	janda	jána	janda	janna	janna-
dollar	dála					
cooper	kúpa	koepa	kóepa	koepa		koepa
schooner	skúna	skoener	skoéna			
hankercher	aŋísa	hangisa	hangísa	hangisa		
ginger	gíndja	djinja	djiénja			ginjaa
			djiéndja			
			na			
nor (than)						

<u>English</u>	<u>1783</u>
yonder	janda
cooper	kúpa-
hankercher	hangissa
ginger	ginja
	djinja

<u>English</u>	<u>Saramaccan</u>	<u>1789</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>
river	-	-	-	líba	liba	ríba/ríva
bitter	bíta		bíta	bíta	bitá	bíta
timber	tímba		timba			
finger	fínga		fínga	fínga	fínga	fínga
sister	sísa		sísa	sísa	šíša	sísta/sisá (obs)
dinner				-dína		
fever				féba	feba	fíba/fíva
supper	sápa-	sappa-	sabba-	sapa-		
brother	baáa	brara	brara	baála	baala	bróda/bráda
		brala				
tother	-	-	-	táá	taa	
mortar	máta		matta	máta		máta
yonder				ánda		jánda
dollar	dála ^s			dála		
cooper	kúpa	kupa-		kúpa		
hankercher	(h)angísa (Golio)		hangisa	angisa		ɛnkíntša
	(h)angísa (Lombe)					
ginger	adjíndja		adjinjà	djíndja		džíndža

Here we see a uniform development to /-a/, which must represent an English model [ə]. In other words the /a/-reflex reflects the loss of final /r/. Dobson (1957) says of such loss:

"loss in unstressed syllables, either by vocalization (as is probable....) is earlier than loss in stressed syllables, but even so is seldom recorded before 1700 and then only in sources that reflect vulgar speech"

What we see in the Surinam creoles in these cases reflecting loss of /r/ would then be based on more vulgar English models. Note, however, that Dobson contrasts loss in unstressed syllables with loss in stressed syllables, which he claims occurred around 1800. As we have seen in the section on final /r/ the same loss occurs also in some cases in stressed syllables. In other words it looks as if we cannot separate the loss of /r/ in unstressed and stressed syllables.

Matthews (1935) gives no spellings from ships' logs directly illustrating sailors' non-pronunciation of /r/ in this context. He does however give spellings of some schwa-final items in -r, which are presumably to be interpreted as indicating that the writers did not pronounce [r] in this context (but see Wells (1984) on /-ər/ in such words).

<u>Smurner</u> (1695)	<u>Cranadar</u> (1695)	<u>Hildar</u> (1698)	<u>St. Keider</u> (1694)
"Smyrna"	"Granada"	"Hilda"	"St. Kilda"

This is the only development of English /* -ər/ in Krio (apart from a few cases of vowel assimilation), unlike the situation in Surinam (see the next section), hence it is conceivable that these Surinam creole items derive from a WAPE source.

V) English /VCər/ (ii)

This is the second group of such words, and here we see a parallelism of development to words in /VCLV/. The normal development is to /rV/ in Sranan, /ØV/ in Saramaccan and Boni, and /VØV/ in Ndjuka.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1844</u>	<u>1798</u>
cover	kíbri	kibri	kíbri	kibri	kibri	kiebrie
remember	mémre	membre	mémbre	membre	memre	memree
master	másra	masra	máss'ra	masra	masra	
after	átra		mássera			
doctor	dátra	datra	dátra	datra		datra
over	ábra	abra	ábra	abra		abra

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1844</u>	<u>1798</u>
gutter	gótro	gotro	gótro	gotro	gottro	gotroo
yesterday	és(re)de	isredei	ésrede issredè	isredei		esrede
never		nebre-	nébre			
answer		ansre				

<u>English</u>	<u>1783</u>	<u>1780</u>	<u>Earlier</u>
cover	kibri	kiepere	kibry- (1777)
remember	membre	memere	
master	massra	mastra	mastra (1718)
after	attara	attere	
doctor	dattra		
over	ábra	abere	
gutter	gotro		
yesterday	issredeh		
never	nebre-		
answer	hánsre		

<u>English</u>	<u>Sara-</u> <u>maccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>
cover	-	kibri		kiíbi	kíba (Jamaican)
remember	mɛmbɛ	membre	mémbee	membe	mɛmba
master	mása	massra	másáa	masa	másta/mása
after				taá- (Kumentí)	
doctor	dáta		dátáa	data	dókta
over	aaba	abra	ábáa	haba	óba
gutter	gɔ́tɔ́ ngɔ́tɔ́ ^s	goto	gótóo		gɔ́ta
yesterday	ésíde	isredè	ésíde	ešide	ésíde/jéstade
never	-	nebre-			nába/néva/nóba

These tables show a different development from that in section IV), involving the retention of /r/. As we interpret the historical data, the development in Proto-Sranan was as follows:

<u>English</u>	<u>Proto-Sranan</u>	<u>Modern Sranan</u>
CV _i Cəɾ	: CV _i CV _i rV _i	> CV _i CrV _i

In other words the schwa was replaced first by an echo of the Surinam interpretation of the stressed vowel of the English model. In addition an epithetic

vowel was added corresponding in quality to the preceding two vowels. In modern Sranan the unstressed medial vowel has been lost. In van Dyk (c. 1780) the medial vowels are uniformly indicated by -e-. We argue that the frequent use of e in early records of Sranan to represent epenthetic and epenthetic vowels represents not schwa as various researchers have interpreted it but a vowel of the same quality as the preceding vowel. Our main argument is derived from the inconsistency of the usage. We see a good example of this in two forms attere (1780) and attara (1783). In Ndjuka the medial vowels survive due to their having received a high tone before the loss of the final liquid (in respect of the English model). In Boni usually all trace of the liquid is lost - as it is in Saramaccan - but in /kiíbi/ we see the traces of an old metathesis:

*kíbirí > *kiríbi > kiíbi

This case does not stand alone in Boni. Compare the following cases:

<u>Boni</u>	<u>Sranan</u>	<u>English/Dutch</u>
keéte	kétre	kettle/ketel
boófo	bófro	-/buffel
soódo	sódro	-/zolder
soálufu	swáfru	-/zwavel

The last example suggests that /kiíbi/ - and the majority of the examples quoted - has undergone pseudometathesis as well.

Proto-Sranan

kíbirí	>	kíríbi	>	kiríbi	>	kiíbi
kétele	>	kélete	>	keléte	>	keéte
bófolo	>	bólofo	>	bolófo	>	boófo
sódro	>	sórodo	>	soródo	>	soódo
suwáfuru	>	suwárufo	>		>	soálufu

It is unclear if Saramaccan /aaba/ (<over) is to be explained in these terms. At least a metathesis must have played a role here:

*ábara > áraba > aaba (tone uncertain)

The development of softly to /saáfi/ in Ndjuka (and presumably also to /sáápi/ in Saramaccan) can be explained in similar terms (see section (VII i)).

VI) English /VCəl/

The developments in words of this structure are identical to those described in the previous section: we have /rV/ in Sranan, /∅V/ in Saramaccan and Boni, and /V∅V/ in Ndjuka.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1844</u>	<u>1798</u>
people	pipel pipli (obs)		pipli			
tickle	tígri	tígli	tígri			kieglie
middle	míndri	mindri	míendri	mindri	mindri	miendrie
shingle	síŋri	singel singli	siengri	singli		
gentle	géndri	gendri	géndri	gendri		
couple (rafter)	kópro					
buckle	bókru					
paddle	(see section (d))					

<u>English</u>	<u>1783</u>	<u>1780</u>
people	pipe	
tickle	tikri tikkri (~)tigri	
middle	míndri	míndere
shingle	single	
gentle	gendri	

<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>
middle	míndi	mindri	míndíi	mingi	mídul
shingle	síngi				
gentle	djénde	gendri	djéndeé		džéŋtri
couple (rafter)	kópu				
paddle	páda	padra			pádul

This group of words displays two types of development which become clearer if we examine the result of Dutch loans of similar structure in Sranan. The first type involves an epithetic vowel which is an echo of the stressed vowel, as in Sranan /kópro/ and Saramaccan /djénde/ and /páda/ above. Parallel forms based on Dutch models would include the following:

<u>Dutch</u>	<u>Sranan</u>	<u>Dutch</u>	<u>Sranan</u>
dissel	désre	metsele	mésre
stijfsel	stéjsre	tafel	taífra
hagel	ágra	amandel	amándra
borstel	bósro	sleutel	sróto

The second type involves an epithetic vowel /i/ following an accented front vowel, or following a sequence of accented /a/ and a velar or dental consonant; and an epithetic vowel /u/ following an accented round vowel, or following a sequence of accented /a/ and a labial consonant.

Examples of this type based on English models would be Sranan /bókru/ and Saramaccan /kópu/. Dutch-derived cases would include:

<u>Dutch</u>	<u>Sranan</u>	<u>Dutch</u>	<u>Sranan</u>
winkel	wénkri	winsel	wénsri
enkel	énkri	hengsel	énsri
oksel-	osru-	buffel	bófru
konkelen	kónkru	roffelen	lófru
stapelen	stábru	zaagsel	sáksi
zwavel	swáfru	mazelen	maaslie (1798)

Cases involving accented /i/ and /u/ respectively display the epithetic vowels /i/ and /u/. This would of course be forecast by both strategies. Examples of English-derived words would be Sranan /tígri, míndri, síŋri/. Dutch-derived examples would include:

<u>Dutch</u>	<u>Sranan</u>	<u>Dutch</u>	<u>Sranan</u>
spiegel	spígri	kogel	kúgru
hoepel	úpru	knoedel	knúdru

VIII) English /VCrV/

The developments here are identical to those described in sections V) and VI): /rV/ in Sranan, / \emptyset V/ in Saramaccan and Boni, and /V \emptyset V/ in Ndjuka.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1798</u>	<u>1783</u>
every	íbri	ibri	íbri	ibri	jebrie	ebri- ibri-
shangree	sáŋri		sángri			
hungry	háŋri áŋri	hangri	hángri	hangri	hangrie	hangri
country	kóndre	kondre	kóndre	kondre	kondree	kondre
different	difrénti	difrenti				

<u>English</u>	<u>Earlier</u>
shangree	sangaree (1777)
country	condre (1777)

<u>English</u>	<u>Saramaccan</u>	<u>1805</u>	<u>1781</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>
every	ibi			ebre-	íbí		ébrí
hungry	háŋi			hangri	ángí	angi	ángri
country	kóndre	kondre	kondre	kontri	kóndée		kɔ̃ntri
			contri				

VII ii) Portuguese /VCrV/

The developments here are identical to those in the preceding section: /rV/ in Sranan and / \emptyset V/ in Saramaccan.

	<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Gloss</u>
a)	abrir	jabí jabí (DG)	jabri	-	open
	corbrir	tjubí	kubri		cover
	dobrar	dubá dobás	dubla	-	fold
	entrar	dendá dendáa	dindra	-	enter
	mostrar	musulá	mussula	-	exhibit
	sangrar	sangá	sangla	-	bleed

b)	Portuguese	Saramaccan	1778	Sranan	Gloss
	cedro	sédu		-	cedar
	dentro	déndu	dindru	-	inside
	febre	fébe	febre	-	fever
	magro	mángu	mangru	-	thin
	outro	óto	oter	-	other
			otre/otro		
	pedra	-	petra	-	rock
	pobre	-	-	póbri (1855)	poor
	podre	póndi	pondri	-	rotten
	quadriolho	kpátiwójo ^s	kwatriwoijo	-	marsupial rat
	sangre	-	sangri	-	blood
	sempre	sémbe sémpe	-	-	always
	sombra	sómbe sómbe	sombra	sómbe ómbe	shadow

The difference between the forms illustrated here, where a structure CLV is reflected by CV in most cases in modern Saramaccan, and those in section IIIi), where the same structure CLV is mostly reflected by CVV, appears to lie in the fact that here the structure is located at the end of the word, while in IIIi) it is located at the beginning, in most cases. In Portuguese and modern Saramaccan, CLV and its result CV form the final syllable in the items in this section, although of course this was not the case in 18th century Saramaccan, where the intermediate structure CV₁LV₁ formed the last two syllables. The position of the accent/high tone appears to play no role in these developments.

There are two items abrir and entrar which have optional forms with final C[́]V, beside the expected forms with C[́]V. These cannot be derived from forms with final infinitive /r/ - unrecorded in 1778 - for the simple reason that such forms do not have a final CLV in Portuguese, but CLVL and would therefore be expected to give a final CV[́]V in Saramaccan, compare the development of items such as brother 1778: brara; modern: /baáa/.

Let us ask ourselves what kind of structure is usually responsible for the creation of C[́]V structure in Saramaccan. One frequent source is structures of the type C[́]LV (derived from models of the type C[́]V(LV)). The normal verb form of Portuguese origin derived from a structure /..CL[́]r/ would have become /..CVL[́]/ in eighteenth century Saramaccan.

Portuguese	1778 orthography	assumed pronunciation	modern
abrir	jabri	*jabirí	jabí
cobrir	kubri	*kubirí	tjubí
entrar	dindra	*dindará	dendá
sangrar	sangla	*sangalá	sangá
dobrar	dubla	*dubalá	dubá

Of these five verbs, there are two that beside the normal development of words of the structure /..CVC^lV₁LV₁/ to /..CVCV₁/ (where ^lV is a low-toned vowel and one of the other two vowels is high-toned) also exhibit a development to /..CVCV^h₁V^l₁/ as above. This appears to reflect an older structure /..CVCV^h₁L^lV₁/:

*jabíri jabíi
*dindára dendáa

Note that this cannot be explained as an irregular application of pseudo-metathesis, which also causes a tone shift, as pseudo-metathesis works in the other direction. We have no explanation for this development.

The case of mostrar is interesting, assuming that the Saramaccan form is in fact derived from this word. The Portuguese word is glossed: "show, display, exhibit, etc." while the reflexive mostrar-se is glossed "be on display, show off, make a public appearance". Schumann (1778) gives the meaning "bow while making a compliment", while Doncie and Voorhoeve (1963) give "stand with crossed legs, run zigzag to make a fool of someone", while source "s" gives "hit feet together to cross legs and then cross them". Although the word seems to have undergone considerable semantic specialization, a derivation from the Portuguese item seems likely. As far as the phonological development of this item is concerned, the preservation of the liquid is no problem. It is presumably due to the non-identity of the vowels flanking the liquid and particularly the difference in rounding. Why are these vowels different? We have here not the normal epenthesis with liquid clusters, but that usually encountered in s-clusters, where the quality of the vowel inserted is not totally determined by that of the neighbouring vowel, but is usually more restricted, being either /i/ or /u/ depending largely on the second consonant. Clusters consisting of /s/ and a liquid form the intersection between

the two types, so that while in /s/-liquid clusters epenthesis takes place according to the rules applying to liquid clusters, in this case the rule governing epenthetic vowel insertion in s-clusters has applied.

While the item quadriolho does not strictly belong in group b), it is possible that the relation to ðlho was apparent to Saramaccan speakers and influenced its development. Its development is parallel to that of group b) forms.

VIII) English /VCLV/

The developments here do not differ from those described in section VII): /rV/ in Sranan; /ØV/ in Saramaccan and Boni; and usually /VØV/ in Ndjuka.

English	Sranan	1856	1855	1850	1798	1783	1780	Earlier
English	inrisi-	inglisi	iengrisi					
dumpling	adómprí	adómpli	adompri					
ugly	ógri	ogri	hógrie	ogri	ogrie	ougri	ogeri	
softly	áfri	safri	ófrie	safri	safrie	safri		
			sáfri					

English	Saramaccan	1778	Ndjuka	Boni	Krio
English			(ingísi)		ínglís inglís (obs)
dumpling	dómbi		dumbru	dómíi	
ugly	wógi ógi hógi ^s		ougri	ógíi	ogi
softly	sáápi		sapri	saáfi ^s	safi
			safri		sáful sáfli

Ndjuka /ingísi/ seems to derive from a Proto-Sranan form /*ingilísi/ rather than the /*íngilisi/ from which the modern Sranan form is presumably descended. Compare the Krio form /inglís/.

Ndjuka /saáfi/ and Saramaccan /sáápi/ have been explained in Section V).

d) Double Liquids

In this section we will treat cases involving the dissimilation of one of two liquids occurring in English, Portuguese - and Dutch - items. We will treat English and Portuguese words together here, as the number of items from these languages displaying this phenomenon is not very numerous. A number of Dutch items will be included as these allow us to select one of two possible avenues of development as the correct one, where the English and Portuguese words provide no clear choice.

<u>English</u>	<u>Sranan</u>	<u>1856</u>	<u>1855</u>	<u>1850</u>	<u>1844</u>	<u>1798</u>	<u>1783</u>	<u>1780</u>	<u>Earlier</u>
paddle	pári	pari	pári				pali		
meddle	méri	pali meli	méri	meli			meli		mele (1777)
quarrel	kwári	kwari	kwári			kwaarie	kwali/ kwari		
trouble	tróbi	trobi	tróbi	trobi	trobi	trobie	trobbi	trobbele	

<u>English</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>
paddle	-	-	páli	pali	pádul
meddle	méi	meli			
quarrel			kwáli	kwali	kwárel
trouble	toóbi	trobbi	toóbi	tóobi	tróbul

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
estrela	teéa	teréja	-	-	star
grilo	-	-	grío	-	cricket
flor	foló	floro	-	-	flower
		froro			
		floli			
pólvora	poóba	proba	-	-	powder
barril	balí	bali	barí	balí	barrel
		bari			
guelra	geéia geéja ^s				gill

<u>Dutch</u>	<u>Sranan</u>	<u>1855</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Gloss</u>
provoceren	-	-	póóbsi	probossi	provoke
galloperen	grapí	grapí	gaapí		gallop
troebel	tróbru	tróebro			turbid
	tróbu				

<u>Dutch</u>	<u>Sranan</u>	<u>1855</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Gloss</u>
zilver	sórfu sórfru	sólfroe sórfroe	sólúfu sóófu		silver
vlieger frommelen	frígi frómru frómu	frígri frómroe	fiígi		kite
sleutel	sróto	sróto slotro	سرتو	srotto slotto slottro	key

In order to facilitate the discussion of these items we will give the forms that would have developed had no dissimilation taken place.

<u>English</u>	<u>18th century</u> <u>Sranan</u>	<u>Modern</u> <u>Sranan</u>	<u>18th century</u> <u>Saramaccan</u>	<u>Modern</u> <u>Saramaccan</u>
paddle	párlíi	?	-	-
meddle	méríli	?	méríli	méi
quarrel	kwáríli	?	-	-
trouble	toróbili	tróbri	toróbili	toóbi

Portuguese

estrela	-	-	teréla	teé(j)a
grilo	girílo	grílo	-	-
flor	-	-	folóro folóri	foóo foói
pólvora	-	-	polóbara	poóba
barril	baríli	b(a)rírí	baríli	ba(l)íi
guelra	-	-	geléra	geé(j)a

Dutch

provoceren	-	-	poroboséri	po(o)boséi
galloperen	galapéri	grapéri	-	

We assume from the present-day reflexes that pseudometathesis has applied in polvara and guelra.

From this we can see that the expected reflex in Sranan would be different from the actual reflex at least for one of the English items - trouble. In Ndjuka we would expect /toóbíi/ for trouble, and /párlíi/ and /kwárlíi/ for paddle and quarrel.

For the Portuguese items we would expect /grílo/, not the actually occurring /gríó/ in Sranan.

Both the Dutch-derived forms given in the second table differ from what we would expect.

A glance at the eighteenth century forms demonstrates that, in most but not all cases, the loss of one of the two liquids had already occurred. In one case - that of Dutch sleutel - we find optional forms.

It is clear that the present reflexes of these forms cannot be explained by merely assuming the loss of one of the liquids. This would only give us the correct result in two forms: estrela and grilo. However, note that these are two of the four forms considered in the second table which have non-identical vowels straddling the dropped (second) liquid.

The vowels we would expect in these cases are:

<u>estrela</u>	e-a
<u>grilo</u>	i-o
<u>provoceren</u>	e-i
<u>galloperen</u>	e-i

If we separate the vowels of the Surinam creoles into the following three types: front unrounded vowels, back unrounded vowels, and back rounded vowels, we can establish the following scenarios. If the vowels straddling the second liquid belong to the same category, then one of the vowels will be lost. If however these vowels belong to different categories then only the liquid will be lost.

Which vowel is lost? That preceding the liquid, or that following it? The crucial examples are the Dutch items provoceren and galloperen. These reveal that the vowel preceding the second liquid is lost. We might formulate the dissimilation rule (at least as it applied in the 18th century) as follows:

$$\begin{array}{c} \langle V \rangle \\ [\alpha \text{ back}] [\text{xson}] \\ [\beta \text{ round}] \end{array} C \rightarrow \emptyset \quad / \quad X V \quad C \quad Y \quad \langle V \rangle \\ \begin{array}{c} [\text{xson}] \\ [\alpha \text{ back}] \\ [\beta \text{ round}] \end{array}$$

(where [xson] stands for the point on the sonority hierarchy that defines the liquids)

This account of things means that we have to abandon the idea in Smith (1982b) that it is a syllable that is dropped, and return to the idea of Smith (1978) - for different reasons - that the segments involved do not belong to any higher order constituent in the phonological hierarchy.

Note a very significant fact following from the change of galloperen /**galapéri*/ into /**galapí*/ and then /*grapí*/. This is that an apparently accented syllable has been deleted. We suggest that this is evidence that Sranan was earlier a tone language, like Saramaccan. This could be represented autosegmentally as follows:

					H										H	
C	V	C	V	C	V	C	V	C	V	C	V	C	V	C	V	H
g	a	l	a	p	e	r	i	g	a	l	a	p	i	g	a	l

The loss of the CV-elements on the CV-tier leads to the non-realization and disappearance of the segmental elements /*e*/ and /*r*/, but the H tone originally associated with the /*e*/ does not remain floating, but reassociates with the final V-slot. The other V-slots become associated with default L tones.

Note also that the form /*foló*/ is a piece of evidence from modern Saramaccan against the hypothesis tentatively proposed by Sebba (1982) that Saramaccan underwent a change /CIV/ → /CVV/ and in favour of Voorhoeve's interpretation of Schumann's orthography (Voorhoeve, 1961b) adopted by us, that short epenthetic vowels intervened in the orthographic liquid clusters.

The fact that this assimilation rule is apparently still - sporadically - in operation in Sranan implies that we must reformulate it as follows:

r ---> Ø / X r Y C ___ V
 (where Y but not X may = Ø)

Appendix

Portuguese-derived verbs in Surinam: infinitives or third person singulars?

The verbal forms derived from Portuguese in the Surinam creoles have a tone pattern or accentuation suggesting a derivation from infinitive forms. However, the infinitive suffix -r does not appear in these forms, raising the possibility at least of their origin in third person singular present forms of the verb with subsequent shift of the accent.

The verbal forms that have a bearing on this question are those with a potential unstressed e or o in Portuguese, either in the stem, or in the conjugation marker, as these go optionally to /i/ and /u/ respectively preceding the accent, and obligatorily following the accent.

- i) forms with e in the stem (i.e. [e~i] in Portuguese infinitives;
 [e/ɛ] in third person singulars)

	<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>
a)	vestir	bisí	bisí ~ besí
	pedir	pidí	
	mentir	mindí	
	sentir	sintí	
b)	invejar		fedjá
	atravessar		tobesá
	assentar		sindà
	penar	(piná Sr)	pená
	apertar		peetá
	negar		ninga
	esfregar		feegá (Li) frigá
			feigá (Lo) friká
	fechar	fitjá	fitjà
	chegar	tjiká	zikka (1805)

	<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>
	entrar		dendá dendáa
	drenar	diína diiná ^s	
	pegar		peká peeká
c)	acendar		sëndé
	beber		bebe
	crescer		
	ferver		fëebé
	gemer		djemé
	meter		meté
	tremar		tëmé
	estender		tëndé
			sendèh bebèh gressi frebbèh tjemeh metteh tremeh tenteh

As we observed in the section on vowels, there is a clear relation between the reflex of the stem vowel and the conjugation vowel. In modern Saramaccan all the reflexes of -ir verbs have /i/ for the stem vowel, all the reflexes of -er verbs have mid vowels, and the reflexes of -ar verbs have sometimes /e/ and sometimes /i/. These vowels can best be explained as the reflexes of unaccented stem vowels, where the conjugation vowels -i- and -e-, have influenced the choice between the options /e-e/ and /i/. The conjugation vowel -a-, not being identical to either option has not had any influence on their selection, so that we get both reflexes among the modern Saramaccan cases. In eighteenth century Saramaccan the reflexes of the stem vowels seem to have been slightly less systematic, if we consider a case such as vestir 1778: bisí ~ besi.

- ii) forms with o in the stem (i.e. [o ~ u] in Portuguese infinitives;
[o /ɔ] in third person singular)

	<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>
a)	cobrir	tjubí	kubri
	demolir	dimbolí ^s	
	dormir	duumí	drummi
	engolir	gulí (gori Sr)	gulí
b)	botar	butá	putta
	coar	kuá	kuà
	contar	kondá	kondà

Portuguese	Saramaccan	1778	
dobrar	dubá	dobá ^s	dubla
molhar	munjá		muija
amolgar	muungá		munga
mostrar	musulá		mussula
apontar			pontà
provar		poobá	probà
rolar		lolá	lolà
roncar		lonká	lungà
sonhar		sonjá	sunja ~ sonja
tocar	tuká		tukka
toldar		tolá	
tomar	tumá		tumma ~ tomma
tornar		tooná	tronna
trocar		tooká	trokka
voar	buá		boa
c) escolher			kujeh
comer		kómé	kome
correr	kulé		kuleh
morrer			muleh ~ moleh

Here we observe less influence in the sense of selection of one or other option of an unstressed stem vowel in terms of the conjugation vowel. What we do see is clear evidence that we have to do with unaccented stem vowels in this case.

- iii) forms with e as conjugation vowel (i.e. [e] in Portuguese infinitives; [i] in third person forms)

Portuguese	Saramaccan	1778	
bater	bati ^s		
fazer	fasí	fassí	
nascer	nasí	nasih ~	nasèh
varrer	baí	bali	
lamber		lèmbé	lembeh
acender		sendé	sendèh
beber		bebé	bebèh
crescer		gressi	
ferver		fèbè	
gemer		djemé	tjemeh
meter		meté	metteh
tremer		teémé	tremeh
estender		tendé	tenteh
escolher			kujeh

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	
comer	kɔmɛ		komè
correr	kulɛ		kulèh
morrer			mulèh/molèh
poder	(pój Nd)	poli	

Here we see a number of forms with final /i/ instead of the expected mid vowel - that is, under the assumption that the conjugation vowel is unstressed as would be the case in a third person form. One item is clearly derived from a genuine case of a third person form - 1778 poli, Ndjuka /pój/. The vowel structure and tone pattern both indicate that this is derived from Portuguese pode "can". It could be argued that as a modal this verb was not treated the same as other, more lexical verbs. On the other hand forms such as /kulɛ/ and 1778 mulèh are indicative of derivation from infinitives for the same reasons of vowel structure and tone pattern. Note that /fasi/ could not be derived from a regular third person form - even ignoring the accent - as the third person form in Portuguese is faz.

The significant parallels we noted between the vowel structure of the Surinam creoles and the Portuguese-based creoles suggest that it would be useful to examine the latter with respect to this question. Let us summarize the import of the table of comparisons on pp. 415/416. The Gulf of Guinea creoles have in comparable -er verbs a final /e-ɛ/ with the exception of poder: Principe /pɔ́(di)/. Barlavento Cape Verde has /e/ in all cases. Papiamentu has /i/ in the following cases: bater /bátì/; fazer /hási/ (<Spanish hacer>); varrer /bári/; morrer /múri/. The accentuation of these forms, as of all Papiamentu finite verb forms, might suggest derivation from third person forms, but that this is not so is indicated by their tone pattern which is LH, implying that the accent originally belonged on the last syllable (Römer, 1977). In the case of /múri/ the /u/ would indicate too that the first syllable was originally unstressed. PGC (Guiné creole) also has a vowel structure in the cases of correr and morrer - /kúuri/ and /múuri/ - indicating that the first syllable was originally unstressed.

Let us now turn to a review of expert opinion as to the source of the verbal forms in the various Portuguese creoles.

Wilson (1962), discussing Guine creole, says the following:

"In most instances this [i.e. the verb root (NS)] is directly relatable to the Portuguese present infinitive, but has penultimate stress. Regular verbs in Portuguese have infinitives in -ar, -er, -ir, but the final -r is lost in Creole. Portuguese monosyllabic verbs with irregular 3rd person forms have these forms instead of their infinitives as the basis of the Creole form...",

"Portuguese -ar, -ir Creole /-a, -i/; Portuguese -er verbs were in some cases noted with /-i/ [/i/ is a vowel "rather less close" than /i/ (NS)], but more often with /-i/, the latter may prove to be incorrect."

Lopes da Silva (1957) says of Cape Verde creole:

"Salvo algumas excepções os verbos reduziram-se em todo o arquipélago à forma única do infinitivo, com apocope do -r. So o verbo ser conservou o -r. Como excepções mais importantes à regra da redução ao infinito, aqui se aísalam os verbos ter, vir, e ir, em que a forma que se mantere foi a 3.^a pessoa do singular do presente do indicativo: tê, bê, e báí."

"Em Sotavento (Santiago), o recuo do acento tónico de dissílabos oxítonos para a penúltima sílaba (por exemplo: fika, por fikâ; perde por perdê, ..."

"Apart from general exceptions ... verbs reduce in the whole archipelago to the single form of the infinitive, with apocope of the -r. Only the verb ser conserves the -r. The most important exceptions to the rule of reduction to the infinitive are the verbs ter, vir and er, where the third person singular present indicative form is maintained: tê, bê and báí."

"In Sotavento (Santiago) the accent of disyllabic oxytones is shifted back to the penultimate syllable (e.g.: fika for fikâ; perde for perdê, etc..."

Meintel (1975), discussing the Cape Verde creole dialect spoken on Brava, one of the Sotavento islands, says however:

"Most Bravense Creole verbs can be directly related to a Portuguese present third person singular, with the stress placed on the penultimate for the Creole in the present tense form."

"Paroxytone, or penultimate stress, is typical of verbs in Sotavento Creole, indicating their derivation from the Portuguese present tense third singular form. In contrast, oxytone, or stress on the last syllable, characterizes the verbs of Barlavento Creole, indicating derivation from the Portuguese present infinitive form."

and with reference to /sábi/ from sabe(r):

"Change from e to i is optional in many cases; pronunciation of the final vowel as i is regarded as characteristic of "heavy Creole"..."

It seems to us that the occurrence of verbal forms derived from -er verbs in -e is more difficult to explain if the third person present singular (henceforth 3PPS) is taken as the basis, since we would expect in that case rather final -i everywhere.

Meintel refers to one verbal aspect which is expressed by a change of stress in the verb from penultimate to final, so that stress placement cannot a priori be regarded as an infallible guide in determining the original verb form from which the creole verb is derived.

Meintel's conclusion that the basis for the form of the verb in Brava creole is the 3PPS is also rather weakened by the facts of the vowel structure of a number of the forms she quotes:

a)	<u>Brava</u>	<u>Portuguese</u>	<u>Gloss</u>
	cígɛ	chegar	arrive at
	kúme	comer	eat
	búa	voar	fly
	skúbri	descobrir	discover
	d'ispídi	despedir	dismiss
b)	kúme	comer	eat
	fáze	fazer	make

The first group of forms suggests that the presently stressed vowel was originally unstressed, resulting in the replacement of the original mid vowels by the corresponding high vowels.

The second group comprises forms with unstressed vowels, which in final position we would expect to be raised to *i*. Once again these forms rather suggest derivation from infinitive forms, with subsequent accent shift, as Lopes da Silva (1957) suggests. In support of Meintel's position however are the more basilectal forms of verbs derived from Portuguese *-er* verbs in *-i*.

Ferraz and Valkhoff (1975) say of Cape Verde creole:

"...differences of stress in Barlavento and Sotavento (final in B; penultimate in S (NS)), Barlavento having kept the infinitive as verb stem, Sotavento the present indicative, probably the 3rd person singular"

Traill and Ferraz (1981) say of Principense creole:

"Note that certain Principense verbs seem to **have been derived** from Portuguese infinitives, while others are from 3rd person forms."

However, Günther (1973) claims that more than 90% of Principense creole verbs are derived from infinitive forms. Only very common verbs such as /wé/ "go", /pádi/ "can", and /fédi/ "stink"(!) are derived from 3PPS forms.

Ferraz (1979), in a work on São Tomense creole, says:

"On disyllabic main verbs, such as /fi'sa/ 'fisa/ "to close", the strong stress may be placed either on the final or on the penultimate syllable. There is a general tendency for the main stress to be placed on the penultimate syllable when an object or other immediate complement follows, and on the final syllable when there is no immediate complement to the verb."

Römer (1977), discussing questions of tone and stress in Papiamentu, reveals that the non-affixed form of the verb may have distinct prosodic patterns in this language. For disyllabic vowel-final verbs there are three forms:

$C\acute{V}C\bar{V}$	basic verb
$CVC\check{V}$	participle
$C\check{V}CV$	imperative

The historical derivation of the basic verb form is from a finally accented form (Römer, p.c.) but disyllables ending in a vowel have shifted the accent forward, leaving behind on the final syllable the originally concomitant high tone. This accent shift did not take place in the participial form as this originally had a trisyllabic structure $-/CVC\check{V}du/$ but the final syllable has been lost by a phonological process deleting all final /du/'s, whether in a verbal form or not.

An r-less infinitive form is also frequent in rural Brazilian varieties of Portuguese. According to Holm (1986) this pronunciation has even become acceptable in Standard Brazilian Portuguese. For a rural dialect, we may quote the following examples from Jeroslow (1975), from the dialect spoken by Central Ceará sharecroppers:

<u>Portuguese</u>	<u>C.Ceará</u>	<u>Gloss</u>
tornar	toxná	return
esperar	isperá	hope
morrer	moxé	die
entender	ētédé	understand
passar	pasá	pass
interessar	íteresá	interest

From all these facts we can deduce a number of conclusions. Firstly the position of the accent of verbal forms at present in a creole language cannot be taken as providing hard and fast evidence regarding the original position of the accent in the Portuguese forms from which they are derived.

More solid are the conclusions that can be drawn from the vowel structure of verbal forms in the various creoles. Where this is in conflict with the evidence provided by the accentuation the vocalic evidence must take precedence.

Thirdly, there are varieties of Portuguese, as distinct from Portuguese creole, in which an r-less infinitive occurs. However, rural varieties of Brazilian Portuguese, especially in N.E. Brazil, have frequently been claimed to represent decreolized varieties of Portuguese. The most recent discussion of this question - Holm (1986) - concludes that either popular Brazilian Portuguese derives from a Portuguese creole, which has undergone significant decreolization, or that it, itself, while never a creole, has been influenced by a Portuguese creole or creoles in the course of its history. This means that we cannot point to Brazilian varieties of Portuguese as indicating that there were non-creolized forms of Portuguese with r-less infinitives, as these very dialects are under suspicion of having undergone decreolization; in other words we cannot use this fact without being guilty of circularity.

Let us examine more closely the Cape Verde forms adduced by Ferraz and Valkhoff (1975), to see whether they are justified in their claim that in Sotavento Portuguese 3PPS forms provide the basis for the verb forms, while in Barlavento it is the infinitive that forms the basis.

<u>Portuguese</u>	<u>Sotavento</u>	<u>Barlavento</u>	<u>Gloss</u>
levar	lébɹ	levá	carry
partir	párt(i)	partí	divide
sair	sɛj	saí	go out
apagar	págɹ	pagá	extinguish
chegar	tʃíge	tʃgá	arrive at
apanhar	páɹɹ	papá	gather
rachar	rátʃɹ	ratʃá	split
pedir	pídi	pdí	beg
comer	kúme	kmé	eat

<u>Portuguese</u>	<u>Sotavento</u>	<u>Barlavento</u>	<u>Gloss</u>
saber	sábi	sabé	know
correr	kɔ́rɐ	kɔré	run
beber	bébi	bibé	drink
voar	búvɐ	vvá	fly
fugir	fúʒi	fʒí	run away
secar	séke	seká	dry
cantar	kántɐ	kantá	sing

There are in fact only three Sotavento forms not at first glance derivable from Portuguese infinitives:

correr	kɔ́rɐ	(kɔré)
beber	bébi	(bibé)
saber	sábi	(sabé)

In Barlavento, Lopes da Silva (1957) gives a very few forms with -er apparently developing to -i:

<u>Portuguese</u>	<u>Barlavento B-S. Nicolau</u>		<u>Gloss</u>
sofrer	sofré	sufrí	suffer
proteger	proteže	putiʒí	protect from

Observe, however, that these forms have the accent on the final syllable, and, more significantly, the non-final vowels are raised, indicating that they are derived from Portuguese unstressed vowels.

How then are we to explain the forms that occur in a number of creoles - and in Saramaccan - with final -i, derived from Portuguese -er verbs, if these are not 3PPS forms, as certain authors claim they are?

We would suggest that these are analogical forms, the explanation for which is obvious if we consider the verbal forms retained by the more typical, i.e. less Standard Portuguese-influenced creoles.

We regard the Gulf of Guinea creoles as reflecting the basilectal prototype probably most closely of all. Papiamentu has undergone much Spanish influence,

Guine creole has undergone much influence from African languages, and Cape Verde creole has undergone massive interference from Portuguese itself, particularly in the verbal system.

Let us examine the Portuguese verb forms that have survived in Principe creole - the Gulf of Guinea creole for which the fullest description is available. There are two forms - one claimed by Günther (1973) to be based on the infinitive for most verbs, and a second - morphologically complex - form, the participle, derived from the Portuguese past participle.

The participle is derived as follows:

<u>Verb stem</u>	<u>Participle</u>
-ã	-ãdu
-í	-ídu
-é (monosyllable)	-édu
-é (polysyllable)	-ídu

The derivation of -er participles with a vowel change is of course a direct reflection of Portuguese morphology.

I suggest therefore that the variability between the final vowels /i/ and /e/, in er-derived verbs, to be found in most Atlantic Portuguese creoles (except those of the Gulf of Guinea), as well as in Saramaccan, derives from the well-known tendency towards paradigm regularity, and that in those cases where the /i/ occurs in a verb form reflecting a Portuguese -er-verb the vowel of the participle form has won out.

SECTION THREE

The Development of the English and Portuguese Vowels in the Surinam Creoles

In this section we will examine the developments resulting in the present-day reflexes of the vowels of English and Portuguese as these are represented in the creole languages in Surinam.

In order to make it easier to keep track of the complicated developments in the English vowel system we will distinguish between three historical stages of vowels in English. Most important of course is the vowel system of the so-called Early Modern English of the seventeenth century (EME). Because this was a period of flux in the development of the vowels we will also refer in each case to the Middle English (c. 1100-1500) values (ME). We will also have cause to refer to various forms of modern English. We will utilize principally data concerning various forms - "advanced", "conservative", etc. - of the Standard English of England, which was essentially London-based at the time. The popular dialect of London - Cockney - also appears to have left its mark on the Surinam creoles, and will be referred to where relevant. Because practically all the English-derived forms in the Surinam creoles can be explained in terms of one or other form of London English, we will restrict ourselves in general to the citation of these forms of English, regarding this practice as methodologically more powerful than making reference to a great variety of dialects, which could from time to time be used to provide a phonological match with forms from the Surinam creoles.

We make extensive use of Dobson (1957) and Barber (1976). We also make frequent reference to Matthews (1935) on nautical English, and to Sivertson (1960) on present-day Cockney, and Matthews (1938) on the history of Cockney.

As far as the Portuguese items in the Surinam creoles are concerned, we are immediately faced with the problem which kind of Portuguese to base our comparison on, since there are two kinds of Portuguese Standard at the present, and this was also the case to a lesser extent in the seventeenth century. We have chosen Brazilian Portuguese rather than European Portuguese as our standard of

comparison as this - apart from the obvious geographical proximity - seems to be closer to what we find in the Surinam creoles, in particular as far as unstressed vowels are concerned. Where relevant, however, European pronunciations will be considered as well. As far as style is concerned we will take as our starting point the citation form.

Where a development is plentifully illustrated in the Surinam creoles we will usually provide only three or four illustrations in the case of English items. Where developments occur that are at variance with the general developments to be found in Standard English we will normally give a fuller exemplification. In the case of Portuguese items, we also provide a fuller exemplification, since we do not want to make a priori assumptions regarding the form of Portuguese responsible, and we want to make possible comparisons between Surinam forms and those found in various Portuguese creoles.

The Surinam creole developments of the seventeenth century vowel phonemes will be examined starting from front (unrounded) vowels and proceeding round the periphery of the vowel quadrilateral. Within each (approximately phonetically identical) vowel type we will examine first long and then short vowels, looking first at the English vowel and then at its Portuguese congener.

Monophthongs (1 - 17)

1) /i:/

a) English

This sound is represented by /i/ in the Surinam creoles. It has two ME sources: /ē/ and /ĕ/.

i) /i:/ was the normal development of ME /ē/ in Standard English, except before /r/.

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
free	fri	fri	fri	fíí	fri	fíí	fíí
meet	míti	míti	miti	míti	miti	míti	míti
feel	fíri	fíli	fili	fíi	fili	fíi	fíi
		fíri					

ii) ME /ē/ was represented in the seventeenth century by /i:/ in substandard English, which later became the norm in English Standard English (ESE). We find this reflex in the Surinam creoles in a subset of the items that now display it in SE.

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
leave	líbi	líbi	libi	-	libi	líbi	
speak	píki	píki (péki)	pikki	píki	pikki	píki	
clean	krin	krien kríni	krín krini	-		kiín	kíin
heap	ípi	hípi	hipi	(h)ípi		(h)ípi	ípi

b) Portuguese
Not relevant

2) /i/

a) English

EME /i/ is reflected by /i/ in the Surinam creoles. It has two ME sources: /i/ and /ē/.

i) /i/ is assumed to have more or less the same value in ME, EME, and ESE.

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
bitter	bíta	bíta	bíta	bíta	bíta	bíta	bitá
six	síksi	síeksi	siksi síksi	síkisi	siksi	sigísi	sigíši
big	bígi	bígi	biggi	bígi	biggi	bígi	bígi

ii) According to Dobson (1957) raising of /e/ to /i/ is a fairly common process in the fifteenth or sixteenth century in the South-east. In the seventeenth century

ships' logs we find frequent examples of this raising, e.g. chists "chests". We presumably have another example of this process in Sranan /kísi/ "chest". The Saramaccan form /kési/ could be either "chest" or Dutch kist. Matthews (1938) provides many examples in Cockney including chistes (1553).

English	Sranan	1855	1783	Saramaccan	1778	Ndjuka	Boni
forget	frigíti	frigíti	vergiti	(fɛɛ kúɛ) (vergeti)	(vergêti)	feegéte	(féegete)
egg(s)	(éksi)	(éksi) (égsi)	(eksi)	-		ígi	(égi)
says he	sísi (sáisi)	sísi	-	-		-	-
every	íbri	íbri	íbri- (ebri)	íbi	(ebri-)	íbri	
any	íni-	ini-	ini-	(h)íni-	ini-	íni	

The word in the Surinam creoles corresponding to catch presumably belongs here too, as this word has a ME variant with /e/.

English	Sranan	1855	1783	Saramaccan	1778	Ndjuka	Boni
"ketch"	kísi	kísi	kissi	kísi	kissi	kísi	kísi

Compare also the following forms from other Atlantic creoles:

Krio	Jamaican	Guyanese	Gullah	Antiguan
ketʃ	k(j)etʃ	ketʃ	cɛc	ketʃ

Compare also the widespread English and American dialectal "ketch". A form [kɛtʃ] also occurs in S. and E. England in a number of places. Forms of eggs, every, and any with /i/ all occur in the immediate vicinity of London, in the Home Counties.

iii) Unstressed /i/ (ME /y/) is normally represented as /i/.

English	Sranan	1855	1783	Sara- maccan	1778	Ndjuka	Boni
greedy	grídi	grídi	griddi	gííi	griddi	gííi	gííi
weary	wéri	wéri	weri	wéi	wêri	wéi	wéi
ugly	ógri	(h)ógrie	ougri	(w)ógi	ougri	ógi	ogi

A number of forms exhibit a deviant development to /e/ in Sranan, Ndjuka and Boni, and /ɛ/ in Saramaccan.

English	Sranan	1855	1783	Sara- maccan	1778	Ndjuka	Boni	Krio
belly	bére	bére	berre	béɛ	belle	bée	bee	bɛɛ
		béle	belle					
already	aréde	aréde	aréde	-	arêre	-	-	
very	-	-	belle (1765N)	-	bere-	-	-	bére- (weri)
somebody	-	-	(sombadi) (1718)	sɔmbɛ	sombre	-	-	sɔmbadí
country	kóndre	kóndre	kondre	kɔndɛ	(kontri) kondre (1805)	kóndɛɛ	konde	kontrí

This seems to be only partly a Proto-Sranan feature. It is not the result of an accommodation strategy applied to an English model, but would appear to be partly the result of a process applying within the Surinam creole languages, and partly a feature shared with Krio (and WAPE).

iv) ME unstressed /ən/ appears in EME as /əɳ/, but in substandard English a development to /in/ also appears. This development is to be found in present-day Cockney (Sivertsen, 1960) as well as in Krio. Firstly we will present a number of clear cases.

English	Sranan	1855	1783	Sara- maccan	1778	Ndjuka	Boni	Krio
rotten	ratín	ratíen	latin	-	-	-	-	rɔ́tin
fashion	fási	fási	fasi	fási	fási	fási	fási	fásiin
fasten	fási	fási	fassi	-	-	fási	fási	fásiin
garden	djári	djári	djári	djái		djáli		gádin
bargain	bárki	bárki	barki	báiki	barki			bágin

These seem to behave in a parallel fashion to words in -ing /ij/.

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Sara-</u> <u>maccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>
cunning	kóni	kóni	kunni	kóni	kunni	kóni	kóni	kóni
dumpling	adómprí	adompri		dómbi		dómí		
nothing	nóti	nóti	notti	-nóti	noti			nátin

At first sight the following forms suggest derivations not involving /i/.

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Sara-</u> <u>maccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>
iron	-	-	-	-	-	ájee	aje	ájen
cotton	kankan-	kánkan-	kattan	kankan-	kattan-			kótin
woman	úma	(h)óeman	uman	-		úman	uman	úman
open	ópo	(h)ópo	hoppo	-		óbo	opu	ópin
poison	pónsu	pónsoe	-	-		pónsu	pónsu	pónsu
cushion	kúnsu	kóensoe	kussu	kúnsu ^s		kúnsu	kunsu	kúšin
"usen"	júnsu	koesoen						

However, at least some of these forms are paralleled by the following -ing words.

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Sara-</u> <u>maccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Krio</u>
shilling	sren	sren	shelling	seeñ		-		
		sring	sjelling					
herring	eíén	herén		-		-		jerín
		heríng						
pudding		poedoen	-			-		
		(1856)						

It is noticeable that the Surinam forms in the first table all display the pattern /-á-i-/. The -ing forms in the second table all involve the pattern /-ó-i-/(/*-á-i-). Both tables must be regarded as involving models with back unrounded vowels in the stressed syllable as we will demonstrate in the section on /ʌ/ (section 16).

Disregarding the first three forms in the third table for the moment, the items in

the third and fourth tables involve models with either front unrounded or back rounded stressed vowels. The vowel in the unstressed syllable agrees with that in the stressed syllable in backness and rounding.

This situation is reminiscent of that of the epithetic vowel:

a) front unrounded stressed vowel

<u>Stressed Vowel</u>	<u>Epithetic Vowel</u>
i	i
e	i, e
ɛ	ɛ

b) Back rounded stressed vowel

<u>Stressed Vowel</u>	<u>Epithetic Vowel</u>
u	u
o	u, o
ɔ	ɔ

c) back unrounded stressed vowel

<u>Stressed Vowel</u>	<u>Epithetic Vowel</u>
a	a: i: u
*ʌ (/o/)	o: i: o, u

Although there are differences of detail between the two sets of cases the parallels are very striking. This would imply that it is possible that forms such as /ópo/ "open" are based on EME models such as /ópin/ - presumably via Proto-Sranan forms like /*ópon/.

To return to the first three forms in the third table, the first form is problematic. The Ndjuka and Boni forms suggest an original Proto-Sranan form /*ájere(n)/ or /*ájere(n)/. Although this is clearly based on an "r"-full model, unlike the Krio counterpart, the similarity in the unstressed vowel between the Surinam and Krio forms is striking.

The second form /kankan-/ is puzzling. If the modern forms are to be derived from

the earlier ones then they have been deformed to a reduplicated pattern. The older form /katan/ must represent a model /kɔ̃tən/ rather than /kɔ̃tin/.

The third form /úma(n)/ has probably been influenced by /man/ "man".

v) Orthographic ow in an unstressed syllable in English corresponds to a variation between ME /ou/ and /ũ/. The former has given rise to the present Standard English pronunciation, while the latter has given rise to various dialectal pronunciations including [ʊ] which was according to Dobson (1959) to be heard in vulgar London speech in the 17th century. This is illustrated by the following form:

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>
swallow	swári	swári	swali swari

b) Portuguese

In nearly all cases Portuguese /i/ is represented in the Surinam creoles by /i/.

	<u>Portu- guese</u>	<u>Sara- maccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
i) <u>stressed</u>	bulir	bulí	buli	-	-	move
	cair	kaí	kai	-	kaí	fall
	tripa	tiípa	trípa	trípa	-	intestines
	tia	tía	tia	tía	tía	aunt
ii) <u>unstr.</u>	ficar	fiká	fikka	fiká	fiká	leave behind
	piolho	pioíjo	pioijo	-	-	louse
	pai	pái	pai	-	páj	father
	ópio	ópio	-	-	-	opium

One deviant form is the following:

<u>Portu- guese</u>	<u>Sara- maccan</u>	<u>1778</u>	<u>Matawai</u>	<u>Gloss</u>
pintar	pendé	pindeh	pinde	paint

The first /ɛ/ in the modern Saramaccan form is presumably due to a cross with a

form based on an English model i.e. paint: Sranan /péni/ (1783: pendi, penni). The final mid vowel in all the Surinam forms could be due to confusion as regards the conjugation vowel, something for which there are parallels, e.g. grunhir Sar. /guunjá/, torcer Sar. /toosá/.

3) /e:/

a) English

This sound is represented by /e/ in Sranan, Ndjuka and Boni, and by /e/ and / / in Saramaccan. It has three ME sources; /ē/, /ai/ and /ā/.

i) In the seventeenth century /e:/ was the ordinary Standard English reflex of ME /ē/. This was later replaced by /i:/, originally a substandard form, leaving only a residue of /e:/ forms. In Surinam we find a larger number of such /e:/ forms than exist in present day English. In other words a number of items that have /i:/ in Standard English display /e/ in Surinam.

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Sara-</u> <u>maccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
meat	méti	méti	meti	mbéti	meti	méti	meti
dream	dren	drem	drem	-	-	deén	den
beam	-	-	-	bén	bem	-	-
peas(e)	pési	pési	pesi (piesjes)	pési	(pisis)	pési	peši

Before /r/, ME /ē/ had not progressed further than /e:/ in EME. However in certain words there had been a development in ME from /ē/ to /ē/ before /r/. We find this development in one item only in Surinam.

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
beard	-	-	-	bía	bia	-	-

Other items in which this development has taken place in modern **Standard English**

do not display it in Surinam. For these words see (5).

ii) The ME diphthong /ai/ had various monophthongal and diphthongal reflexes in EME. We will only be concerned with the former in the section. There were two of these - /e:/ in the speech of "vulgar" speakers, and /ɛ:/ with so-called advanced (as against conservative) speakers. The Surinam creole reflex /e/ could be from either (or both).

English	Sranan	1855	1783	Saramaccan	1778	Ndjuka	Boni
today	tidé	ti-dè	tideh	tidé	tidè	tidé	tidé
away	-we	-we	-weh			-we	-we

iii) In the seventeenth century /e:/ was the "vulgar" Standard English reflex of ME /ā/. More "conservative" speakers had /ɛ:/. As in the previous case the Surinam creole reflexes /e/ and /ɛ/ could be from either.

English	Sranan	1855	1783	Sara-maccan	1778	Ndjuka	Boni
plate	préti	préti pléti	pleti	-		peéti	
face	fési	fési	fesi	fési	fési feessi	fési	fesi
snake	snéki	s(i)neki	sneki	sindéki	sneki	s(i)neki	šinéki
change	kénki	kínki	tjendji djendji	tjéntje	kjénji	kéngi	kjengi

Certain forms with vowels deriving from ME /ā/ display a reflex /i/ instead of the expected /e/ in Sranan and other creoles.

English	Sranan	1855	1783	Sara-maccan	1778	Ndjuka	Boni
grate	gríti	gríti	(gretti)			gríti	
wake	wíki	wíki (wéki)	(weki)	(wéki)	(weki)	(wéki)	(weki)
shame	(s)en	(s)em (siém)	(shem) (sjem)	(sen) sin ^s	(shem)	(sjén)	sin

b) Portuguese

Not relevant

4) /e/

a) English

Not relevant

b) Portuguese

Citation /e/ is pronounced [e] in stressed position in all styles of Portuguese; becomes [i] in normal speech in unstressed final position; and becomes [i] frequently in unstressed nonfinal position in casual speech. (Major, 1979)

		<u>citation</u>	<u>normal</u>	<u>casual</u>
a)	/é/	[e]	[e]	[e]
b)	/e#/	[e]	[i]	[i]
c)	/eX/	[e]	[e]	[e-i]

Stressed /e/ is represented by /e/ in the majority of cases in the Surinam creoles.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Gloss</u>
alfinete	finéta	fineti	-	pin
espelho	sipéi	sipèi	-	mirror
estrela	teéa	teréja	-	star
meia	-	meija	-	sock
pera	-	-	péra	pear
pagamento	pakaméntu	paggamentu	-	payment
Tedesco	-	-	tudésku	German
pente	pénti	penti	-	comb
quente	kéndi	kendi	-	hut
	kéndi ^s			
vento	véntu	winti	-	wind
	víntu ^s			
sempre	sémbe	-	-	always
	sémpe			

Final unstressed /e/ is most frequently represented by /i/.

Portuguese	Saramaccan	1778	Sranan	Ndjuka	Gloss
alfange	ufangi	lefangi	-	-	machete
doce	-	-	dósi	-	sweet
chocolate	sukaáti	-	skráti	sukaáti	chocolate
home (OPtg)	(w)ómi	omi	(omi)	-	man
longe	lóngi	lonje	-	-	far
	lúngi ^s				
mole	móí	moli	-	-	soft
	móis ^s	molli			
pode	-	poli	-	pój	can
pobre	-	-	póbri	-	poor
podre	póndi	pondri	-	-	rotten
quente	kéndi	kendi	-	-	hot
sangre	-	sangri	-	-	blood
febre	fébe	febre	-	-	fever
sempre	sémbre-	-	-	-	always
	sémpre-	-	-	-	

The cases with final /e/ both have the Portuguese structure /..E/eC±e/. The presence of a rhotic frequently appears to be associated with the occurrence of lower-mid vowels in Saramaccan. Compare section (6)b.

More complex is the development of pre-stress /e/ in the Surinam creoles. It is convenient to divide the cases up into four groups: a) non-verbals; b) -ir verbs; c) -ar verbs; d) -er verbs.

a) Portuguese	Saramaccan	1778	Sranan	Ndjuka	Gloss
de dia	didía				in the daytime
empada	-	-	empáda	-	a pastry
fermento	-	-	frementu (1783 Djutongo)	yeast	
gengiva	-	-	-	gingímbi	gums
menino	mií	minini	-	-	child
mentira	-	mitira	-	-	lie
pecado	pikádu	pikkadu	pikádo	-	sin
b) vestir	bisí	bisî besî	-	-	dress
sentir	sintí	-	-	-	perceive
pedir	pidí	-	-	-	beg
mentir	mindí	-	-	-	lie
demolir	dímbolí ^s	-	-	-	demolish

c)	Portuguese	Saramaccan	1778	Sranan	Ndjuka	Gloss
	invejar	fedjá	wedja	-	-	envy
	atravessar	tobesá tobe sa ^s	trebessà	-	-	cross
	temperar	-	-	temprà (1855)	-	chastise
	assentar	(sindó)	sindà	-	-	sit
	penar	pená	penna	piná	piná	suffer
	apertar	peetá	pretta	-	-	tighten
	negar	-	ninga	-	-	deny
	esfregar	feigá (Lo) feegá (Li)	friga friká	-	-	rub
	fechar	fitjá	fitjà	-	-	close
	chegar	tjiká	zikka (1805)	-	-	suffice
	entrar	dendá dendáa	dindra	-	-	enter
	drenar	diína diiná ^s	-	-	-	drain
	pegar	peká peeká	pekka	-	-	stick
d)	acender	sendé	sendèh	-	-	light
	beber	bebé	bebèh	-	-	drink
	crescer	-	gressi	-	-	grow
	ferver	f e e b é	frebbèh	-	-	boil
	gemer	dj e m é	tjemeh	gemé	B:gemeh	groan
	meter	meté	metteh	meté	-	introduce
	tremar	t e e m é	tremeh	-	-	tremble
	estender	tendé	tenteh	-	-	extend

The forms under a) are a mixed bunch, both as to the language they occur in, and as to the vocalic environment. About all we can say on the basis of these forms alone is that both /i/ and /e/ reflexes occur.

When we turn to the verbal forms, however, we are on more certain ground. As far as the b) forms are concerned these are poorly represented in the eighteenth century source for Saramaccan. The only form occurring in that source shows a variation between /e/ and /i/. The modern language displays only /i/-reflexes. As far as the eighteenth century source - Schumann (1778) - is concerned if we take the nominal forms mentira and menino as comparable, then we can say that the /i/ reflex was the normal one then too.

The c) forms display a mixture of /i/ and /e/ reflexes. There does not seem to be any means of forecasting which of these two vowels occurs in a given situation. If we are to take the 1778 forms as accurately distinguishing /i/ and /e/, then we appear to have two forms - esfregar and entrar - displaying an /i/ reflex in 1778, and an /e/ reflex at the present day. One form - penar- shows a different development in this respect as between Saramaccan on the one hand, and Sranan and Ndjuka on the other.

The d) forms present a nearly united front as far as the modern terms are concerned. With the one exception of beber with /e/, they all display an /e/ reflex. crescer (Schumann, 1778) displays a deviant reflex.

A comparison with the other Portuguese creoles is very instructive. To make this clearer we will only give the reflex of the unstressed /e/ in each case.

	Port	Sara	1778	Sran	CVBarl.	CVSot.	PGC	Pap.	S.Tomé	Prin.
b)	vestir	i	i/e	-	∅			i	i	i
	sentir	i	-	-	i			i	i	i
	mentir	i	-	-	i			i	i	-
	pedir	i		-	∅	i		i	i	i
c)	atravessar	e	e	-	e					
	assentar	(i)	i	-	e			i	-	-
	penar	e	e	i	e			e	-	-
	apertar	e	e	-	e			e		ε
	negar	-	i	-	e			e		ε
	esfregar	e/i	i	-	∅	i		e		ε
	fechar	i	i	-	∅	i			i	i
	chegar	i	(i)	-	∅	i		(e)	i	i
	entrar	e	i	-	i/e		ε	e	e	e
	pegar	e	e	-	e			e		ε
d)	acender	ε	e	-	e			e	e	e
	beber	e	e	-	i	e		e	e	e
	crescer	-	e	-	i			e		
	ferver	ε	e	-	e			(e)	e	e
	gemer	ε	e	e	e	e			ε	ε
	meter	ε	e	-	e			e		e
	tremer	ε	e	-	e			(e)	e	e
	estender	ε	e	-	e					e

The striking thing about this table is the extent of the agreement among the various Portuguese-based creoles - at least as far as the data available to us is concerned - and the extent of the agreement between them and Saramaccan. The zero-reflex in Cape Verde creole does not in fact disturb the pattern of general agreement as this results from a deletion of high vowels in the Barlavento variety of that creole. The few deviations from the pattern to be further found in Barlavento can be ascribed to the influence of Standard Portuguese which has probably affected this creole more than most. The bracketed forms in the Papiamento column are clearly Spanish-derived, and as such not relevant. The creoles least affected by outside influences - and for which we have the most data - are the Gulf of Guinea creoles of São Tomé and Príncipe. As far as the distribution of high and mid vowels is concerned we find an exact match with the modern Saramaccan situation. This is not the case with the two types of mid vowel. The match between high and mid vowels, however, indicates a connection between Saramaccan and the Portuguese-based creoles. The more so, as the conditioning of the raising of the mid vowels in the c) cases is not clearly phonological.

A final problem concerned with the development of Portuguese /e/ is to be encountered in verbs in Portuguese -er. A number of forms display /i/ instead of the expected /e-é/ in these items in Saramaccan. As there are no significant variations within the Surinam creoles we proceed directly to a comparison with the Portuguese creoles where we sometimes find this phenomenon too.

	<u>Port- uguese</u>	<u>Sara- maccan</u>	<u>1778</u>	<u>S.Tomé</u>	<u>Príncipe</u>	<u>CVBar.</u>	<u>PGC</u>
a)	bater	+batí ^s			baté	baté	
	fazer	+fasí	fassi		fezé	fazé	
	lamber	lêmbé	lembeh			lêmbé	
	nascer	+nasí	+nasih nasèh	nãsé	nasé	nasé	
	varrer	+baí	+bali	+bali	(+) vwê	barré	
b)	acender	sendé	sendèh		sêdé	sendé	
	beber	bebe	bebeh	bebé	bebé	bibé	
	crescer	-	gressi			krisé	
	ferver	fêé bé	frèbbèh	flebé	febé	ferbé	
	gemer	djémé	tjemeh	zémé	zémé	žémé	
	meter	meté	metteh		meté	meté	
	tremar	témé	tremeh	tlemé		tremé	
	estender	tendé	tenteh		sêdé	stendé	

c) <u>Port-uguese</u>	<u>Sara-maccan</u>	<u>1778</u>	<u>S.Tomé</u>	<u>Principe</u>	<u>CVBar.</u>	<u>PGC</u>
aborrecer	buusé	brussèh	blosé		burisé	
escolher		kujeh	kojé		skodžé	
comer	kómé	komè	kumé	kumé	kme	kúme
corre	kulé	kulèh	kulé	kwê	korré	+ kúuri
			kolé	kore		
morrer		mulèh	mulé	mwê	morré	+ múuri
		molèh	molé	more		
<u>Port.</u>	<u>Papiamento</u>					
a) bater	+ bári					
fazer	+ (hási)					
lamber	lèmbè					
nascer	násè					
varrer	+ bári					
b) acender	séndè					
beber	bébè					
crescer	krésè					
ferver	herebe					
meter	mètè					
tremer	(témblà)					
c) escolher	skóhè					
comer	kómè					
correr	kórè					
morrer	+ múri					

Saramaccan differs from the other creoles in that in verbs with the structure a..er the normal reflex is /a..í/. All the other creoles exhibit sporadic cases of the same reflex, with the exception of Principe creole (but see p. 472 for an interpretation of Pr. /ɛ/ as < /*ai/). This is perhaps relevant in the case of /vwê/. The reflex /ɛ..ɛ/ found in the case of lamber is strikingly paralleled in Papiamentu and Cape Verde creole. Although this form is not evidenced in the Gulf of Guinea creoles, parallel cases are to be found: São Tomé saber /sebe/, arder /lede/.

An explanation of the Saramaccan forms as derived from 3rd person singular present forms does not seem very likely. Quite apart from the unexpected accentuation which would then result, why should forms with the stem vowel /a/ be derived from 3rd person forms, while this does not appear to be the case with

stems in /e/ or /o/. The forms in c) in particular demonstrate this quite clearly, displaying in a number of cases a /u/ which can only be a reflex of unstressed /o/.

5) /ɛ:/

a) English

i) As we saw in (3) the ME diphthong /ai/ had monophthongal developments /e:/ and /ɛ:/. As we said there it is not possible to determine whether Surinam creole /e/ and /ɛ/ are modeled on EME /e:/ or /ɛ:/.

ii) Similarly ME /ā/ had reflexes /e:/ and /ɛ:/ in different forms of EME. Once again we cannot determine which of them was the source of Surinam creole /e/ and /ɛ/.

iii) ME /ē/ had developed to /ɛ:/ before /r/ as mentioned above. This gives Surinam creole /e/, with one case of /ɛ/ in Saramaccan.

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
wear	wéri	wéri	weri	-	-	wéj	wéli (Paramaccan)
there	de	dè	de	de		de	de
hear	jére	jéri jére	jeri	jéi	jeri	jée	je
ears	jési	jési	jessi	jési jési ^s	jessi	jési	ješi

As we can see the development is the **same** whether or not an /r/ can be reconstructed in the model.

The last two items do not have a mid vowel in ESE. Here they are the result of the aforementioned change in ME from /ē/ to /ē̄/, which had clearly not taken place in the English model for Proto-Sranan.

b) Portuguese

Not relevant

6) /ɛ/a) English

i) There was a tendency in ME to lower /i/ to /ɛ/, principally in Northern and S. Western dialects (Dobson, 1957), which however occasionally affected Standard English. This was also a prevalent Cockneyism according to Matthews (1938), who gives inter alia the form ef. The seventeenth century ships' logs indicate this lowering of i to e very frequently (Matthews, 1935).

English	Sranan	1855	1783	Saramaccan	1778	Ndjuka	Boni
if	éfi/éfu	iffi	effi	ɛ/e/éi/éfi	effi	éfu	efu/efi
been	ben	ben	ben	(bī)	(bi)	be	be
[b n] shilling	sren	sren	shelling	seén			
him	en	sring hem	sjelling hem	(h)én	hem	en	en

ii) ME /ɛ/ has basically remained unchanged in Standard English to the present day. In Surinam it appears generally as /e/, and occasionally in Saramaccan as /ɛ/.

English	Sranan	1855	1783	Saramaccan	1778	Ndjuka	Boni
yet	éte	(j)éte	(j)ette	jeti	jetti	éte	ete
bed	bédi	bédi	bedi beddi	bédi bédi ^s		bédi	
beg	bégi	bégi	begi	bégi	bégi	bégi	begi

iii) ME /a/ develops to /ɛ/ in the modern dialects in and around London. This development had already taken place by the seventeenth century in Cockney (Matthews, 1938). Sranan /áŋa/ could also be from Dutch hangen.

<u>English</u>	<u>Sranan</u>	<u>1850</u>	<u>1783</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Krio</u>
hang	(áŋa)	(hanga)	hengi	h'éngi	hengi	éŋge	ɛŋ(g)

b) Portuguese

This vowel occurs in Portuguese only in stressed syllables. This appears in general as /e/ in Saramaccan. When adjacent to original /r/, however, it usually has the reflex /ɛ/.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Gloss</u>
anel	andélu	aneru	-	ring
a pe	a pé	apè	-	upright
cedro	sédu	-	(1783:sedru)	cedar
ferro	félu	feru	-	iron
feira	-	-	fésa	feast
guelra	geeía	-	-	gill
materia	mateéa	-	-	pus
mecha	-	-	métja	suppository
perola	-	pellula	-	pearl
prego	peégu peégu ^s	pregu	-	nail
pressa	peésa	pressa	-	haste
pedra	-	petra	-	rock
colher	kujéé	kujeri	-	spoon
mulher	mujéé	mujere mojere	-	woman
febre	fábɛ	febre	-	fever

Two conditions would appear to result in a lower-mid vowel in Saramaccan: a) the position before Portuguese final /r/, or before a consonant preceding /r/; b) word-final position. The dialect indicated by raised "s" (the Upper Surinam River dialect) appears to have a couple of other forms with /ɛ/. The conditioning factor here is unclear, however.

c) Comparative Notes

In general, if we ignore source "s", we can observe an interesting distribution of front mid vowels in items of Portuguese and English (and Dutch) origin containing two (or more) such vowels. The vowels concerned go back to Portuguese /e/

and /ɛ/; English /e:/, /ɛ/, /ɛ:/, /əi/ and possibly /ai/; and at least Dutch /ɛ/, /e:/, /ɛi/ and /ɛ/.

Whether such items display high and mid vowels or low mid vowels is in by far the most cases determined by the other vowels present.

- i)E(C)E #
- ii)E(C)E(C) a
- iii)E(C)E(C) i
- iv)E(C)E(C) u
- v)E C i C E

The distribution of mid vowels in these five cases is as follows:

	/e/	/ɛ/
i)	4	32
ii)	8	-
iii)	15	1
iv)	2	-
v)	2	-

In particular the relationship between /e/ and /a/, /i/ and /u/ is reminiscent of that evidenced in the vowel harmony systems of many Bantu languages, although not modern Kikongo which has a 5-vowel system and not a 7-vowel system.

7) /a/

a) English

By the seventeenth century this sound had two variant pronunciations. [æ], an advanced pronunciation at the beginning of the century, had become normal before 1650, while "[a] continued to be heard from careful conservative speakers until the

Restoration Period" (around 1660) (Barber, 1976). Dobson is of a similar opinion. In the Surinam creoles the normal reflex is /a/.

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
fat	fátu	fáttoe	fattu	fátu	fattu	fátu	fatu
hat	áti	hátti	hatti	-		áti	hati
back	báka	bákka	bakka	báka	bakka	báka	baka
ask	áksi	(h)áksi	haksi	(h)ákísi	haksi	ákísi	aksi
					hakkesi		

In most English-based Atlantic creoles, velar stops are palatalized before /a/ corresponding to ME /a/. Compare:

<u>English</u>	<u>Jamaican</u>
cat	kyat
candle	kyanggi
carry	kyar(i)
garden	gyaadn

This palatalization does not always appear in the Surinam creoles:

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
cat	-	-	-	-tjáti		káti	tjáátji(?)
cabbage	kábisi	kábbisi	tjabbisi	tjábisi	tjábissi	tjábisi	tjábisi
		kjábbisi					
		tjábbisi					
candle	kándra	kándra	kandera	-	-	kándáa	
carry	tjá(ri)	kjári	tjarri	tjá	tja(rri)	tjái	tja
		tjári	tjerri				
		tja'					
cast-net	tjasneti						
garden	djári	djári	djári	djái		djáli	

This palatalization can be linked to a pronunciation of velar stops before front vowels that was in vogue in the seventeenth century. This pronunciation never completely replaced that with plain - or at least less palatalized - allophones. It became recessive, and is now purely dialectal, occurring in scattered locations across Central England. It still occurs to some extent in Cockney, cf. the Survey of English Dialects recording for Hackney (E. London) for cabbage [kíæbidʒ].

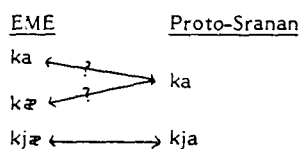
We then have three variant pronunciations for EME, i.e.

- i) [ka] ii) [kæ] iii) [kjæ]

The two reflexes we find in Surinam, i.e.,

- i) /ka/ ii) /kja > tja/

can presumably be associated as follows:



b) Portuguese

In Portuguese some cases of orthographic a are reflected by [ɐ]. These are in Brazilian Portuguese the stressed environments before /m, n, ɲ/. In European Portuguese this occurs in most cases of unstressed /a/. In the Surinam creoles there is no trace of this reflex which would presumably have resulted in /a/ in any case.

	<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
a) <u>stressed</u>						
	tanto	tántu	tantu	-	-	so much
	santa	santa	santa	sánta	-	holy
	papa	pápa	pappa	pápa	pápa	pap
	gago	ngáku	gaku	gágu	káku	stammerer
b) <u>unstressed - post-stress</u>						
	unha	húnja	hunja	-	-	nail
	trípa	tiípa	-	trípa	-	intestines
	tia	tía	tia	tía	tía	aunt
	sombra	sómbra	sombra	(s)ómbra	-	shadow

	Portuguese	Saramaccan	1778	Sranan	Ndjuka	Gloss
c)	<u>unstressed - post-stress (/r - #)</u>					
	vassoura	basóó	basorre	-	-	brush
	capoeira	kapéé (Kwinti kapwée kapúwe)	kappewirri kappewerri	kapuwéři (1855 kapuwéři kapowéři)	kapuwéi kapuwéi ^s	newly grown bush
d)	<u>unstressed - pre-stress</u>					
	tampão	tampá	tampa	tapún (?)	-	lid
	tabaco	tabáku	tabako	-	-	tobacco
	sapato	saapátu	sappatu	-	-	shoe
	papada	papáda ^s	-	-	-	cheek

With reference to the cases under c) which provide the only deviation from the normal reflex /a/ we would say, assuming that we only had access to the modern Saramaccan forms, that these two cases illustrated the restriction on /ɛ-a/, /ɔ-a/ in the Surinam creoles noted in Smith (1976). However the reflexes of capoeira in Sranan, Ndjuka, and the Saramaccan word-list of 1778 indicate that this word belongs to a group of items displaying final /i/ instead of the expected vowel.

Portuguese	Saramaccan	1778	Kwinti	Sranan	Ndjuka	Gloss
menino	miíi	minini	-	-	-	child
gingiva	-	-	-	-	gingímbi	gum(s)
dentro	(deńdu)	(dindru)	déńdi-	-	-	inside
burrico	bulíki	-	-	buríki	bulíki	ass's foal
parteira	-	-	-	plattiri (1783: Djutongo)	-	midwife
castico	-	-	-	kastísi	-	child of white & mestizo
mestico	-	-	-	mostísi	-	child of white & mulatto
bicho	(bítju)	(bidju) (pitju)	-	-	bísi bisi-	insect
papo	pápi (Li) (pápo (Lo))	(pappo)	-	-	-	bird's crop

8) /ɔ:/

a) English

The ME diphthong /au/ gives /ɔ:/ in the mid-seventeenth century. This appears as /a/ in the Surinam languages. There are two possible explanations for this. The first is that the low rounded /ɔ:/ was felt to be closer to the /a/ of some African language than to the /o/ or /ɔ/ of that language. The second is that the unrounding took place in English. Matthews (1938) gives examples from the Cockney of the seventeenth century: straberēs "strawberries", dater "daughter", etc. The same tendency is also evidenced from ships' logs (Matthews, 1935): saa "saw", harse "hawse", etc. This presumably is to be interpreted as equivalent to Dobson's /a:/ (> modern /ɑ:/) occurring in certain phonetic contexts only in Standard English, e.g. in "aunt", etc.

English	Sranan	1855	1783	Saramaccan	1778	Ndjuka	Boni
saw	sa	sâ	sa	sán	sa	sá	soa
call	kári	káli	kali	kái	kali	káj	kali
		kári					
hawk	áka	hákká					
walk	wáka	wákka	wakka	wáka	wakka	wáka	waka

b) Portuguese

Not relevant

9) /ɒ/

a) English

Normal by the middle of the seventeenth century was the reflex /ɒ/ for this vowel according to Barber (1976). An older reflex /ɔ/ could still be heard from careful conservative speakers. Dobson (1957), however, says that /ɒ/ cannot have been generally current in Standard English till about 1670. In vulgar speech - and this is possibly of greater relevance for us - /ɒ/ had long been normal.

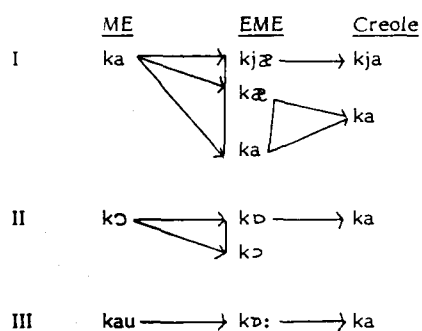
<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Sara-</u> <u>maccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
god	gádo	gádo	gado	gádu	gado	gádu	gadu
copper	kápa	káppa					
stop	tápu	tápoe				tápu	tapu
dog	dágu	dàgoe	dago	dágu		dágu	dágu

This reflex is of course identical to that of ME /ǣ/. A question that could be asked is whether this identity of reflex implies an identity of English model. In English certain dialects unrounded /ɔ/ to /ǣ/ in ME times (Dobson, 1957) This development spread to "vulgar London English, and occasionally to more correct speech". Matthews (1938) records this pronunciation for sixteenth and seventeenth century Cockney. He also records many occurrences in the seventeenth century ships' logs (Matthews, 1935), e.g. last "lost", saft "soft", drap "drop", etc. In the few cases preserved in modern Standard English, e.g. strap, the present vowel is /æ/, i.e. identical to that appearing in original /a/-words. It can therefore be assumed that unrounding of /ɔ/ in ME times gave rise to a merger with /ǣ/, at least insofar as this unrounding had a place in Standard English. On the other hand /a/ from ME /ɔ/ never gives rise to the palatalization of preceding velar stops, as happens at least with a portion of the cases involving /a/ from ME /ǣ/. Compare the following contrast:

	<u>English</u>	<u>Surinam</u>	<u>Jamaican</u>
i)	cat	-tjáti (Sar.)	kyat
	carry	tjári (Sr.)	kyari
	garden	djári (Sr.)	gyaadn
ii)	copper	kápa (Sr.)	kapa
	god	gádo (Sr.)	gad

This distinction means that the qualities of the English vowels that lie behind the /a/'s of these creole languages cannot be identical, otherwise we would expect to find palatalized velar stops with the /a/'s from ME /ɔ/. The fact that not all of the velar stops that precede /a/ from /ǣ/ are palatalized does not alter this fact.

If we examine the full range of developments of English low vowels, the following picture emerges:



There are of course also dialects in Britain and in America that unrounded the vowels of II and III, without merging them in quality with the vowel in I. In these dialects the usual quality is [a] or [ɔ]. Obviously we cannot exclude the possibility of the English model possessing one of these sounds rather than [ɔ]. However, there is every probability that [ɔ] would be interpreted in terms of many African phonological systems as /a/ as low rounded vowels do not occur in the phonologies of the languages that apparently played the most part in Surinam - Kikongo, Gbe and Twi.

The Sranan form /jarabáka/ "yellowback (sp. fish)" is to be derived, not from a form of the word yellow with ME /ʃ/ but from a variant with ME /ð/, explained by Dobson (1957) as being due to a stress-shifted OE form (OE ǵeolu > yellow, OE ǵeolu > "yollow").

10) /ɔ:/

a) English

i) ME /ō/ before /r/ became in EME /u:/, as it did preceding other consonants. However this /u:/ became lowered in the pronunciation of many speakers, starting about 1600 and resulting in /ɔ:/ (Barber, 1976; Dobson, 1957).

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>
poor thing	pooti	pōti	poti	pootíman ^s	poti	poóti
poor man			potiman (poor-thing-man)		poman	

ii) ME /ū/ develops in EME normally to a diphthong. However before /r/ it frequently remained /u:/, often then being lowered, as described above, to /ɔ:/.

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>
gourd	gódo	gódo	gollo	gólu	gollu	góo
					golu	godó
					gbu	

b) Portuguese

Not relevant.

11) /ɔ/

a) English

ME /ō/ gave in EME the reflexes /ɔ/ and /ɒ/, whose effects cannot be distinguished in the Surinam creoles. See (9) on /ɒ/.

b) Portuguese

/ɔ/ occurs only in stressed syllables in Portuguese. In the Surinam creoles this sound is reflected by /o/ in the majority of cases, occasionally by /ɔ/ or /u/.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Gloss</u>
mole	mɔ́i móis	moli molli	-	soft
espanhol	sipajólu-	-	spanjóro	Spanish/Spaniard
ópio	ópio	-	-	opium
pobre	-	-	póbri (1855)	poor
pólvora	poóba	proba	-	powder
redondo	lúntu ^s	(lu)luntu	-	round
bóta	-	-	butá	boot

The single case of a /u/-reflex is interesting. In the first place, there is, according to Rountree (1972), no contrast between /o/ and /u/ in the environment following /l/ and preceding a nasal cluster in the Upper Surinam dialect of Saramaccan. The sound in this context is described as "muffled [u]". This case is complicated, however, by the fact that the modern Saramaccan reflex is probably not to be derived from Portuguese at all, but from Dutch rond. In 1778, however, there were two forms luntu, presumably Dutch, and luluntu, which looks like a crossing between Dutch rond, and Portuguese redondo. Redondo would normally be expected to give /*lidóndu~*lidóndu/, or in this dialect /*lidúndu/. A form with total assimilation of the vowel preceding the high tone would be /*ludúndu/. Either crossing with the Dutch form, or else this in combination with /d/-liquefaction gives us /lulúntu/.

12) /o:/

a) English

This sound is represented by /o/ in Sranan, Ndjuka, and Boni, and by /o/ and /ɔ/ in Saramaccan. It has two ME sources /ō/ and /ou/.

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Sara- maccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
go	go	go	go	gó	go	gó	go
broke	bróko	bróko	brokko	boóko	brokko	boóko	boóko
story	tóri	tóri	tori	-	-	tóli	toli
more	móro	móro	morro	mɔ́ɔ mɔ́ɔn ^s	morro	móo	moo
sore	sóro	sóro	sorro	-	sorro	sóo	sóh

ME /ou/ had usually become /o:/ by the middle of the seventeenth century, although a diphthongal pronunciation (see (30)) was also possible with more conservative speakers.

English	Sranan	1855	1783	Sara- maccan	1778	Ndjuka	Boni
bow	bo	bo	bo	bɔ	bo	bɔ	bo:
blow	bro	bro	bro	bɔɔ	bro	boɔ	boo
low	lo	lo	lo	lɔ	loo	lɔ	
		ro			loh		
four	fo	fo	fo	fɔ	vo	fɔ	fo

b) Portuguese

Not relevant

13) /o/

a) English

Not relevant

b) Portuguese

Citation /o/ is pronounced [o] in stressed position in all styles in Brazilian Portuguese; becomes [u] in normal speech in unstressed final position; and becomes [u] frequently in unstressed nonfinal position in casual speech (Major, 1979).

	<u>citation</u>	<u>normal</u>	<u>casual</u>
a) /ɔ/	[o]	[o]	[o]
b) /o#/	[o]	[u]	[u]
c) /oX/	[o]	[o]	[o-u]

Stressed Portuguese /o/ is represented by /o/ in the majority of cases in the Surinam creoles.

Portuguese	Saramaccan	1778	Sranan	Ndjuka	Gloss
goma	góma	goma	góma	ngóma	starch
doce	-	-	dósi	-	sweet
bôlo	-	-	bóru	-	cake
popa	pómpa	-	-	pópa	poop
ovo	(w)óbo	wóbo	-	-	egg
piolho	piójo	pioijo	-	-	louse
ôlho	(w)ójo	oijo	-	-	eye
flor	foiô	floro	-	-	flower
		froro			
		fli			
podre	póndi	pondri	-	-	rotten
bobo	-	-	bóbo	-	buffoon
sombra	sómba	sombra	(s)ómbra	-	shadow
bôca	búka	búka	-	-	mouth
conta	kónða	kónða	-	-	bead
conta	kóntu	kóntu	-	-	story

/u/ in /búka/ is paralleled by Principe /ubúka/ although the other Atlantic Portuguese creoles have a mid vowel in this item.

Unstressed /o/ is represented variously by /o~/>/ or /u/. As in the case of /e/ the vocalic environment appears to play a role. First we will consider post-tonic cases (all final in fact).

	Portuguese	Saramaccan	1778	Sranan	Ndjuka	Gloss
a)	<u>following a mid back vowel</u>					
	torto	tɔɔtɔ	trotto	-	-	twisted
	piolho	piójo	pioijo	-	-	louse
	ovo	(w)óbo	wóbo	-	-	egg
			hóbo			
	bobo	-	-	bóbo	-	buffoon
b)	<u>following a high front vowel</u>					
	umbigo	bíngo	bíngo	-	-	navel
	cativo	katibo	kattibo	katíbo	-	slave
	vivo	-vívo	wívo	-	-	alive
	limpo	límpo	limbo	-	-	smooth
c)	<u>following other vowels</u>					
	vento	véntu	wintu	-	-	wind
		víntu ^s				
	tudo	túu	tule	-	-	all
	tanto	tántu	tantu	-	-	so much
	Tedesco	-	-	tudésku	-	German

These represent the regular cases. There are exceptions in each case. In the case of the mid back vowels there are two: grosso: grossu (1778); and conto: /kóntu/ (Sar.). In the case of the high front vowel - where it is difficult to explain the occurrence of /-o/ in any case - there are six, taking all the sources together.

Portuguese	Saramaccan	1778	Ndjuka	Boni	Gloss
tio	(tío)	(tio)	tiu (tio)	tiyu	uncle
periquito	piikútu	prikittu	-	-	parrot
liso	(línzo)	(liso)	-	-	smooth
fio	(fío)	linsu (fio)	-	-	wire
fino	fíu ^s	-	-	-	thin
bicho	bítju	bidju pitju	-	-	insect

In the case of the other vowels four forms occur that have /-o/ in one or other source: catarro:/katáo/^s (Sar.); papo:pappo (1778); pecado: /pikádo/ (Sran.); tabaco:tabako (1778). All these items also occur with /-u/.

There are no parallels in the Portuguese creoles for the cases in /..í.o/ but parallel cases do occur for the cases in /..ó.o/ in the Gulf of Guinea creoles, and in Papiamentu.

Portuguese	Sara- maccan	Sranan	Papia- mentu	Principe	São Tomé
bobo	-	bóbo	bobo	bóbo	
bôlo	-	bóru	bolo		
fogo	fógo	-	-	ufógo ufógu	fógo fógu
ôlho	(w)ójo	-	wowo	-	-
ópio	ópio	-	opio		
tio	tío	-	tio	číu	tíyu
torto	tórtu	-	otro	tórtu	tórtu
outro	óto	-	otro	ótü	ótlo

This assimilation is recessive in the Gulf of Guinea creoles, as is shown by the occurrence of alternative forms, and the fact that Principe displays this

phenomenon to a much lesser degree than São Tomé, a fact surely to be explained by the fact that Príncipe creole is a dying language, and therefore much more influenced by Portuguese than São Tomé.

Portuguese	São Tomé	Príncipe	Gloss
ouro	ólo	óru	gold
caroço	klóso	kósu	Andim-nut
pouco	póko	póku	a little
osso	ósu	ósu	bone
gordo	gódo	gódu	fat

Now we will consider pre-tonic cases. First we will examine verbal forms.

	Portuguese	Saramaccan	1778	Sranan	Ndjuka	Gloss
i)	botar	butá	putta	-	-	place
	coar	kuá	kuà	-	-	sieve
	contar	kondá	kondà	-	-	tell
	escorregar	koogá	krokka	-	-	slide
	acostumar	kusumá	kusumà	-	-	be familiar with
	dobrar	dubá	dubla	-	-	fold
		dobás				
	amolar	maá	malà	-	-	sharpen
	molhar	munjá	muija	-	-	wet
		munján (U)				
	amolgar	muungá	munga	-	-	bruise
	mostrar	musulá	mussula	-	-	show
	apontar	-	pontà	-	-	aim
	provar	poobá	probà	-	-	taste
	rolar	lolá	lolà	-	-	roll
	roncar	lonká	lungà	-	-	snore
	sonhar	sonjá	sonja	-	-	dream
			sonja			
	tocar	tuká	tukka	tuká	-	touch
	toldar	tolá	-	-	-	mar
	tomar	tumá	tummà	tumá	-	take
			tommà			
	tornar	tooná	tronna	-	-	return
	trocar	tooká	trokka	-	-	change
	voar	buá	boà	-	-	fly
ii)	aborrecer	buusé	brussèh	-	-	loathe
	escolher	-	kujeh	-	-	choose
	comer	kómé	komè	-	-	eat
	correr	kulé	kulèh	-	-	run
	morrer	-	molèh	-	-	die
			mulèh			
	torcer	toosá	trussa	-	-	twist

	Portuguese	Saramaccan	1778	Sranan	Ndjuka	Gloss
iii)	cobrir	tjubí	kubri	-	-	cover
	consumir	kusumí	kussumih	kusumí	-	consume
	demolir	dimbolí	-	-	-	demolish
	dormir	duumí	drummi	-	-	sleep
	engolir	gulí	guli	gori	gwilí	swallow

Here we fail to see the consistent assimilatory pattern that we found with pre-tonic /e/. In that case -ir verbs had uniformly /i/ as the Saramaccan reflex of this sound. Four out of five verbs in iii) display the high /u/ before -ir, but one -demolir - has /o/.

-er verbs have uniformly a mid vowel in the case of pre-tonic Portuguese /e/. Six out of seven display /ɛ/, while one has /e/. In the case of Portuguese /o/, however, there seems to be no pattern, with both high and mid reflexes occurring.

-ar verbs do not as a whole display any more consistency than their counterparts with Portuguese /e/. There appear to be some subregularities however.

The cases derived from an earlier structure /(..)r __ Cá/ usually display /o/:

Saramaccan	Proto-Saramaccan
koogá	*korogá
poobá	*porobá
loia	*rolá
tooná	*toroná
tooká	*toroká
toosá	*torosá

Items of the structure /.. __NCá/ have also /o/ in present-day Saramaccan.

Saramaccan	1778
kondá	kondà
-	pontà
lonká	lungà

In the last case we have u in 1778. However, the modern Upper Surinam River dialect described in Rountree (1972) is stated to have no distinction between

/o/ and /u/ in the environment /l __ NC/. The product of neutralization is [ɹ] (see Rountree p. 24). This dialect is the same as that represented by items represented by "s". Schumann (1778), who was stationed at Bambej on the Surinam River describes a dialect displaying certain similarities to dialect "s" (Upper Surinam River).

Portuguese	Saramaccan Lombé/Golío	Saramaccan "s" Upper Surinam	1778 Bambej
dobrar	<u>dubá</u>	<u>dobá</u>	<u>dubla</u>
gritar	<u>giitá</u>	<u>giintá</u>	<u>gritá</u>
mijar	<u>miindjá</u>	<u>minján</u>	<u>minja</u>
amanah	<u>amanjá</u>	<u>amaján</u>	<u>amajja</u>
casinha	<u>kazían</u>	<u>kasían</u>	<u>kassínja</u>
peçonha	<u>poozían</u>	<u>poosíjan</u>	<u>possínja</u>
vento	<u>véntu</u>	<u>vintu</u>	<u>wintu</u>

It is again of interest to examine the development of unstressed /o/ in the same items in the Portuguese-based creoles to see if the parallelisms observed in the case of unstressed /e/ are to be found in this case also.

Port.	Sara.	1778	Sran.	CVBarl.	Pap.	S.Tomé	Prin.
a) cobrir	u	u					u
consumir	u	u	u	u			
dormir	u	u	-	u	u	u	i
engolir	u	u	o	ø	u	u	u
b) contar	o	o	-	o	o		ɔ
escorregar	o	o	-	o		ɔ	
dobrar	u	u	-	o	o		
	o (s)						
apontar	-	o	-	o			
provar	o	o	-	o	u		
rolar	o	o	-	o	o		
roncar	o	u	-	o	o	o	
(torcer)	o	u	-	u	o	o	
tornar	o	o	-	o			
trocar	o	o	-	o	o		
botar	u	u	-	ø	u		ɔ
coar	u	u	-	w	(o)		
acostumar	u	u	-	ø	u		
molhar	u	u	-	o	u	o/ɔ	w
amolgar	u	u	-	o			
mestrar	u	u	-	o	u	u	u
sonhar	o	u/o	-	u	o		
tocar	u	u	u	o	o		ɔ
tomar	u	u/o	u	ø	u		
voar	u	o	-	w	(u)		w

c) Port	Sara.	1778	Sran.	CVBarl.	Pap.	S.Tome	Prin.
aborreecer	u	u	-	u		o	
escolher	-	u	-	o	(o)	o	
comer		o	-	ø	o	u	u
correr	u	u	-	o	o	u/o	w
morrer	-	u/o	-	o	u	u/o	w

We had already remarked above on the much less consistent relationship between the qualities of the pretonic vowel and the tonic vowel in this case as compared to the case of pre-tonic /e/. We observe here too much less parallelism among the various creoles, than in the case of pretonic /e/. The only real parallel - which is not evidenced by all that many forms - concerns the forms under a) which as in the case of -ir verbs with pretonic /e/ display a high vowel reflex of pretonic /o/, i.e. /u/. While the -ar verbs display about half high and half mid vowel reflexes in Saramaccan in the case of Portuguese /o/ stems - as is the case with the /e/ stems - this pattern is not all at reflected for the corresponding items in the other creoles, although the general proportion of high and mid vowel reflexes would appear to be the same in most cases, inasfar as the available data allows us to draw conclusions about this. Note that Cape Verde (Barlavento) creole has changed an original high vowel reflex of Portuguese pre-tonic /o/ to /w/ or zero. The -er verbs display a completely different pattern in Saramaccan for /o/ as against /e/ stems, having in all cases except one a high /u/ rather than a mid vowel as in the /e/ cases. Once again there is little consistency of distribution of high and mid vowel types over the various creoles.

Now we turn to an examination of the development of pretonic /o/ in nonverbal forms.

Portuguese	Saramaccan 1778	Sranan	Ndjuka	Gloss	
bocadinho	-	-	bokadínju	-	sweet cake
bonita	-	buníta boníta	-	-	pretty
capoeira	kapéé	kappewirri	kapuwéeri	kapuwéli ^s kapuwéi	newly grown bush
chocolate	sukuáti	-	skráti	sukaáti	chocolate
colher	kujéé	kujeri	-	-	spoon
goiaba	-	-	gujába	-	guave
mofina	mofína	muffina	mofína	-	poor
poema	-	-	poéma puéma	-	poem

If we separate these reflexes into those occurring in syllables that are labial-initial and those that are not, an interesting distribution appears.

	<u>labial-initial</u>	<u>other initial</u>
/o/	1	-
/o~u/	3	-
/u/	1	5

Unfortunately the sample is rather too small to state definitely whether the apparent relationship between labial-initial syllables and the occurrence of /o/-reflexes is a real one or not.

14) /u:/

a) English

This sound is represented by /u/ in the Surinam creoles. It has three ME sources, /ō/, /iu/, and /ū/ (before /r/).

	<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Sara-</u> <u>maccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
two	tu	toe	tu	tú	tu	tú	tu	
do	du	doe	du	dú	du	du	du	
foot	fútu	fóetoe	futu	fútu	futu	fútu	futu	
root		lóetoe	lutu	lútu	lutu	lútu	lutu	
		rútu	roetoe					

ii) ME /iu/ had developed in EME to /ju:/ in most cases, but to /u:/ following /tʃ, dʒ, r/.

	<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Sara-</u> <u>maccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
true	tru	troe	tru	tuú	tru	tuú	túu	
Jew	dju	djoe	dju	djú	djù	djú		

iii) ME /ū/ preceding /r/ was represented in EME by both diphthongal reflexes (as was normal in other environments), and monophthongal reflexes, one of which involved the retention of the high vowel.

English	Sranan	1855	1783	Sara- maccan	1778	Ndjuka	Boni
flour	frúwa (frowá)	fróewa		(foówa)			
sour	súwa	sóewa	sua (soa) (sowa)	súa (sóa)	(sowa)	súa súwa	
court	krútu	króetoe	kruttu	kuútu	kruttu	kuútu	kuútu

Of these cases it is certain that the last at least represents EME /u:/. The first two cases could be interpreted as a raising of an earlier form in /-ówa/. We find such forms - presumably reflexes of diphthongal EME forms /-ʌuər/ or /-əuər/ - in Saramaccan and Sranan (bracketed in table).

b) Portuguese

Not relevant

15) /u/

a) English

EME /u/ is represented by /u/ in the Surinam creoles. This sound has one ME source - /ũ/.

While the normal development of ME /ũ/ is to modern English /ʌ/, a minority of forms - i.e. some of the forms where the ME vowel was followed by /l/, or preceded by /w, b, p, f/ - preserved the high vowel.

cf.	puff	/ʌ/	:	pull, put	/u/
	fun	/ʌ/	:	full	/u/
	but	/ʌ/	:	bull, bush	/u/
				wool, wood	/u/

According to Dobson the unrounding of /u/ is first evidenced around 1640 in Standard English, at least in careful speech. However there is evidence that might indicate unrounding in Cockney from around 1525, and in "advanced" Standard around 1550.

The evidence of the Surinam creole forms suggests that, whatever English models were utilized, at least some of these involved less rounded forms than we find in modern Standard English, and this represented an older situation. Whether we ought to reinterpret this as evidence for two separate inputs of English, parallel to the "r"-less and "r"-full dialects of the previous section is not entirely clear.

We provide two groups of forms here: (a) forms where modern Standard English has a rounded vowel; and (b) forms where modern Standard English has an unrounded vowel.

	<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Sara-</u> <u>maccan</u>	<u>1778</u>
(a)	wood	údu	hóedoe	hudu	údu	hudu
	woman	úma	(h)óeman	uman	-	-
	bush	búsi	bóesi	bussi	-	-
	puss(y)	puspúsi	(poes)póesi		pusi-púsi	puspussi

	<u>English</u>	<u>Ndjuka</u>	<u>Boni</u>
(a)	wood	údu	udu
	woman	úman	uman
	bush	búsi	buši
	puss(y)	púsi	puši

	<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Sara-</u> <u>maccan</u>	<u>1778</u>
(b)	"buck"	búku	bóekoe	búku	-	-
	mutch	músu	móesoe	musse	músu	mussu
	must	músu	móesoe	musse	músu	musse
	too	túm(u)si	tóemoesi	tumussi	túmúsi	tumussi
	much				túmísi ^s	
	thrust	trúsu	troesoe	trussu	tuúsi	trussi
						trusse
	drunk	drúju	dróengoe	drungu	ɗɔŋɔ	drungu
	sunk	súju	sóengoe	sungu	-	-

	<u>English</u>	<u>Ndjuka</u>	<u>Boni</u>
(b)	mutch	músu	
	must	músu	musu
	too	túmísi	tumuši
	much		
	thrust	(toósi)	tuúsu
	drunk	duúngu	dungu
	sunk	súngu	súngu

b) Portuguese

This sound is normally represented in the Surinam creoles by /u/.

	<u>Portugu- guese</u>	<u>Sara- maccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
i) <u>stressed</u>	unha	húnja	hunja	-	-	nail
	crua	kúa	glua	kruwá	-	raw
			grua			
	cu	kú	ku	-	-	vagina
	fungo	fúngu	fúngu	fúngu	-	fungus
ii) <u>unstressed</u>	fundão	fundá	fundàm	-	-	whirlpool
	subir	subí	subi	-	subí	go up
	puxar	pusá	pussà	-	-	pull
	juntar	zuntá	suntà	djuntá	djuntá	assemble
			sundà			

There are a number of cases where Schumann (1778) gives an alternative form with o.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Gloss</u>
sujo	súndju	sunju	dirty
mulher	mujê	sonsu mujêre mojêre	woman

These forms may indicate that the /o/-reflex discussed above of pretonic Portuguese /o/ is not a retention of a Portuguese mid vowel but a Saramaccan lowering process operating optionally on pretonic /u/, especially following labial consonants.

In one item a sequence of a velar stop plus /u/ develops into a labial-velar stop.

Portuguese	Saramaccan	1778	Gloss
sacudir	sakpí	sakkuli	shake

Here, the loss of the liquid is followed by the loss of syllabicity of the /u/ giving /w/:

*/*sakudí → sakulí → *sakuí → sakwíʂ - sakpí/*

16) /ʌ/

a) English

EME /ʌ/ is represented in the Surinam creoles by the following sounds:

- /a/ in Saramaccan, Sranan, Ndjuka and Boni;
- /o/ in the same languages;
- /ɔ/ in Saramaccan;
- /ə/ in Boni.

Whether we are to assume that /a/ and /o/ - the two main reflexes - represent two different stages in the development of ME /ǔ/ to modern Standard English /ʌ/, i.e. i) unrounding to [ɘ], and ii) lowering to [ʌ] possibly representing respectively the English models in Africa, and in the Caribbean (with /o/ < [ɘ] and /a/ < [ʌ]), or else that a Proto-Sranan /*ʌ/ developed variously to /a/ and /o/ is not totally clear.

In favour of the second scenario is the fact that the /o/-reflex - which is the most frequent - does not have associated with it the rounded epithetic vowel found in cases where "stem" /o/ is derived from EME /o:/ or /aw/, but seems to involve a variation of epithetic vowel, determined by the place of articulation of the final consonant, and similar to that encountered with the other low unrounded vowel /a/.

We will compare the epithetic vowels occurring with Surinam creole /o/ (and /ɔ/), and /a/ derived from English /ʌ/, with those occurring with /a/ derived from English unrounded or rounded low vowels, and with /o/ (and /ɔ/) derived from English /o:/ and /aw/.

i)	/o/ from /ʌ/:	<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>
	- <u>Labial</u> :	cuff	kófu	-
		enough	nófo	ndófu
		shove	sjóbu	-
		rub	(lóbi)	(lóbi)
		tub	tóbo	tóbo
	- <u>Alveolar</u> :	hunt	ónti	(h)óndi
		cut	kóti	kóti
		buss	bósi	bósi
		first	fósi	(fósu)
	- <u>Velar</u> :	duck	-	(dóki)
		jug	djógo	djógu
		drunk	(drúju)	dɔ́ngɔ
		work	wróko	woóko
ii)	/a/ from /ʌ/:			
	- <u>Labial</u> :	-	-	-
	- <u>Alveolar</u> :	hurt	áti	(h)áti
	- <u>Velar</u> :	-	-	-
iii)	/a/ from /a/:			
	- <u>Labial</u> :	half	áfu	háfu
		laugh	láfu	láfu
		trap	trápu	taápu
		crab	krábu	kaábu
	- <u>Alveolar</u> :	hat	áti	-
		cat	-	-tjáti
		heart	áti	(h)áti
		thatch	tási	tási
	- <u>Velar</u> :	back	báka	báka
		black	bláka	baáka
IV)	/a/ from /ɒ/:			
	- <u>Labial</u> :	broth	bráfu	baafu
			brafú	
		soft	sáfu	-
		top	tápu	-
		stop	tápu	-

- <u>Alveolar:</u>	<u>English</u>	<u>Sranan</u>	<u>Sramaccan</u>
	call	kári	kái
	because	bikási	-
	bawl	bári	bái
	hot	áti	-
- <u>Velar:</u>	hawk	áka	-
	walk	wáka	wáka
	strong	tráŋa	taáŋga
	along	náŋa	-
v)	<u>/o/ from /o:/</u>		
- <u>Labial:</u>	soap	sópo	sópu
- <u>Alveolar:</u>	coat	kóto	-
	fort	fóto	fóto
	roast	(lósi)	-
	more	móro	mɔ́ɔ / mɔ́ɔn ⁵
- <u>Velar:</u>	broke	bróko	boóko
	smoke	smóko	(sumúku)
vi)	<u>/o/ from /aw/</u>		
- <u>Labial:</u>	mouth	mófo	-
- <u>Alveolar:</u>	proud	pródo	poólo
	house	osó	(w)ósu
	louse	lóso	lósu
	roundabout	lombóto	lómbóto
- <u>Velar:</u>	-	-	-

From this comparison we may conclude that Proto-Sranan did have a phonological unit /ʌ/, at least represented by modern Surinam creole items with /o/ or /ɔ/ corresponding to English /ʌ/. Whether Surinam creole items with /a/ corresponding to English /ʌ/ also represent a reflex of Proto-Sranan /ʌ/ cannot be established with certainty.

Ndjuka and Boni reflexes are similar in type, but not always in token:

i)	<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>
	jump	djómpo	djómpo	djómpo	djompo
	cuff	kófu	-	kófu	kófu
	enough	nófo	ndófu	nófu	

	<u>English</u>	<u>Sranan</u>	<u>Saramaccan</u>	<u>Ndjuka</u>	<u>Boni</u>
	shove	sjóbu	-		
	supper	sapa-	sápa-	sapa-	
	tub	tóbo	tóbo	tobo	
	rub	(lóbi)	(lóbi)	(lóbi)	
	love	(lóbi)	(lóbi)	(lóbi)	(lobi)
ii)	hunt	ónti	(h)ɔ̃ndi	(h)ónti	hónti
	cut	kóti	kóti	kóti	koti
	curse	kósi	kósi	kósi	koši
	buss	bósi	bósi	bósi	boši
	first	fósi	(fósu)	fósi	foši
	sun	son	(sónu)	sán	san
	brother	bráda	baáa	baáa	baala
	thrust	(trúsu)	(tuúsi)	toósi	(tuusu)
	gun	gon	góni	góni	goni
iii)	hungry	áŋri	háŋgi	áŋgi	angi
	jug	djógo	djógo	djógo	djogo
	duck	(dukrún)	dóki	dóki	
	drunk	(drúŋu)	dɔɔŋɔ	(duúŋu)	(dungu)
	work	wróko	woóko	woóko	woko

Forms with irregular epithetic vowels, and forms with other vowels than /o,ɔ, a/ are bracketed.

One other case that requires to be discussed at this juncture is the following:

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
mix	móksi	móksi	moksi	mókísi	mokkesi	mókisi	mókisi
						mokisá	

Although there is no exact parallel for this, we do have in ME a rounding of /ɣ/ to /ũ/ "after w and in isolated words after b, and before m" (Dobson, 1957). Except for the case of woman this survives only dialectally in English. If such rounding could take place in labial contexts in isolated items in ME, an ME form /*mũks/ is within the bounds of possibility. This would give EME /*mʌks/, which would in turn give Proto-Sranan /*mókisi/. The Ndjuka form /mokisá/ probably represents a cross with Portuguese mastigar (cf. the section on /tʃ/).

A possible parallel is to be found in Cameroonian Pidgin English, alone of the West African forms of English.

<u>Cameroonian</u>	<u>Nigerian</u>	<u>Fernando Po</u>	<u>Krio</u>
bɔks	misk	mix	miks

17) /ə/

a) English

We have already discussed reflexes of EME schwa in structures /-ər, -əl/ in connection with the previous section. These can be summarized as follows:

Words in /-ər/ display two types of reflex: firstly /-a/ which was explained as deriving from an "r"-less model - i.e. one involving only a final schwa; and secondly /-VrV/ (in Proto-Sranan) where the two V's derive their value from the preceding stressed vowel.

Words in /-əl/ also display two types of reflex: firstly /-VIV/ (in Proto-Sranan) where the two V's derive their value from the preceding stressed vowel, as with /-ər/; and secondly /-VIV/ (in Proto-Sranan) where the two V's are high vowels homorganic with the preceding stressed vowel in backness and rounding.

We have also seen that forms involving /-ŋ/ or /-ən/ in modern English are generally represented by what may be assumed to be reflexes of /-in/, still occurring in Cockney, and also widespread in Krio. If we except /úma(n)/ woman as of little relevance because of its clear relationships to /man/ man, we are left with two forms clearly reflecting a schwa in a form modelled on a structure /-ən/:

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
cotton	kankan-	kankan-	kattan-	kankan-	kattan-	-	-
payment	pajmán	paimán	paiman	kakan- kakan- ^s	paiman	-	-

The equivalence Surinam creole /a/:English /ə/ is demonstrated by the following forms illustrating final schwa.

English	Sranan	1855	1783	Saramaccan	1778	Ndjuka	Boni
mosquito	maskíta		maskita	masikíta ^s		makisíta	
vanilla			banilla (1777)				
yellow-	jara-	jara-	jara-	-	-	jaa-	
sorrow	-	-	-	sáa	sara	-	-
tomorrow	tamára	tamára	tamarra	-	-	tamáa ^s	tama
the	a	da	da	-	da	a	a

Initial syllables corresponding to syllables containing /ə/ in modern English display a number of developments apart from /a/. Some of these can be explained in terms of assimilation to the following stem vowel - more or less parallel to those involved in vowel-epithesis. Others suggest that the model did not involve /ə/ in a number of cases.

	English	Sranan	1855	1783	Saramaccan	1778
i)	mosquito	maskíta		maskita	masikíta ^s	
	vanilla			banilla (1777)		
	again	agén	agèn	agêhn	-	agehn
	alike	-	aléki	alleki	-	alléki
	tomorrow	tamára	tamára	tamarra	-	-
ii)	today	tidé	ti-dè	tideh	tidé	tidè
	together	tigédre	tigédre	tegedere tegeddere (1777)		
	tonight	tenéti				
	forget	frigíti	frigíti	vergeti vergiti	fεεkétε	vergéti
iii)	because	biká(si) bakási	bikássi bikà bakà	bikasi bika (Dju)	bika biga ^s	bikà
	before	bifó(si)	bifósi bifo	bevo	bifó ufó	bevo
i)	English	Ndjuka	Boni	Boni-Kromanti		
	mosquito	makisíta				
	tomorrow	tamáa ^s	tama			

	<u>English</u>	<u>Ndjuka</u>	<u>Boni</u>	<u>Boni-Kromanti</u>
ii)	today	tidé	tidé	tadé
	forget	feegéte	féegete	
iii)	because	bikáa	beka	
		bika	bekan	
	before	bifó	bifo	

The first group illustrates occurrences of Surinam creole /a/ for English schwa.

The second group illustrates cases of front vowels - which cannot be reflexes of the original non-schwa English vowels, as these were back - reflecting English schwa before a stressed front vowel. The only case involving a non-front vowel, apart from the case of togeddere (1777) where English influence may be suspected in the spelling, is that of /tadé/ in the Boni Kromanti secret language.

The third group presumably derives largely from English unstressed /i(:)/, with the exception of the Sranan variant form /baká(si)/ which illustrates the /a/ corresponding to English /ə/.

Two items have such peculiar forms as to require separate discussion.

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
far	fu	foe	va	fu	vo	fu/___C	fu/___C
			vo	u		fu/___V	fi/___V
window	-	-	windau (1765N)				
			windels (1718)				

In the first case we have three basic situations to consider:

- the forms with rounded vowels in Sranan and Saramaccan
- the form with a in Schumann (1783)
- the Ndjuka/Boni alternation between /fu/ preceding a consonant and /fi/ preceding a vowel.

When we consider the rounded vowel items in Sranan and Saramaccan, of which we give a more detailed survey for Sranan:

<u>Modern</u>	<u>1856</u>	<u>1855</u>	<u>1844</u>	<u>1837</u>	<u>1798</u>	<u>1783</u>	<u>1780</u>	<u>1777</u>	<u>1765</u>	<u>1718</u>
fu	vo	foe	vo	voe	foe	vo	fo	fo	for	ver
				foe						

we need not be unduly concerned at Schumann's (1778, 1783) recording an o here. Schumann (1778) gives ko for modern Saramaccan /ku/ (Portuguese com) "with", which corresponds to pronunciations [kõũ-kõ - kũ]. Of these it would seem likely, in view of the modern Saramaccan form, that [kũ] provided the model for this. This suggests that the eighteenth century forms vo represent /fu/. When we compare the corresponding forms in other Atlantic English based creoles:

<u>Jamaican</u>	<u>Limon</u>	<u>Providence</u>	
fi	fi	fi	
<u>Guyanese</u>	<u>Belizean</u>		
fu/fi	fu/fi		
<u>St. Kitts-Nevis</u>			
fu			
<u>Misquito Coast Creole</u>		<u>Barbadian</u>	
fo		fo	
<u>Bahamian</u>			
fa			
<u>Krio</u>	<u>Cameroon</u>	<u>Nigerian</u>	<u>Gullah</u>
fɔ	fɔ	fɔ	fɔ (+fa)

we can see that there are parallels for /fu/ although /fo/ does occur too.

The second form - va - could represent either an English unstressed form with schwa /fə/, or an English stressed form /fɔ:/, which as we can see is evidenced from West Africa (Krio, Cameroonian).

The third situation - that of variation between /fu/ and /fi/ in Ndjuka and Boni according to whether the following word begins with a consonant or vowel - is mysterious. Although other creoles display a variation between /fu/ and /fi/ - e.g. Belize - these do not show the same distribution of these forms as Ndjuka and Boni.

The other form - windels (Herlein, 1718); windau (Nepveu, 1765) - is highly interesting. We would expect /*wínda/ to judge by most other words of this type (cf. tomorrow /tamára/) - and this form is represented by Krio /wínda/. In EME the final diphthong /ou/ occurred in this type of word and it is conceivable that Nepveu is intending to represent this. Herlein's version, however, can only be related to the phonetic realization of final /ə/ in the dialect of Bristol, England's second sea-port (in the seventeenth century), which is [əɪ] before a word beginning with a consonant, and [əɪ] before a word beginning with a vowel. In the latter case there is neutralization between /ə/ and /əɪ/, but not in the former case (Weissman, 1970) The dialect of Bristol is quite distinct from the surrounding S.W. English rural dialects, sharing many features with Cockney, and clearly strongly influenced by (sub) standard English. It is, however, an "r"-full dialect.

Diphthongs (18-32)

18) /ei/

a) English

Not relevant.

b) Portuguese

This diphthong is pronounced [ɛi] in European Portuguese, but [ei] in Brazilian Portuguese. It only occurs nonfinally in Surinam where it appears as /e/ or /ɛ/ if stressed and /e-i/ if unstressed. In this it does not differ from monophthongal /e/.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
deixar	disá	dissà	-	-	leave
preitear	-	-	prèta (1855)	-	do homage to
queimar	tjumá	tchimà kjimà	-	-	burn
teimar	-	-	temà	-	be stubborn
capoeira	kapéé	kappewirri	kapuwéri	kapuwéi kapuwéli ^s	newly grown bush
inteiro	télu	télu	-	-	whole

Note that the vowel in /tjuma/ has undergone rounding by virtue of the following labial

19) /ɛi/

a) English

EME /ɛi/ of two origins appears to have been present in the models for Surinam creole, firstly from ME /ai/, and secondly from ME /ā/ preceding /r/.

i) ME /ai/ has a variety of possibilities in EME in the mid-seventeenth century - monophthongal /ɛ:/ with advanced speakers, and /e:/ with "vulgar" speakers (Dobson, 1957), and diphthongal /ɛi/ and even /ai/ with conservative speakers. In the Surinam creoles we find the following reflexes in Sranan - /ej/, /e/ and /aj/. Of these it seems reasonable to identify /ej/ as the reflex of /ɛi/.

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
day	dej/-de	dei	dei/deh	-de	-de	de/déi	de/dei
play	prej	plei	pre/preh	peé	pre	peé	peé
hooray	uréj	hoéré	hureh	-	-	-	-
clay	-	klei-		kéé-	kreh-	keié	

ii) In the section on liquids we have discussed the development of monosyllabic /ɛiə/ to Surinam creole /ej/, parallel to the developments of /ɔə/, /ɛə/ to /o/, /e/.

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
hare	ej	hei	hei	-	-	hé	he
shear	seséj siséj s'séj	seséi	sesei	seséi	sese seisei	seséi	seséi

As can be seen some of the Bush Negro languages and older Sranan sources display reflexes lacking diphthongs. The question is whether these monophthongal reflexes are to be derived from an older diphthongal stage. This question is probably to be answered in the negative for two reasons. Firstly Ndjuka has a mixture of

monophthongal and diphthongal reflexes which cannot be explained in terms of any phonological conditioning. Secondly, Schumann's recording of Sranan in 1783 also has monophthongal reflexes in addition to the diphthongal reflexes that came to prevail later. This implies that we must assume a variation between monophthongal and diphthongal models for all these items. Monophthongal variants of hare and shear in the Bush Negro languages would then be modelled on /eə/.

b) Portuguese

Not relevant.

20) /ai/

a) English

EME /ai/ is derived from three ME phonemes - /ī/, /ai/ an /ui/.

i) ME /ī/ had two reflexes around the middle of the seventeenth century according to Barber (1976) - /əi/ in conservative Standard English, and /ai/ in advanced Standard English. In word final position we have evidence for both reflexes in the form of /ej/ and /aj/ in Sranan. The second of these would seem to be derived from EME /ai/.

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Gloss</u>
eye	aaj	ai	ai	aái	ai	aai	
eye	aj	(h)ai	hai/(hei)	-	-	áin	
buy	baj	bai	bai	bái/báli	bai	bái	
tie	taj	tai	tai	tái	tai	(téi)	
tie-tie	(tetéj)	(tétéi)	(tetéi)	tatái	taitai	(tétéi)	rope
by'n'by	bambaj		(tetèh)				

<u>English</u>	<u>Boni</u>	<u>Gloss</u>
eye	ai	
buy	baj	
tie	(téi)	
tie-tie	(tetéi)	rope

In medial position this duality of reflex is not present - and as we shall shortly see a parallel situation obtains with the EME derivations of ME /ū/- so that we cannot determine with certainty whether the resultant /e/ in the Surinam creoles is to be ascribed to EME /ai/, /əi/ or to both of these.

English	Sranan	1855	1783	Saramaccan	1778	Ndjuka	Boni
fight	féti	féti	feti	féti/féti ^s	feti	féti	feti
ripe	lépi	répi/lépi	repi/lepi	lépi/lépi ^s		lépi	lepi
knife	néfi	néfi	nefi	-n(d)éfi	-nefi	néfi	néfi
time	ten	tem	tem	té(n)	tem	tén	ten

The one exception to this rule concerns ME /i/ preceding /r/. In the EME model for the items illustrating this sequence - and in a parallel fashion to ME /ū/ before /r/ - an epenthetic schwa had developed between vowel and liquid (Barber, 1976), giving rise to a disyllabic structure in fire with /fájər/ → /fája/ as model, and a trisyllabic structure in iron with /ájɛrən/ or some such structure as model.

The evidence from sailors' logs supports the occurrence of this type of pronunciation (Matthews, 1935) of fiuring "firing", fiared "fired", Iarland "Ireland" etc.

English	Sranan	1855	1783	Saramaccan	1778	Ndjuka	Boni	Krio
fire	fája	fája	faija	fája	faija	fája	faja	fája
iron	-	-	-	-	-	ájee	áje	ájən

ii) ME /ai/ had, as was mentioned in the section on /ɛi/ (19), a variety of reflexes in EME - /ɛ:/, /e:/, /ɛi/ and /ai/ - this last only with very conservative speakers. There are only four examples of this reflex in the Surinam creoles.

English	Sranan	1855	1783	Saramaccan	1778	Ndjuka	Boni
pay	paj	pai	pai	-	-	pái	pái
payment	pajmán	paimán	paiman	paimá	paiman	-	-
eight	ájti	áiti	aiti	áiti	aiti	áiti(n)	aéti
says he	sájsi (sísí)	(sísí)					

What is interesting about these examples is that they display a consistent diphthongal reflex of the EME vowel. In section (i) above we noted that we could not assign the reflex /e/ found in e.g. /béti/ with any degree of certainty to EME /ai/ or /əi/. The occurrence of preconsonantal cases - eight and says he - that we can clearly assign to EME /ai/, might indicate that the vowel in /béti/ etc. should rather be attributed to EME /əi/. However, the two cases of a preconsonantal diphthong just given might just be exceptional.

iii) ME /ui/ was reflected in the EME of conservative speakers as /ui/, and in that of advanced speakers as /ai/ (via /əi/). The modern standard English reflex /ɔi/ is derived from a variant ME pronunciation. The relevant forms are the following:

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
boy	boj	boi	boi	-	boi	bóí	
boil (v)	bóri	bóli	boli	bói	boli	bóli	bóli
		bóri	bori				
boil (n)	-			bói	boli	-	-
spoil	póri	pори	poli	pói	poli	póli	poli
			pори	póli			

The last three forms are extremely interesting by reason of the unusual combination of "stem"-vowel and epithetic vowel - /o/ and /i/. As we have seen above the quality of the epithetic vowel is determined by that of the "stem"-vowel as we will term it. In particular front (unrounded) vowels condition a front (unrounded) epithetic vowel, rounded (back) vowels condition a rounded (back) epithetic vowel, and back unrounded vowel items have their epithetic vowel determined by the final consonant - labials condition back rounded epithetic vowels, alveolars condition high front unrounded epithetic vowels, and velars condition a vowel identical with the previous vowel.

Here we appear to have a situation where there is a complete lack of agreement between the two vowels. The only case that would fit the occurring patterns would be a model involving the EME vowel /ʌ/ followed by an alveolar. Clearly these forms cannot be explained as involving a vowel /ʌ/, and the diphthong /əi/ would give a "stem" vowel /e/ in the Surinam creoles.

A comparison with other Atlantic creoles is very instructive.

English	Krio	Fernando Po	Jamaican	Guyanese	Limon	Antiguan
boy	bɔj	boy	bwaj	b(w)ɔj	bwaj	
boil	bwɛl	buel	bwajl	bajl	bwajl	bwajl
spoil	pwɛl	puel	pwajl	spajl	spwajl	pwajl
	pwɔjl	spuel				

Jamaican, Limon English, and Antiguan display a development of ME /ui/ to /waj/, frequent also in Southern English dialects. The /w/ in these cases occurs only after labials, and is explained by Dobson (1957) as a "glide", by which he presumably means some kind of transition sound. Dobson also mentions that the last seventeenth century phonetician Cooper appears to indicate at least the optional retention of /ui/ after labials. There are two possible explanations for the development of /waj/. The first possibility is that the rounding of the initial consonant preceding /ui/ was retained in some styles even after the replacement of this by /əi/ (-> /ai/). Alternately these forms could be derived by a process of stress shift within the diphthong - /úi/ -> /uí/, resulting in a form /wí/. This would have to occur in ME, leading to the reflex /wəi/ (-> /wai/) in EME.

If the above phenomenon in creole languages is restricted to the context following labials - which can only be demonstrated from the evidence from outside Surinam, the longer retention of /ui/ after labials may well form an intermediate link in the chain of development.

Apart from the forms /ájti/, /sájsi/ and /pajmán/ - which last form is probably to be explained as analogical to /paj/ - no Surinam creole form shows a development of an English item involving the retention of a diphthong preconsonantly. If we compare the outcome of ME /i/ in EME which is also /əi/ or /ai/ we would expect the stressed vowel in these items deriving from ME /ui/ to be /e/ in Sranan and /e/ or /ɛ/ in Saramaccan.

Krio is a language which has a similar monophthongal tendency in its older vocabulary. The forms /pwɛl/ and /bwɛl/ are obviously of relevance here. In other words, we would expect the Sranan forms to be:

*bwaj boy
 *bwéri boil
 *pwéri spoil

Note that we would now have **regular epithetic vowels**. The epithetic /-i/ now follows a stressed front vowel.

In the Surinam creoles, there is, as we will see later, a set of frequent changes.

wi → u
 we → o
 wa → o

This set of changes operates only haphazardly. Examples are:

English	Sran. 1783	Sranan	Sar. 1778	Sar.
sweet	(switti)	(swíti)	swütti	súti
we	(wi)	(wi)/u	u	(wi)/u
swear/ zweren	(sweri)	(swéri)	sweli	sói

We can now hypothesize the following sequence of forms:

English model	Proto-Sranan	Sranan
*bwaj →	*bwáj →	boj
*bwajl →	*bwéli →	bóli → bóri
*pwajl →	*pwéli →	póli → póri

This remains entirely hypothetical as far as these forms are concerned. However, there is an indirect confirmation provided by an early form of the Sranan item based on goodbye. This form, /krobój ~ kribój/ in Sranan (now meaning "last"), has a 1777 form cerroboay. This is interpreted in Smith (1978) as /korobwáj/ (note oan for /wan/ in the same source). Only the second part /bwaj/ is of interest here. Why goodbye should be represented by /-bwaj/, however, is not immediately obvious. However, this is probably to be seen as a hypercorrection.

Presumably models with the standard reflex of /*-bui/, /-bai/, were available, as well as the /-bwai/ forms. The model of goodbye would have been /gudbáj/, so that it would have been possible to interpret this as /baj/ < ME /bui/, and therefore as a variant of the other development of ME /bui/, /-bwaj/.

The seventeenth century ships' logs provide one parallel form - pwint "point" (Matthews, 1935).

b) Portuguese

There are very few cases of Portuguese /ai/ reflected in the Surinam creoles. It appears as /a/ in nonfinal position, and as /ai/ if final.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
baixar	baziá	bassia	-	-	descend
baixo	básu báu-	básu	-	-	under
pai	pái	pai	-	pāj	father

The Portuguese creoles display the same distribution of reflexes.

	<u>Portu- guese</u>	<u>Sara- maccan</u>	<u>1778</u>	<u>São Tomé</u>	<u>Principe</u>	<u>Cape Verde</u>	<u>Papua Tetu</u>
(a)	baixar	baziá	bassia		basá	bɛʃá	báhà
	baixo	básu báu-	básu	básu	ubásu	bóʃə (Barl)	bóu
	pai	pái	pai	pɛ	pwé	básu (Sot) páj (Barl) péj (Sot)	pái

The two components of the diphthong have been merged in Sao Tome and Principe creole, but the difference of reflex as between final and nonfinal position remains.

In particular if we restrict our examination to the Gulf of Guinea creoles we find that the parallels are especially striking.

Portuguese	Saramaccan	São Tomé	Principe	Annobon	Gloss
baixar	baziá		basá		descend
baixo	básu	básu	ubásu	básu	under
caixão	-		kasã		
caixa	-		káša		chest
caida	-		kjéde		
mais	-		mási		more
pai	pái	pé	pwé	páj/pé	father
rainha	-		raŋa		queen
raiva	-		réva		
xaille	-	š é li	š é li		shawl

The Gulf of Guinea creoles seem in fact to have a slightly more complex set of reflexes than we have implied:

- a) /a/ preceding a "palatal" consonant: e.g. Portuguese /š,ɲ/
- b) /ɛ/ preceding other consonants
- c) /*aj/ developing to /(w)e-ɛ/ in final position.

In Saramaccan we have examples of types a) and c), which agree with the Gulf of Guinea reflexes.

c) Comparative notes

Although the developments of preconsonantal /ai/ might seem to differ as between English and Portuguese items:

English: /ai/, and conceivably /e/
 Portuguese: /a/

the cases are probably not comparable, as we may at least suspect, given the Gulf of Guinea reflexes, that /a/ occurs only before "palatals" - by chance the two Portuguese items fall into this category - while no English case is of this type.

21) /əi/

a) English

As we have already noted in the previous section, ME /ɪ/ had two reflexes in the middle of the seventeenth century - /əi/ in conservative Standard English, and /ai/ in advanced Standard English. We have already dealt with the reflexes of /ai/. /əi/ seems to be represented by the following items:

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>
cry	krej	krei keréi	kreh	kéé	kre	keé
dry	drej	drei	dre	déé	dre	deé
fly (v)	frej	flei frei	flei frei	-	-	fee'
fly (n)	-frej	flei frei	flei frei	-feéi	-	feefee'
high	ej	hei	heh	héi	heh	héi
lie	lej	lei	lei	-	lei	léi
tie	(taj)	(tai)	(tai)	(tái)	(tai)	téi
tie-tie	tetéj titéj t'téj	tétéi	tetèi teitei	(tatái)	(taitai)	tétéi
close-by	krosbéj	krósibei	(klossibai) (krossibai)	-	(klossibai) (krossubai)	kousubéi

<u>English</u>	<u>Boni</u>	<u>Gloss</u>
cry	kréi keréi	
dry	dée	
fly (v)	(fai)	
fly (n)	-fée	
high	héi	
lie	léi	
tie	téi	
tie-tie	tetéi	rope

As can be seen from this table the reflex in modern Sranan is /ej/ in all cases. In the Bush Negro dialects, however, we observe two reflexes - /e/ in Ndjuka and Boni, and /ɛ/ in Saramaccan following a liquid cluster, and /ei/ elsewhere (this is also relevant for play in (19)). In the liquid cluster cases we must consider the antecedent forms such as:

cry *keré
dry *deré
fly *felé

In contrast to antecedent forms on the basis of modern Sranan:

cry *keréi
dry *deréi
fly *feléi

However, this neat distribution falls down when the forms provided in Schumann (1783) are taken into account. For comparison we add forms from (19) modelled on English /*ɛi*/, and forms from the same section modelled on English /*ɛ(i)ə*/.

		<u>following liquid cluster</u>		<u>elsewhere</u>	
		<u>monophthong</u>	<u>diphthong</u>	<u>monophthong</u>	<u>diphthong</u>
i)	/əi/	cry	x	high	x
		dry	x	lie	x
		fly		tie-tie	x
ii)	/ɛi/	play	x	eye	x
		clay	x (Saramaccan 1778)	day	x
				hooray	x
iii)	/ɛ(i)ə/			hare	x
				shear	x

From this we must conclude that the majority of these forms must have had both monophthongal and diphthongal options and that for some reason or other the diphthongal forms came to be preferred in Sranan.

We suggested in section (20) on /ai/ that the /e/ in words like the following:

English	Sranan 1855	1783	Saramaccan 1778	Ndjuka	Boni
fight	féti	féti	feti féti	feti féti	feti

might derive from the /əi/ reflex of ME /ī/, rather than the /ai/ reflex, but that certainty was not possible on this point.

b) Portuguese

Not relevant

22) /ɛĩ/

a) English

Not relevant

b) Portuguese

There is only one example of this diphthong, which is pronounced [ɛĩ] in Brazilian Portuguese, and appears as /ai/ in the Surinam creoles.

<u>Portuguese</u>	<u>Saramaccan 1778</u>	<u>Sranan 1783</u>	<u>Ndjuka</u>	<u>Gloss</u>
mãe	mái	mai -	máj	mother

23) /ɔi/

a) English

The only possible case of this involves the word boy:

<u>English</u>	<u>Sranan 1855</u>	<u>1783</u>	<u>Saramaccan 1778</u>	<u>Ndjuka</u>	<u>Boni</u>
boy	boj	boi	boi -	boi	bói -

As we saw above this might represent ME /bui/ → /bwi/ → EME /bwəi/ → /bwai/. It must be stated, however, that it could equally well represent the alternate ME /boi/, in which case we have to do with EME /bɔi/.

b) Portuguese

Not relevant

24) /oi/

a) English

Not relevant

b) Portuguese

This diphthong is pronounced [oi] in Portuguese. There is only one certain example in Surinam, in which it appears as /we~we/.

<u>Portuguese</u>	<u>Saramaccan 1778</u>	
coifa	kpéfa	kwefa
	kwéfa/kpéfa ^s	

/kw/ develops to /kp/ in modern Saramaccan, with however the two allophones [kp] and [kw].

There are a number of other items represented in Surinam which may have /oi/ in Portuguese, but in these forms there is always the alternative /ou/. As these forms display /o/ in Surinam, which could be explained as deriving from /ou/, we will leave them out of consideration.

When we examine the Gulf of Guinea creoles, especially that of Principe, we find the same duality of reflex as in the case of /ai/.

<u>Portuguese</u>	<u>São Tomé</u>	<u>Principe</u>	<u>Gloss</u>
çoite		sótši	scourge
boi	bwe	ubwé	bull
coitado	kwetádu	kwetádu	miserable
noite		unótši	night
oito		wétu	eight
pois		póži	because

Just as is the case of /ai/ only the first part is preserved before palatal consonants, while in other cases the result is /we/.

In Saramaccan we had only examples of nonfinal /ai/ preceding palatal consonants, here we only have an example of /oi/ preceding a nonpalatal consonant. Once again, Saramaccan agrees with the Gulf of Guinea creoles.

25) /ʊi/

a) English

See section (20) /ai/ part (iii).

b) Portuguese

Not relevant.

26) /ju:/

a) English

This is the EME reflex of ME /iu/, except after /tʃ, dʒ, r/.

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Sara-</u> <u>maccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
"usen"	njúsu	njóesoe njóensoe	njusu	njúsu njúnsu júnsu	njusu	-	-

The nasal element present in this item - in the various positions (cf. the Saramaccan forms) - witnesses to the fact that the model for this form was not the English used, but its dialectal variant usen. That this occurred in other Atlantic creoles is evidenced by the Jamaican form /yuuzn/. For the shift of the nasal element compare section (2) on unstressed /-in/, and also the section on /-i/.

Examples displaying the loss of the /j/ element have already been considered in the section on /u:/.

b) Portuguese

Not relevant

27) /au/

a) English

There are two ME sources for EME /au/ - ME /ū/ and, much less significant, ME /ǫ/ preceding /l/.

i) ME /ū/ has two reflexes in Standard seventeenth century English - /au/ in advanced speech, and /əu/ (Barber, 1976) or /ʌu/ (Dobson, 1957) in conservative speech.

As in the case of the EME reflexes of ME /ī/ we have in some contexts an unclear situation. Let us recapitulate on those developments as this might shed some light on the present situation.

<u>Context:</u>	<u>Final</u>	<u>Pre - /r/</u>	<u>Other Preconsonantal</u>	<u>EME Model</u>
	ai/aj	aja	} e {	ai
	ei/ej	-		əi

In the case of /au/ we have:

<u>Context:</u>	<u>Final</u>	<u>Pre - /r/</u>	<u>Other Preconsonantal</u>	<u>EME Model</u>
	au/aw	-	} o {	au
	ou/ow	owa		əu (see (28))
	-	uwa	-	u: (see (16))

English	Sranan	1855	1783	Saramaccan	Ndjuka	Boni
cow	kow	kou	kau (kou)	káu	káu	koo

No case occurs displaying a form modeled on /au/ preceding /r/.

The forms evidencing other preconsonantal environments are not assignable with any confidence to /au/ rather than to /əu/. If, as is tentatively suggested in the section on /ai/ there is evidence for the assignment of the Surinam creole /e/-reflex of ME /ī/ to EME /əi/, then we could reasonably claim that the Surinam creole /o/-reflex of ME /ū/ derives from EME /əu/.

English	Sranan	1855	1783	Saramaccan	1778	Ndjuka	Boni
proud	pródo	pródo	prodo	poólo	prolo proro	poólo	poolo
house	óso	(h)óso	hosso	(w)ósu	hosso	ósu	oşu
louse	lóso	lóso	lossu	lósu	lossu	lósu	loşu

ii) ME /ō/ preceding /l/ develops to late ME /ou/. In some cases - in Cockney for example - this late ME diphthong develops to late ME /ū/ "by the raising influence of a back l" (Dobson, 1957). This /ū/ develops as do all other ME /ū/, undergoing diphthongisation. Here we can see both developments to /au/ and /əu/. Relevant here are:

English	Sranan	1855	1783	Sara- maccan	1778	Ndjuka	Boni
old	(ówru)	(óuwroe)	(oure)	awoo	(oure)	háu	háu
cold	(kówru)	(kóuroe)	(koure)	-	-	(kóo)	(kóo)

In Smith (1982) we claim that the Saramaccan form is a reflex of an earlier /*áwo/, where the normal development /*áwo/ caused by liquid loss and concomitant vowel degemination did not occur due to the exceptional loss of the high tone on the /a/, which prevented the application of degemination which apparently requires a high tone in the previous syllable. Thus we can see that - similarly to the diphthongs preceding /r/ - a transition schwa developed into a separate syllable in the EME model, or at least was interpreted as constituting a separate syllable by the slaves, i.e.

<u>ME</u>	<u>EME</u>
ōld --> ould --> ūld -->	əuld --> auld --> auəl(d) -->

<u>Proto-Sranan</u>	<u>Saramaccan</u>
áwolo -->	awoo

b) Portuguese

There are two cases of this diphthong in the Surinam creoles. In Brazilian Portuguese it is pronounced [aw].

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
bacalháu	bakajáu		batjáu	bakiáw	dried cod
pau	páu	pau	-	-	stick

Here we may have to do with two different historical developments in the case of the first word. While the Saramaccan form may well be directly of Portuguese (creole) origin, those in Sranan and Ndjuka may have come via Dutch bakkeljauw - a by-form of kabbeljauw - itself from Portuguese bacalháu or Spanish bacallao. Sharing the same origin are presumably Berbice Dutch and Essequibo Dutch /bakiau/ (Robertson, 1982)

28) /əu/

a) English

i) As noted in the previous section, ME /ū/ had two reflexes in EME - /au/ in advanced speech, and /əu/ (Barber, 1976) or /ʌu/ (Dobson, 1957) in conservative speech. The difference between /əu/ and /ʌu/, or rather between the phonetic realizations implied by these symbols, is not great, although certainly discernable. However we will eschew a discussion of the theories of the development of the ME high vowel in later English.

In final position there is one clear case of the /əu/-reflex /cow/ in 1783 Sranan, and possibly Boni. In the case of the second word we might equally have to do with Dutch nou.

English	Sranan	1855	1783	Saramaccan 1778	Ndjuka	Boni
cow	(kaw)	(kau)	kou (kau)	(káu)	(káu)	koo
now	now		nou (nau)	-	-	nou-nou

In the context preceding /r/ some forms of EME developed a transitional schwa between the high glide and the liquid - as we saw in the case of the parallel front vowel case (cf. (20i)) - which combined with a later loss of the liquid provides the model for the following (non-bracketed) forms:

English	Sranan	1855	1783	Saramaccan 1778	Ndjuka	Boni
flour	(frúwa)	(fróewa)		fówa		
sour	(s(u)wa)	(sóewa)	(sua) so(w)a	sóa/(súa)	sowa	(sú(w)a) (súa)
power	pówa					

The items with /u/ are probably reflexes displaying the frequent ME /ū/ preceding /r/ that did not undergo the Great Vowel Shift in English (see the section on /u:/).

Before other consonants, as we saw in the previous section, it is uncertain whether the development in words descending from ME /ū/ to /o/ in the Surinam creoles is to be ascribed to models involving EME /au/, /əu/, or either indistinctly. If we have to make a choice in this matter, then the slight evidence would seem to favour /əu/, but we prefer to leave things undecided. One example will suffice here:

English	Sranan	1855	1783	Saramaccan 1778	Ndjuka	Boni
house	óso	(h)óso	hosso	(w)ósu	hosso	ósu
						oóu

Also as noted in the previous section, ME /ūi/ developed to late ME /ū:/ in

Cockney, giving EME /əu/ or /ʌu/, with a later development to /au/. The /əu/ or /ʌu/ diphthong gives, we assume, /ow/ in the Surinam creoles:

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
old	ówru	óuwroe	oure	(awoo)	oure	(háu)	(háu)
cold	kówru	kóuroe	koure	-	-	kóo	kóo

The /ow/-cases in Sranan derive from Proto-Sranan forms /*(k)ówulu/ based on EME models /*(k)áwəl(d)/. For further details and motivation see section (27 ii). The Ndjuka/Boni form /kóo/ could reflect either a non-diphthongized EME model /ko:ld/ - the ancestor of the present Standard forms - or else /*(k)áwəl(d)/ as above, but giving a Proto-Sranan variant /*(k)ówolo/ with subsequent loss of /w/.

To sum up, we assume the following Proto-Sranan forms:

<u>old:</u>	* (h)ówulu:	ówru	(Sranan)
	* (h)áwolo:	awoo	(Saramaccan)
	* (h)áwulu:	háu	(Ndjuka/Boni)
<u>cold:</u>	* kówulu:	kówru	(Sranan)
	* kówolo/kólo:	kóo	(Ndjuka/Boni)

It might be thought that this represents too much variation in the interpretation of the EME models, and that at least part of this variation is to be explained by developments in Proto-Sranan itself. We have nothing meaningful to say on this question.

b) Portuguese

Not relevant.

29) /ɛ ũ/

a) English

Not relevant

b) Portuguese

This diphthong - orthographically ão - possessed the alternants [õ] and [õũ] in Old Portuguese. In modern Brazilian both alternants are still possible, while in European Portuguese only the latter alternant occurs, in Standard Portuguese at least. In Surinam it is generally represented by /a(n)/ following a non-nasal, and by /au(n)/ following a nasal.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
babão	-	-	babáw	babáw	idiot
carvão	kaabán (Lo) koobán (Li)	kramaù	-	-	charcoal
fundão	fundá	fundám	-	-	whiripool
gavião	gabián	gabiám	-	-	hawk
mamão	mamáu mamáun ^s	mamáu	-	-	sp. fruit
mão	máu máun ^s	mau	-	-	hand
tampão	tampá	tampa	tapún (1856: tapóe(n))	-	lid
capão (?)	-	-	kapu (Kramp, 1983)	-	gelding
pasmão	-	passamau	-	-	person surprised at everything

In the case of /máu/ and /mamáu/ the nasality recorded in source "s" is possibly not derived from the originally nasalized Portuguese diphthong, but might well be caused by the preceding /m/. Compare more /mó ~ móun^s/, and also the 1778 reflexes.

The other reflex in 1778 is -ã(m), where the presence or absence of the orthographic nasal does not seem to have any direct correlation with any other aspect of the phonological structure of the items concerned. In modern Saramaccan this does appear to be the case, however. /-ã/ appears following /..VNC/, while /-ãñ/ appears following /..VC/.

One item - carvão - displays the /áu/ reflex in the 1778 wordlist, and the /ãñ/ reflex in Voorhoeve and Donicic (1963). This must represent two different

dialectal variants, as in fact the reflexes are regular. The 1778 source has /áu/ following an /m/: *kramáũ*, which we take to represent /*karamáu/, while the modern form is /kaabán/, from earlier /*karabán/. The Golíó form /kooban/ reflects the influence of Saramaccan /koofája/ from /*kolofája/, unless this is a Sranan loan, in which case the influence would be from Sranan /krofája/ from the same starred form.

The Sranan forms are more problematic. It would really be necessary to have more forms before we could claim with any degree of certainty that Portuguese *-ão* also had a reflex /-ú(n)/ in Sranan. There is no trace of such a reflex among the Portuguese creoles. These have:

Cape Verde:	-õ	(-ãw̃ in more recent loans)
Cape Verde (Fogo):	-ã/-õ	
São Tomé:	-õ	
Príncipe:	-ã	
Papiamentu:	-óŋ ~ -áŋ	

The variation between /o/ and /a/ in these reflexes may reflect the Old Portuguese alternation between [õ] and [ã ũ] as Ferraz (1974) suggests for São Tomense and Principense. However we will suggest an alternative solution for the difference between these two languages below.

We will return to the Sranan /u/-reflexes below in our discussion of the reflexes of /õũ/.

30) /ɔu/

a) English

ME /ou/ had normally developed to /o:/ by the middle of the seventeenth century, but diphthongal /ɔu/ was also possible with more conservative speakers. In the Surinam creoles the normal reflex is /o/ (see the section on /o:/) but there is a single case of /ow/ which may be modelled on EME /ɔu/.

<u>English</u>	<u>Sranan</u>	<u>1855</u>	<u>1783</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Ndjuka</u>	<u>Boni</u>
tow	tow			-		-	tou

For semantic reasons - it means "tow, to tow" - this is less likely to be derived from Dutch touw "rope".

b) Portuguese

Not relevant

31) /ou/

a) English

Not relevant

b) Portuguese

This diphthong is pronounced [o] in European Portuguese and [ou] in Brazilian Portuguese. In Surinam it appears as /o/.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
outro	óto (w)óto ^s	otre otro oter	-	-	other
crioulo	kíóo	kreòl	krióro	kíoo	creole

32) /õũ/

This diphthong - orthographic om - is pronounced [õ] in European Portuguese and [õũ] in Brazilian Portuguese. In Surinam it appears in the certain cases as /ú(n)/.

<u>Portuguese</u>	<u>Saramaccan</u>	<u>1778</u>	<u>Sranan</u>	<u>Ndjuka</u>	<u>Gloss</u>
bom	búnu búm-búu búm-búnu	bun bunne	bun bóenboen (1855) bóemoen (1855)	bún	good
com	ku	ko	-	-	with
marrom (?)	-	-	-	maa (Boni)	brown

/ku/ is low-toned in Saramaccan indicating that the Portuguese model was unstressed. In Portuguese this item is pronounced [kõũ] ~ [kõ] ~ [kũ]. Clearly the last pronunciation formed the model (directly or indirectly) for the Saramaccan form.

The development to /ún/ in bom should be compared to that in the putative Sranan form derived from tampão - /tapún/.

The Boni form /maa/ cannot with certainty be ascribed to marrom as there is no parallel case.

General comparative notes

It is difficult taking the vowels as a whole to point out cases where identical vowels/diphthongs in the input display different developments depending on whether they are of English or Portuguese origin. In general where seeming differences are present these must be ascribed to differences in the model, not differences in the accommodation of the model.

As regards comparisons between the vocabulary items of English and Portuguese origin and their respective matrix languages, we can provide parallels with other creole languages suggestive of relationship. These parallels are however also parallel.

As far as the English side of things is concerned the most striking feature is the monophthongizing interpretation of preconsonantal diphthongs. This is common to the Surinam creoles and the various pidgins/creoles spoken in West Africa - including Krio, Cameroonian, Nigerian Pidgin and the so-called "Broken English" of

Fernando Po. The only other "creole" to display this in the Atlantic area is the Maroon Spirit Possession Language of Jamaica (MSL).

As far as the Portuguese side of things is concerned, the same monophthongization appears both in Surinam and in most Portuguese creoles under precisely the same conditions - preconsonantly.

This requires some demonstration as monophthongization appears to have applied finally as well, in particular in the Gulf of Guinea creoles we wish to connect most closely to the Portuguese elements in Saramaccan.

The situation is roughly as follows for the non-nasal diphthongs

<u>Portu- guese</u>	ai	ai#	au	au#	ei	ei#	eu	eu#	oi	oi#	ou	ou#	ui	ui#
<u>Surinam</u>	a	ai	-	au	e	-	-	-	we/we	-	o	-	-	-
<u>São Tomé</u>	a/ɛ	ɛ	a	ɔ	e/ɛ		e		o/we	o/we	o/ɔ		u	
<u>Prin- cipe</u>	a/ɛ	wɛ	a	a	e/ɛ	e	e	e/ɛ	o/we	we	o			
		jɛ												

For the nasal diphthongs we have:

<u>Portuguese</u>	ɛĩ#	ɛũ#	õũ#
<u>Surinam</u>	ai	au(n)	un
		a (n)	
<u>São Tomé</u>	ɛ/ɛ	õ	õ
<u>Principe</u>	wĩ	ã	õ

In the first place we can observe that the result of monophthongization of final and non-final diphthongs is different in some cases, in particular that of /ai/ and /au/. Final ãe /ɛĩ/ and ão /ɛũ/ run parallel with /ai/ and /au/, making it likely that the different realizations of /ɛũ/ in São Tomé and Príncipe for example are to be

explained in terms of variation in the Old Portuguese model as Ferraz (1974) suggests.

Let us concentrate on these four diphthongs in their realizations in final position.

Portuguese	Proto-Gulf	São Tomé	Príncipe	Annobon	Proto-Saramaccan	Saramaccan
<u>ai</u>	aj	*aj	ɛ	wɛ	aj/e	ai
<u>āe</u>	ǣ̃	*ā̃	ẽ/ɛ	wĩ	aj/e	ai
<u>au</u>	aw	*aw	ɔ	a	a	au
<u>āo</u>	ǣw̃	*āw̃	õ	ã	ã	ãú/ã

In the light of the parallels revealed in this table we can hypothesize that the correct explanation of the developments of these Portuguese final diphthongs in São Tomé involves the merger of the two elements of Proto-Gulf diphthongs. The alternations in Annobonese support this interpretation. The Príncipe reflexes of the front diphthongs might be explained in terms of an accent shift within the diphthong. That this is in fact not always the case appears from the cases illustrated below of a process involving the deletion of liquids (largely following Gunther, 1973) which support the thesis of a bimoraic origin for the Gulf of Guinea final diphthongs.

Portuguese		Príncipe	(São Tomé)	Gloss
palma	*pálima → páima	pwéma		palm
barba	*báriba → báiba	bwéba	béba	beard
barriga	*baríga → baíga	bwéga	béga	stomach
largar	*larigá → laigá	lɛgá	léga	let go
sardinha	*saridía → saidía	sedjá	(sãdžã)	sardine

It is clear from these examples that the process of merger in Príncipe proceeds differently depending on whether the preceding consonant is a labial or not. Basically we seem to have in Príncipe and São Tomé creoles the same merger. How then is the Príncipe /w/ element to be explained? One possibility would be that

*/*ai/* went to */*oi/* after a labial (cf. */oi/* > */we/* in Príncipe). We will not devote any more space to this problem, as it would take us rather far from the basic point we wanted to make, which was that in Príncipe the */ɛ/* after non-labials is the result of the merger of the two elements of the diphthong, as we can see from the above cases where an epenthetic vowel is involved.

We would like to interpret the reflexes of the back nasal diphthong in the two Gulf of Guinea creoles, not as a reflection of two older Portuguese variants - */õ/* and */ãw/* - but as reflecting the different treatment of */ãw/* in São Tomé and Príncipe. Basically we see this as involving a merger of the two elements of the diphthong in São Tomé, and the loss of the second element in Príncipe (as Ferraz (1974) suggests). This solution would have the advantage that the São Tomé developments would receive a simpler explanation than in Ferraz (1974), and be supported by the parallel variation with the nonnasal back diphthong.

We conclude then that our claim that there is parallelism between the developments in Surinam, and those in the Gulf of Guinea must be qualified as reasonable.

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DUTCH SUMMARY

In dit proefschrift wordt een nieuwe hypothese voorgesteld over de oorsprong van de kreooltalen van Suriname. Deze hypothese wordt gesteund door de resultaten van een historisch fonologische studie van de ontwikkelingen van de klanken van het Engels en het Portugees in de verschillende Surinaamse talen. Deze studie levert een aantal nieuwe argumenten op, die toegevoegd worden aan de al bekende feiten en al bestaande ideeën omtrent het ontstaan van deze talen.

Op basis hiervan wordt een hypothese voorgesteld, die in bepaalde opzichten verschilt van de meest recente theorie over het verloop van het kreolisatieproces in Suriname, namelijk die van Bickerton. De werking van zijn Language Bioprogram is namelijk volgens deze hypothese niet te localiseren in Suriname, maar in Afrika - in Sierra Leone wat de Engelse elementen betreft, en op het eiland Sao Tome wat de Portugese elementen betreft.

Een geëxpandeerde vorm van het Pidgin Engels, gebaseerd op het Krio van Sierra Leone, heeft zich langs de kust van Guinee verspreid, van Opper-Guinee naar Neder-Guinee, en verder zuidwaarts. De zogenaamde Slavenkust van Neder-Guinee was in de zeventiende eeuw de belangrijkste bron van slaven voor Barbados en Suriname, dat vanuit Barbados gekoloniseerd werd in 1651. Onder deze slaven zaten een aantal sprekers van het bovengenoemde Pidgin Engels, die model hebben gestaan voor de vorming van het eerste algemene communicatiemiddel tussen de slaven onderling. Dit onderging, waarschijnlijk in Suriname, een zekere fonologische accommodatie aan de Afrikaanse talen die onder de slaven gesproken werden, waarschijnlijk het Gbe en het Kikongo. Het resultaat hiervan was een vroege vorm van het Sranan.

Het Ndjuka, het Boni, het Paramakaans en het Kwinti vertegenwoordigen achttiende eeuwse afstammingen van het Sranan.

Het Saramakaans echter, en het Matawai kunnen niet op deze manier verklaard worden. De bron van het Engelse element in het Saramakaans is het Proto-Sranan.

Het Portugees moet verklaard worden uit een op het Portugees gebaseerde kreooltaal van directe Braziliaanse afkomst, uiteindelijk van Sao Tomese oorsprong. Deze kreooltaal kwam naar Suriname met de slaven van de Portugese Joden, die zich voornamelijk langs de Suriname Rivier vestigden in 1665/6.

Uit deze twee talen - het Proto-Sranan en deze bovengenoemde Portugese kreooltaal is een nieuwe taal ontstaan langs de Suriname Rivier, te weten het Djutongo (letterlijk Jodentaal). Dit geschiedde door een proces van gedeeltelijke Relexificatie. De basis van de nieuwe taal werd het Proto-Sranan, waarbij een

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gedeelte van het "Engelse" lexicon vervangen werd door "Portugese" lexicale items. Djutongo-sprekende slaven van de plantages langs de Suriname Rivier vormden een van de eerste groepen weggelopen slaven. Hieruit ontstonden de Saramakka en Matawai bosnegerstammen in de jaren rond 1700. Het Djutongo werd op de plantages door het Sranan vervangen.

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STELLINGEN

(behorende bij het proefschrift "The Genesis of the Creole Languages of Surinam" van N.S.H. Smith, M.A.)

- 1) The relevance of historical phonology for the study of the creole origins has been seriously underestimated.
- 2) The mechanism of creolization directly involved in the creation of Saramaccan was not the Language Bioprogram but Relexification.
- 3) The number of African languages that had a significant effect on the development of the creole languages of Surinam was very small.
- 4) The Maroon Spirit Possession Language of Jamaica is derived from a creole language closely related to Sranan.
- 5) A form of Pidgin English deriving from the Lower Guinea coast is one component in all the English-based creole languages in the Atlantic area.
- 6) The direct ancestor of Saramaccan was Djutongo.
- 7) The methodological basis for the assignation of sources to putative African-derived lexical items in creole languages requires to be defined much more strictly.
- 8) The claim by Holm ("Bahamians' British Roots traced", College Forum, College of the Bahamas, Nassau, 1980) that there is a large Scottish component discernable in the Bahamian creole lexicon is most probably an artefact due to the uneven spread of dialect literature and lexicography in Britain.
- 9) The Scots dialects spoken in the N.E. of Scotland display a number of Gaelic substrate features.

- 10) Vowel harmony is not governed by language-specific rules, but follows from the working of universal principles.
- 11) For the United Kingdom ever to achieve economic and social stability, electoral reform is an absolute necessity.
- 12) If research within the Dutch university system is not to stagnate, it will be necessary to create a proper career structure.

