The nature of the Creole-to-English continuum for Guyana is examined with two aims. The first of these is to critically assess the validity of orthodox variationist approaches as applied to similar language situations and the second is to produce the outline of an alternative approach that would work in this and other language situations as well. The operation of restrictions against the co-occurrence of any given linguistic variables, which occur within the clause in the Guyanese Creole-to-English continuum, are examined for the past tense marker variable ("bin, did, and woz") and the continuative aspect variable ("a-" and "-in" operating with the verb). The evolution of the continuum is linked to the distinct function and social prestige associated with certain stereotyped linguistic features, and the linguistic stereotyping likely to have occurred in a language situation involving initial contact between English and conservative Guyanese Creole is examined. It is suggested that the co-occurrence restriction rules emerged as a result of social, not linguistic, factors. It is proposed that in Guyana, the appearance of two variants of the same variable in the speech of most speakers represents switching between two or more immediately adjacent varieties on the continuum. (MSE)
LANGUAGE VARIATION THEORY IN THE LIGHT OF CO-OCCURRENCE RESTRICTION RULES

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Two major techniques have been developed in the past two decades for analysing language variation. The first of these is the variable rule, associated with the work of Labov (1972a, 1972b). The second technique involves the use of implicational scaling. Both of these have been applied to the analysis of variation in Caribbean Creole situations. In fact, the use of implicational scaling for dealing with language variation may have been pioneered by DeCamp (1972) in his work on the Jamaican Creole-to-English continuum.

The continuum existing between conservative Guyanese Creole, on one hand, and Standard Guyanese English, on the other, has been at the centre of a lot of discussion on language variation. In this paper, therefore, the precise nature of the Creole-to-English continuum in Guyana will be re-examined with two aims in mind. The first of these is to critically assess the validity of orthodox variationist approaches when applied to language situations such as that existing in Guyana. The second aim is to produce the outline of an alternative approach which would not only work for situations similar to that in Guyana, but to a range of other language situations as well.

Co-occurrence Rules in the Guyana Creole-to-English Continuum

Variation in the Guyana Creole-to-English continuum situation can be analysed using the concept of the linguistic variable. Each variable represents a particular function which can be performed within an utterance. The actual realization of this variable in a body of speech is in the form of one of the linguistic variants belonging to this variable. Thus, if we look at the first person subject pronoun variable, we find three variants. These variants, ai, a, and mi, can each operate in a sentence as a manifestation of the variable. The variant ai is associated with Guyanese English, the high status language within the speech community. On the other hand, mi is associated with conservative or basilectal Creole, the low status language variety. The variant a is mesolectal or intermediate between the two extremes, being associated with language varieties existing between the two poles.

Speakers operating within the Creole-to-English continuum in Guyana are not free to select any variant of a particular linguistic variable and combine it with just any variant of a co-existing linguistic variable. Each variant within a given variable is able to occur with only some of the variants of co-existing linguistic variables. The ability to co-occur with other such variants is restricted. This is due to the operation...
of co-occurrence rules.

The clause is the unit within which co-occurrence rules operate on the Guyana Creole-to-English continuum. Thus, a variant selected for use within one linguistic variable will restrict what variant can be selected for use within a variable co-occurring within the same clause. In Devonish (1978), an extensive examination was made of co-occurrence rules in the Guyana Creole-to-English continuum. It was found that no such rules operate outside the clause. A speaker is, therefore, able to make a selection of variant within a linguistic variable, free of influence from any variant which may co-occur with it outside of the boundary of the clause.

Speakers in this speech community have their choice of variant for each variable within the clause constrained by linguistic factors in the form of co-occurrence restriction rules. Social factors which determine choice of language variety, e.g. level of formality, topic, attitude of speaker to listener, etc., are only able to operate freely between one clause and the next. What is being proposed here is that speakers are able, based on the social factors operating when the clause is about to be produced, to select for use a particular variety from within their repertoires. Co-occurrence restriction rules then determine the internal structure of the language variety selected for use in that clause.

Let us examine how co-occurrence rules operate by looking at the case of some actual linguistic variables on the Guyana Creole-to-English continuum. The past tense marker variable is made up of the variants bin, did and woz. Another variable is the continuative aspect variable made up of a, occurring before the verb, and -in, occurring after the verb, as variants. Below are sentences in which these two variables are present.

1) (a) di maan bin a taak 'The man was talking'
   (b) di maan bin taakin
   (c) di maan did taakin
   (d) di maan woz taakin
   BUT
   (e) *di maan did a taak
   (f) *di maan woz a taak

In the sentences above, we notice that certain combinations of variants from these two variables are not permitted. What do we mean, however, by 'not permitted'? This is used to mean that (i) these combinations do not occur in very extensive bodies of speech spanning a wide range of speakers in the community and (ii) they are rejected as unacceptable by members of the speech community. We will have more to say on this later.

In the examples in (1), there is a total of six theoretically possible combinations of the variants of the two
variables. Two are blocked from occurring as a result of co-occurrence restriction rules. The rule blocking the two starred combinations is shared by the entire language community, regardless of the variant(s) particular speakers may be in the habit of selecting. The co-occurrence rules involving the two variables may be represented as in the diagram below.

2) The Past Tense Variable

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2
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The combination of variants of the two variables produces four different language varieties. This conclusion is based on a very specific definition of the term 'language variety' as it can be applied to the Guyana Creole-to-English continuum situation. According to this definition, a language variety consists of a set of variants, one from each linguistic variable existing in the speech community. The variants of variables which are in syntagmatic relationship to each other constitute a network of mutually co-occurring variants within the clause. In the case of those variables in paradigmatic relationship to each other, a variant belonging to a particular language variety will have the same powers of co-occurrence as the selected variant of another variable within the same paradigm. This, it should be noted, represents an acceptable definition of a language variety even within a speech community where the language varieties are discrete.

What marks off a continuum situation from that involving discrete language varieties is the existence of shared or overlapping variants across the various language varieties. Thus, in the case of the variables just used as examples, a occurs in one language variety, i.e. that involving the combination bin + a. The variant -in, on the other hand, appears in three language varieties, those involving bin + -in, did + in, and woz + -in. The relative ability of variants to straddle more than one language variety produces the effect of a gradual shading off of one language variety to another as one moves from one pole on the continuum towards the other.

In presenting this model of the Guyana Creole-to-English continuum, it is useful to be able to explain how such a continuum could have developed historically. The answer to this lies in the differences in function and social prestige which came to be associated with English and Creole in the early contact situation. Speakers of two language varieties which have quite distinct kinds of function and social prestige linked to them, form certain stereotypes about what constitute the
linguistic differences between these two language varieties. These stereotypes serve the ideological function of providing members of the speech community with a justification for the difference in status and functions of the two languages. Thus, a particular language is viewed as owing its status and functions to the fact that it either has or does not have a particular stereotyped linguistic feature.

Let us examine this linguistic stereotyping as it would have occurred in a language situation involving initial contact between English and conservative Guyanese Creole. Each variant of a linguistic variable would have become associated with particular social values. The English variant of a variable would have acquired the high status and prestige functions associated with the language behaviour of the dominant group within the society. The Creole variant, on the other hand, would have become linked socially with the low status and lack of prestige of the dominated group(s). However, the relative importance of linguistic variables as vehicles for signalling social information would have varied considerably from one variable to another. Every speech community in which there are language varieties in contact with each other, has its shibboleths. These are linguistic variables which function as symbols of the variation within all the other variables in the speech community.

In the early contact situation between Creole and English in Guyana, some linguistic variables would have emerged as being strongly socially diagnostic. Others would have been moderately so, and many barely regarded as socially diagnostic at all. In variables which were strongly socially diagnostic, English variants would have started to occur in clauses otherwise entirely consisting of Creole variants. English variants of variables which were moderately socially diagnostic would have had a much more restricted ability to co-occur with Creole variants. Those English variants of variables which were minimally socially diagnostic would have been largely restricted to co-occurring with other English variants. This could also be viewed from the perspective of the Creole variants. Those variants from diagnostically weak variables could co-occur with a wide range of English variants. Those Creole variants in diagnostically stronger variables would have been progressively less and less able to co-occur with English variants, as one moved towards the strongest variables. This is the stuff of which co-occurrence rules were made. It was out of all this that the continuum developed.

The emergence of co-occurrence restriction rules was the result of social rather than linguistic factors. This is the position taken in the attempt at historical reconstruction just presented. Evidence to support this position can be found in a comparison of the Creole-to-English continua of Jamaica and Guyana. At the conservative Creole level, the two situations share very similar morpho-syntactic features. At the English
pole on the continuum, the two situations again share nearly identical morpho-syntactic features. If, therefore, the co-occurrence rules in the Guyana continuum were motivated by linguistic factors, one would expect very similar co-occurrence rules to operate in Jamaica. This would have the effect of producing extremely similar intermediate language varieties along the continuum in both situations.

In the Jamaica Creole-to-English continuum, the past tense marker variable is made up of the variants (b)en, did, and woz. The continuative aspect variable consists of the variants a and -in. Below is a comparison of the co-occurrence possibilities involving the variants of these two variables in the Creole-to-English continua of Guyana and Jamaica. The co-occurrence data for Jamaica was derived from Bailey (1966) in which an attempt was made to give an exhaustive listing of the combinations possible in that speech community.

3)  

<table>
<thead>
<tr>
<th>Guyana</th>
<th>Jamaica</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) di maan bin a taak</td>
<td>di man (b)en a taak</td>
</tr>
<tr>
<td>(b) di maan bin taakin</td>
<td>*di man (b)en taakin</td>
</tr>
<tr>
<td>(c) *di maan did a taak</td>
<td>di man did a taak</td>
</tr>
<tr>
<td>(d) di maan did taakin</td>
<td>*di man did taakin</td>
</tr>
<tr>
<td>(e) *di maan woz a taak</td>
<td>di man woz a taak</td>
</tr>
<tr>
<td>(f) di maan woz taakin</td>
<td>di man woz taakin</td>
</tr>
</tbody>
</table>

PAST | CONT. | PAST | CONT. |
TENSE | ASPECT | TENSE | ASPECT |

<table>
<thead>
<tr>
<th>bin</th>
<th>a</th>
<th>(b)en</th>
<th>a</th>
</tr>
</thead>
<tbody>
<tr>
<td>did</td>
<td></td>
<td>did</td>
<td></td>
</tr>
<tr>
<td>woz</td>
<td>-in</td>
<td>woz</td>
<td>-in</td>
</tr>
</tbody>
</table>

An examination of the above comparison between the Guyana and Jamaica Creole-to-English continua shows a close correspondence between them at the most Creole level, as represented by the examples in (3)a. There is a similar correspondence at the most English level as seen in the examples in (3)f. However, at the intermediate levels, as represented by the examples in (3)b-e, there is a complete lack of correspondence. What could have caused this, in view of the fact that the two polar varieties out of which these intermediate varieties developed are almost identical in the two situations? The answer lies in our proposition about differences in the relative strength of socially diagnostic linguistic variables. In Guyana, the past tense variable developed as a relatively weak socially diagnostic variable. The result has been that the Creole variant bin is not only able to co-occur with the Creole continuative aspect marker variant, a, but also with the more English variant, -in. In the Jamaican case, the past tense is much stronger as a socially diagnostic
variable. The result is that the Creole variant, (b)en, is restricted to co-occurring only with the most Creole continuative aspect marker variant, a. The more English-influenced past tense variants, did and woz, are the only past tense variants able to co-occur with the English-influenced continuative aspect variant, -in. In the case of the continuative aspect variable, the Guyana continuum treats this as a strong variable. Thus, the English-influenced variant, -in, is able to co-occur with even the most Creole past tense variant, bin. In the Jamaican case, however, the continuative aspect variable is relatively weak. The most English variant, -in, is not able to occur with the Creole past tense variant, (b)en. The weakness of this variable in Jamaica also expresses itself in the fact that the Creole continuative aspect variant, a, is able to co-occur with even the most English-influenced past tense variant, woz. The differences between the intermediate varieties on the Jamaica and Guyana Creole-to-English continua, are clearly not linguistic in origin. In the two speech communities, the relative strength of the two socially diagnostic linguistic variables is different. In Guyana, the continuative aspect variable is stronger. In Jamaica, the past tense variable is stronger.

A Re-examination of Language Variation Theory

Two of the most common tools currently employed in the study of language variation are implicational scales and the variable rule. Let us focus on the first of these. Implicational scales were first employed to deal with variation in the Guyana Creole-to-English continuum by Bickerton (1971, 1973, 1975). In a refined form, these scales have been applied to the Guyana situation more recently by Rickford (1979, 1987a).

Implicational scales are employed to do two things. Firstly, they are used in order to establish the nature of the relationship between variants within the speech of individuals in the speech community. They supposedly show how the presence of a particular variant in a certain linguistic environment will predict its appearance in a specific set of other environments within the speech of the same individual. Let us suppose that the environments in which a particular variable can occur range from I to VII. The presence of variant \( X \) in environment IV will predict its presence in environments V, VI and VII, but not in I, II and III. Let us now look at the behaviour of variant \( Y \), the other variant of the same variable. The presence of variant \( Y \) in environment III will predict its occurrence in environments I, and II, but not in IV, V, VI and VII. It is this which Bickerton (1973:647) was able to demonstrate in his analysis of the distribution of the variants fu and tu in the Guyane Creole-to-English continuum.

In the light of our approach, what does it signify to be able to rank on an implicational scale speakers' use of variants of a variable? It simply exposes the existence of co-occurrence
rules involving the use of a particular variant in its various possible environments. Thus, whenever variant X appears in environment IV, any occurrences of the same variable in environments V, VI and VII will have to be in the form of variant X also. Similarly, any occurrence of variant Y in environment III will mean that any appearance of the variable to which this variant belongs in environments I and II, will have to involve variant Y. The one problem presented by all this, however, is that Bickerton was able to rank not individual clauses uttered by speakers but entire bodies of speech produced by individual speakers. The fact that this was possible suggests that there was very little code switching within the speech of the informants. Thus, the co-occurrence rules which are essentially a feature of the clause became extended to the level of an entire discourse, predominantly one variety having been employed. Bickerton collected his language data from informants by means of interviews. It is being suggested here that the interview situation is one which lends itself to much less code switching than the speaker is capable of.

The other use to which implicational scales can be put is to rank variants belonging to a series of different variables. We can take the case of the variants of the personal pronoun variables analysed by Bickerton (1973). From the scale presented in Bickerton (1973:661), the presence of a Creole variant of a particular variable in the speech of an informant predicts the presence also of a Creole variant in certain variables, but not in others. Complementing this, the presence of a more English variant of a variable will predict the presence of English variants in precisely those variables where the use of Creole variants make no prediction. This is consistent with an interpretation that what is being demonstrated here are co-occurrence rules within the clause. The fact that the ranking is possible for an entire body of discourse produced by a particular speaker may be the result of an absence of code switching within the interview. The artificial and unchanging nature of the social relationship in an interview situation may well account for this.

Rickford (1979:380) presents an analysis of the speech of a number of Guyanese informants in a community. He focuses on the same variables as Bickerton and comes up with rather similar results. One area in which Rickford's data is superior to that of Bickerton is that it probably includes much more natural and spontaneous language use. The reason for this is that one of the situations in which each informant is recorded by Rickford is peer group interaction. This may explain two features which serve to distinguish Rickford's results. The implicational scale presented by Bickerton (1973:661) has relatively few cases of slots occupied by a Creole and more English variant simultaneously. Bickerton regards these cases as evidence of 'rule conflict', involving a speaker in the process of acquiring a more English variant in an environment where he/she previously only used the Creole variant.
Rickford's scale shows many more cases of environments in which speakers used more than one variant. In commenting on this difference in results, Bickerton (p.c. in Rickford, 1987b:136) states that in his own work, he used for each speaker only a single 'speech act' and that if a speaker produced more than one 'speech act', he was treated as if he were two speakers. He concludes that if he had included a broad range of 'speech styles' from each speaker, he would have ended up with scales substantially identical to those in Rickford (1979). This is a conclusion with which Rickford (1987b:136) strongly agrees.

They are both implicitly agreeing that, where there is variation between two variants of a variable in the speech of an informant, this represents the use of two language varieties by that speaker. The reason why, in spite of the presence of this code switching, it is still possible to implicationally scale the output of speakers in Guyana is not answered by either Rickford or Bickerton.

The explanation which I would propose is that, for the most part, speakers switch to immediately adjacent varieties on the continuum. The appearance of two variants of the same variable in the speech of most speakers represents switching between two or more immediately adjacent varieties. The manner of presentation of implicationals scales by both Bickerton and Rickford simply squash together these very similar varieties by showing both variants occurring in a single language variety. The similarity between the varieties squashed together means that they would have occupied adjacent positions on the scale anyway. The result is that this squashing together does not disturb the ability of the analyst to rank them implicationally in relation to the other varieties above and below on that scale.

Rickford (1987a) supplements his data by administering to his informants two Correction Tests, one Creole-to-English, the other English-to-Creole. The intention is to elicit variants which speakers may know but not have produced while they were being recorded. When the results of these tests were added to the data produced in spontaneous recordings, some interesting observations were made. These involved the variables which were composed of three variants, a basilectal or conservative Creole variant, a mesolectal or intermediate one, and an acrolectal or English variant. His Estate Class informants, speakers who worked as field labourers on the sugar estate, tended to use or at least know the basilectal and mesolectal variants, but not the acrolectal ones. His Non-Estate Class, speakers with higher status jobs usually unconnected with the sugar estate, used or knew mesolectal and acrolectal variants but were ignorant of the basilectal ones. (Rickford, 1987a:163,166) What this suggests is that the vast majority of speakers in Rickford's sample, and by extension Bickerton's sample also, tended to use varieties contiguous to each other on the continuum. Squashing these contiguous varieties together by regarding variation between two variants of the same variable in
the speech of a speaker as a rule conflict rather than as a code
switch, therefore, has no effect on the ability of the material
to be implicationally scaled. The data can still be scaled.
That is except when one is dealing with a speaker capable of
switching to a non-contiguous variety.

What then about those informants who switch between
non-contiguous varieties on the continuum? These are, according
to the approach being proposed here, accounted for by the
deviances in the implication scales of both Bickerton (1973)
and Rickford (1979). In both these cases, the deviances account
for approximately 12% of the occurrences in the data. The
agreement between the findings of Bickerton and Rickford suggest
that switches to non-contiguous varieties on the continuum are
uniformly infrequent within the speech community. In addition,
particularly in the case of the Rickford data, the deviances are
not spread evenly among speakers. Rather, the majority of
deviances occur in the speech of informants who have at least
one other deviance. This suggests that this kind switching is a
feature of the linguistic behaviour of only certain special
speakers, i.e. those who have a wider linguistic repertoire than
that of the majority of speakers.

If we look at the speaker who accounts for the largest
number of deviances in Rickford's data, we make some interesting
observations. This speaker, Ustad, was one of the rare cases of
a sugar-estate worker who had climbed the job hierarchy, moving
from boy-gang worker to field foreman. On retirement, he
maintained his links with the ordinary members of the community
whilst serving as a religious and community leader and
representative in contacts with important people from outside.
Ustad's breadth of social activities would suggest an equal
breadth in his control of varieties along the continuum. This
is in fact the case as is shown by the fact that Ustad is the
only speaker of Rickford's 24 informants who used all the 21
possible variants of the 9 personal pronoun variables which were
investigated. (Rickford, 1987c:196-199) I would argue that
Ustad was the informant most capable of using non-contiguous
varieties along the continuum and that, in doing so, his
behaviour on 5 of the 9 variables cannot be implicationally
scaled. It is being suggested that all of the cases of
deviances in Bickerton's and Rickford's data actually represent
switches to non-contiguous varieties along the continuum on the
part of the speakers who produce them.

Another kind of approach which has been employed to deal
with variation in the Guyana Creole-to-English continuum is a
quantitative one. This owes its origins to the notion of the
variable rule as originally developed by Labov (1972a, 1972b)
Within this tradition, Rickford (1987c:73) presents figures
which state that 12 informants who are members of the Estate
Class have a relative frequency of .89 in their use of the
variant mi of the first person singular pronoun variable. This
is as compared with a relative frequency of .11 amongst the 12
Non-Estate informants. What does all this signify? If, as is being argued in this paper, code choice can occur freely outside the boundary of a clause, this frequency difference between the two groups of informants could not reflect a difference in the language varieties which they use. Both groups use the Creole variant mi as well as the non-Creole variant. The difference is one of frequency. Both groups, therefore, use varieties along the continuum which employ the variant mi. They both also use varieties possessing the non-Creole variant of the variable. What is different about the two groups is the frequency with which they use the various language varieties along the continuum.

Even though Rickford (1987c) does not make that mistake with reference to Guyana, quantitative approaches tend to be used to make statements about the linguistic competence of speakers. The very term 'variable rule' suggests that it reflects some aspect of speakers' knowledge of their language. An approach such as that taken in this paper would lead in quite a different direction. What is different about members of these two groups of speakers, assuming that they were all interviewed in roughly comparable social situations, is the social values attached to particular language varieties. A member of the Non-Estate group would tend to use more English-influenced varieties for the kind of social situation prevailing during the greater part of the interview. For those parts of the interaction where they would want to signal an unusual degree of informality or familiarity, they would switch to a more Creole-influenced variety employing the variant mi. In the case of the Estate group, the converse is true. For them, varieties with mi are appropriate for the social conditions prevailing over the greater part of the interview. When they wish to signal some extra degree of formality, they switch to a variety employing one of the non-Creole variants of the variable.

The question which needs to be asked is whether co-occurrence rules in conditions of language variation are restricted to Creole continuum situations such as that of Guyana. A more general question is whether there are any situations where there are linguistic variables with variants which are free to occur without reference to the choice made in co-occurring variables within a unit such as a clause or sentence. If such situations exist, then quantitative methods which focus on frequency of use may reflect the linguistic competence of speakers. In relation to the implicational ranking of variants, this is not likely to be possible in circumstances where there are no co-occurrence rules at work. The issue raised by a re-examination of the variationist approaches to the Guyana Creole-to-English continuum is whether, by ignoring the question of co-occurrence rules, variationists have not been missing the very point on which they should have been focussing. Should their focus not be the identification of internally consistent language varieties to which certain social values are attached by the speech community? The fact that the
varieties thus identified may be extremely similar to other varieties with which they co-exist simply indicates that variants of particular variables function in more than one language variety.

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