Thompson, R. W. 1961. A note on some possible affinities between the Creole dialects of the old world and those of the new. In: Creole language studies II--Proceedings of the conference on creole language studies, ed. by R. B. Le Page. London, MacMillan and Co., Ltd. Pp. 107-113.

Warner, M. 1967. Language in Trinidad with special reference to English. Unpublished M.Phil. Thesis, University of York.

Weinreich, U., W. Labov and M. Herzog. 1968. Empirical foundations for a theory of language change. In: Directions for historical linguistics--A symposium, ed. by W. P. Lehmann and Y. Malkiel. University of Texas Press. Pp. 95-188.

Whinnom, K. 1965. The origin of the European-based creoles and pidgins. Orbis 14:509-527.

Winford, Donald. 1972. A sociolinguistic description of two communities in Trinidad. Unpublished D.Phil dissertation, University of York.

Wolfram, W. A. 1969. A sociolinguistic description of Detroit Negro speech. Washington, D.C., Center for Applied Linguistics.

HOW DOES *DOZ* DISAPPEAR?[1]

John R. Rickford
University of Guyana

Introduction

In Guyana Creolese, sentences like the following can be heard frequently:[2]

(1) dI gjal *dəz* traI tə sma:t di baI, an dI baI *dəz* traI tə sma:t di gjal.

The girls usually try to outsmart the boys, and the boys usually try to outsmart the girls.

Unlike Standard English *does*, the *doz* in sentences of this type occurs with weak stress, and is clearly not an emphatic but an iterative marker, signalling that the action referred to in the verb occurs repeatedly or habitually.

Not only does *doz* occur with high frequency, but it shows up in the speech of a wide range of social or "sociolinguistic" types. *Doz* would have to be defined as a mesolectal marker, insofar as there exist alternate means of marking the habitual or repeated occurrence of an action which are on the one hand, closer to Standard English (acrolectal), and on the other, even more different from it (basilectal). The basilectal marker is *a* (also used for continuative aspect), and the acrolectal system involves the use of the Verb stem alone or the S.E. Present tense.

But the mesolectal span of *doz* is particularly broad. For instance, basilectal speakers are distinguished from mesolectal ones, not by the fact that they use no *doz*, but that the relative frequency of *doz* in their speech is less than that of *a*.[3] Here for example, are the relative frequencies of iterative *doz* and *a* in the speech of Granny, an old East Indian woman now retired after working for over fifty years in the canefields (weeding, thrashing cane, etc.). Her output is typically basilectal:

a = 57 (81.4%) *doz* = 13 (18.6%)

We find the same relationship in Table 1 in Bickerton which displays the basilectal outputs of twenty Guyanese speakers. This table is reprinted below as Table 1. Note that there are only five speakers whose tape-recorded speech does not include any *doz* tokens. The other fifteen all have some *doz*, but regularly use more *a* than *doz*; the total frequencies are *doz* = 100, *a* = 732. Note though that *doz* does occur with some frequency--more often than the truly basilectal *bin* (49 tokens) and *bina* (35), for instance. There is a valid explanation for this--as Bickerton (1975:27) points out, these latter markers are used only in contexts which are rare in ordinary discourse. But the point remains that *doz* is the second most frequent non-standard marker in this

TABLE 1. Basilectal Outputs of Twenty Guyanese Speakers (=Table 2.1 in Bickerton 1975:25)

Speaker	-s	-ed	(be)	-ing	doz	don	bina	bin	a
2				3	1	1		1	21
9			1	2	21	7	2	3	128
15			1	1	7	3	1		26
24							1		18
25				1		1	1		31
27		2	8	2	2	2		4	42
28					14	5		4	55
118							2	3	28
129							2	4	16
137		1	2	3	3	1	7	6	9
148	2		1				1	4	22
168		1	6	1	5	3			44
170				1	8	2		1	11
172				1	2	9			15
176					12	6		1	39
178				1	6	3		5	56
186		1	13	10	1		2		38
188					9	3	9	9	94
198				1	8		2	10	15
219				1	1		5	1	24
TOTAL	2	5	32	28	100	46	35	56	732

Total standard forms: 67 Total nonstandard forms: 969.

NOTE: *-s* = 3rd pers. sing. non-past *-s*; *-ed* = past morphemes for all verbs except *have* and *be*; (*be*) = all forms of verb, inflected or otherwise; *-ing* = verbal, adjectival and nominal forms, but excluding *going to* or equivalents.

basilectal sample. While it is used less frequently than *a* by basilectal speakers, it cannot be ignored or cast aside.

At the other extreme are acrolectal speakers, who more frequently use the S.E. present tense for expressing habitual aspect (often with iterative adverbs), as in

(2) They *go* home everyday.

But these acrolectal speakers also use *doz*. Somewhat like the basilectal speakers, it is the lower frequency of *doz*, relative to some other means of signalling iterative aspect ("present tense" in this case) which distinguishes them. Here for example are the frequencies of *doz* versus present tense forms used for iterative aspect in the speech of Ustad, an educated and respected member of his village, in a fairly formal interview.

doz: 15 (17.4%) present tense: 71 (82.6%)

In fact *doz* is very tenacious indeed. Of the five non-standard markers represented in table 1 (*doz, bin, bina, don* and *a*), *doz* is the only one which acrolectal or upper mesolectal speakers will continue to use quite freely in their informal speech, while avoiding all the others.

So far I have been trying to establish the frequency with which *doz* occurs in Guyana. But *doz*-usage is not confined to Guyana. The form has been reported for Barbados (Collymore 1965), Trinidad (Solomon 1968) and the Bay Islands (Ryan 1973). My own investigations have revealed that it is alive and well in the South Carolina Sea Islands, in Antigua, St. Kitts, Nevis and Belize. I am sure that it can be found elsewhere in the Caribbean. In Alison Shilling's paper for this conference, for instance, we learn that it is also current in the Bahamas! We may safely conclude then that *doz* is a well-attested and important creole feature in the English-speaking Caribbean.

However, while *doz* may be a household word in these creole communities, it has not yet become so in creolist circles. The form received passing reference only in Collymore (1965), Solomon (1968) and Ryan (1973), although it was treated in somewhat more detail in Bickerton (1972) and Rickford (1974). It is certainly not generally considered one of the classic features of an English creole--on a level with *bin* or *mi* or *a*--and this despite the fact that it may well enjoy wider currency than these other features.

This brings us to the question of why *doz*--so central a feature in creole communities--has been thus ignored.

One possible answer is of course to say that *doz* is only one of several fascinating creole features (*sa, neva, did, again* are others) that have suffered from the paucity of descriptive creole studies in the field. Contrary to what many people seem to feel, we still have a great deal to discover about what features individual creoles exhibit, quite apart from all the very interesting speculation about where they came from, where they're going to, and so on.

Another possible explanation may have to do with the fact that most of the active work on Caribbean English creoles has taken place in Jamaica. Now I still have not ruled out the possibility that *doz* may turn up in Jamaica, but so far I haven't received any evidence that it is current there. If *doz* does not in fact show up anywhere in Jamaica, this would be an interesting discovery, leading us to question in the first place the extent to which we could continue to view Jamaican Creole as the proto-typical Caribbean creole, and in the second, to seek out the historical and other factors which might explain this unique situation.

But there is surely more to this issue than the coincidence that the crowd was at one place and the action at another. There *have* been scholars interested in language in other parts of the Caribbean (certainly there has been no shortage on the S. Carolina Sea Islands). And

they have brought back the usual creole treasures--the tokens of *bin* and *mi* and *da* and *a*.

However, the treasures which creolists seek, and find, in creole communities, have always been the most basilectal items possible--the real "raa taak", the varieties furthest removed from the standard language. In fact, many of us conceive of the term "creole" as referring only to some invariant conglomeration of basilectal items.[4]

Given this kind of attitude and approach, it is easy to see how *doz* might have been ignored, in the light of the existence of basilectal *a*. But as I hope this paper has already made clear--in neglecting *doz*, we would be neglecting a crucial aspect of the linguistic competence of the creole community.

Another reason why *doz* may have been overlooked is that it often occurs in phonologically reduced forms--*əz*, *Iz*, and even *z*. Out of a total of 215 *doz* tokens examined for this paper, *doz* was realized in its full form only 62 percent of the time. Furthermore, many of the occurrences of *əz* or *Iz* reduced from *doz* might easily be mistaken for instances of the English copula.

Surprisingly enough, very little work has been done on the nature of phonological reduction or morphological condensation in creole communities. The reduction of *doz* is only one instance of a tremendous amount of phonological reduction and loss which is typical of everyday speech in creole communities. It is this general phenomenon which makes creole speech virtually unintelligible at times--even when the syntactic and lexical levels are fairly standard.

But if we cannot hear reduced forms of *doz* as *doz*, reduced forms of *bin* or *gonna* as *bin* and *gonna*, we can hardly do any "fully accountable" descriptions of creole syntax, not to mention phonology.[5] An understanding of the principal types of phonological reduction which obtain in creole communities would clearly be of considerable practical as well as theoretical value. But few papers have been written on this subject.

The point should also be made here that the condensation of *doz* seems to be more than the automatic consequence of rapid speech, and seems to provide for more than an enrichment of the range of stylistic possibilities.[6] It systematically provides a means of approximating the prestigious standard dialect or acrolect with a minimum of effort, yielding intermediate and final forms which seem closer to the desired goal while at the same time can be related to and used like their non-standard source. For instance, *Iz*, a reduced variant of *doz*, seems more standard than *doz*, because of the fact that it is phonetically identical with the 3rd person singular form of the English copula. But it still functions both syntactically and semantically just like *doz*. The more a speaker reduces *doz*, the more he is able to "pass" as controlling the formal machinery of a higher lect, while being able to draw at the same time on the semantic and expressive machinery which "lower" lects provide.

Just as one might utter a taboo word in condensed or virtually inaudible form, thus meeting requirements of propriety while still feeling to oneself that the expressive purpose had been served, I think the phonologically reduced forms of *doz* permit more self-conscious speakers to use the morpheme without doing so blatantly and obviously, and in a way that might find accommodation among "higher" lects.

On this point, I think it is no accident that upper mesolectal speakers more frequently condense *doz* than basilectal or lower-mesolectal ones. For instance, Johnny Wade, an upper mesolectal speaker, realizes his *doz* tokens in full form only 20 percent of the time, while Uncle, a basilectal speaker, produces his *doz* tokens in full form 83 percent of the time. The upper mesolectal speaker, in a sense, tries to pass his non-standard *doz* off as a more "standard"-looking *Iz* or *z*. But the basilectal speaker is typically less concerned about trying to disguise or conceal his resources, and is more prepared to simply call a *doz* a *doz*. If all of this is true, then it is clear that an understanding of how decreolization proceeds would require an understanding of how processes of phonological condensation like those attested for *doz* actually operate.

With these motivating considerations in mind, let us turn now to a more detailed examination of the reduction of *doz*.

The d- undoing of doz

We shall concentrate most heavily on the "undoing" of the initial *d* in *doz*--the process by which it is deleted, often through assimilated intermediate forms (*nəz*, *ləz* etc.). There are well-known precedents in many English dialects for the reduction of the *əz* which would remain after the *d* is removed, to *z* and even *ø*--the reduction of the English copula *Iz* to *əz*, prior to contraction and deletion, for instance. (Cf. Labov [1969] for a detailed examination of these processes in English in general, and Black English in particular.)

But there are no equally well-known precedents for the deletion of initial voiced stops in English dialects. The closest parallel to the deletion of the initial *d* in *doz* is found only in words like *this*, *that*, *those*, *the*, *them*, etc. in which an initial *ð* becomes *dð* or *d* before being removed, often through assimilation to the preceding element (Cofer 1973).[7]

As we shall soon see, however, the removal of the initial *d* in *doz*, far from being an isolated phenomenon, is part of a general rule affecting initial voiced segments in creole auxiliaries or tense-aspect markers. But before we come to this general pan-creole rule, let us more modestly attempt to work out the rules which would provide for the undoing of *d* in *doz*.

Table 2 displays the frequency with which *doz* (varying in full form between *dʌz* and *dəz*, sometimes *daz* and *das*) was realized without the initial *d* in a total of two hundred and fifteen tokens. One hundred and ninety-six of them were taken from tape-recorded interviews with

twenty-one Guyanese Creole (GC) speakers, and nineteen from interviews with two Sea-Island Creole (SIC) speakers in South Carolina.[8]

TABLE 2. Frequency of d-less forms of doz by Preceding Phonological Environment

Speakers	Pause	Vowel	Obstruent	Sonorant	Total
SIC	--	4/13=31%	1/1=100%	5/5=100%	10/19=53%
GC	0/6=0%	43/138=31%	3/8=38%	25/44=57%	71/196=36%
Combined total	0/6=0%	47/151=31%	4/9=44%	30/49=61%	81/215=38%

Note: "Sonorant" in column 5 refers to sonorant consonants only (i.e., nasals and liquids).

On the whole, the SIC speakers display a higher rate of d-deletion than the GC speakers (53% as against 36%), but since the SIC community is at a more advanced stage of decreolization, this would accord with what I have already said above about upper mesolectal speakers reducing *doz* more often than their basilectal counterparts.

On the surface, the SIC speakers also appear to have a simpler and more clear-cut rule than the GC speakers: delete ##*d* variably after vowels, and categorically after consonants. But the simplicity of this pattern is probably due to the paucity of data in consonantal environments (only six tokens). From other SIC data not tabulated here, SIC speakers *do* have some d-retention in consontal environments, as in:

(2) ju no--sɔ̃ pipl *dəz* kʌm ɵvə jer...
You know--some people come over here

Their real pattern would thus appear to be quantitatively rather than qualitatively different from that of the GC speakers.

Ignoring for the present this and other minor differences between the two communities, we shall refer from this point on to the combined totals in table 2, exploiting all the data at our disposal.

The overall picture of the contrasting effect of preceding phonological environments shown in table 2 is simple enough to explain. Since we are dealing with the removal of a *consonant*, we would expect consonantal environments to favor the rule, and a preceding vowel or pause to disfavor it. (Compare the final *t, d* deletion rule, or the rule for deleting the remaining *z* once contraction has applied to the English copula, in Labov et al. 1968). Furthermore, nasals are more typically involved in homorganic assimilation processes with neighboring segments than non-nasal consonants, and if this assimilative weakening is a prelude to *d*-loss itself, this might explain why *d*-loss is highest after sonorant consonants.

We may represent this general picture by a variable rule of the following form:[9]

RULE I: *d*-undoing of *doz*

$$\begin{bmatrix} -\text{continuant} \\ +\text{voice} \end{bmatrix} \rightarrow \langle \emptyset \rangle \; / \; \begin{Bmatrix} +\text{cons} \\ +\text{son} \end{Bmatrix} \; \#\# \_\_\_\_ \text{VC} \; \#\# \begin{bmatrix} +\text{Aux.} \\ +\text{iterative} \end{bmatrix}$$

While this is an accurate overall characterization, we find intermediate forms which allow us to establish the process of d-undoing in finer detail when we consider the preceding segments individually. Preceding sonorants--nasals in particular--furnish the richest set of intermediate forms, and we shall deal with them first, and in greater detail than the others.

PRECEDING SONORANTS (NASALS AND LIQUIDS)

The following different realizations of *doz* occur in nasal environments:

(3) m##dəz: sʌm dəz ste an pak ap.
Some stay and pack up

(4) m##{ə z Iz}: demIz gat arkestra de.
They (usually) have orchestras there.

(5) n##dəz: dɛn dəz plant stʌmp lang taɪm.
They used to plant stumps long ago.

(6) n##nəz: sʌmtaɪm di *lan nəz* hard.
Sometimes the land is (be) hard.

(7) ø##nəz: *dɛ nəz* pʌŋ əm.
They (usually) pound it.

(8) n##{ə z Iz}: di*gravnɪz* drɔ əm.
The ground draws it.

(9) ŋ##nəz: di *t*Iŋ ŋəz spIn.
The thing spins.

As example (3) indicates, one possibility is for *doz* to remain in its full form without any compensating changes in the preceding nasal. But one other alternative (illustrated in (5) in which the underlying subject pronoun is dɛm) is for the *doz* to remain in full form while the preceding nasal assimilates to the coronal articulation of the initial *d*. This may be handled by the rule:

RULE II: Nasal assimilation to point of articulation of following segment

$$[+\text{nasal}] \rightarrow \begin{bmatrix} \alpha \text{ anterior} \\ \beta \text{ coronal} \end{bmatrix} \; / \; \underline{\quad} \; \#\# \begin{bmatrix} \alpha \text{ anterior} \\ \beta \text{ coronal} \end{bmatrix}$$

This fairly general rule of English, which produces *ribm bo* from 'ribbon bow' and aŋgənə from 'I'm going to' in a number of English dialects (see Labov et al. 1968:252 for a discussion of the latter), will also handle the specific case of (5) with which we are concerned.

The other possibility, represented by (6) and (9), in which the initial stop of *doz* is itself assimilated to the preceding nasal, is unusual in English, and must be represented by a more restricted rule:

RULE III: Assimilation of stop to preceding nasal

$$[-\text{continuant}] \rightarrow \begin{bmatrix} + \text{ nasal} \\ \alpha \text{ coronal} \\ \beta \text{ anterior} \end{bmatrix} \; / \; \begin{bmatrix} + \text{ nasal} \\ \alpha \text{ coronal} \\ \beta \text{ anterior} \end{bmatrix} \; \begin{matrix} \#\# \\ [+ \text{ aux}] \\ [+ \text{ iter}] \end{matrix} \; \text{VC}\#\#$$

The outputs of RULE III may be further reduced, as examples (4) and (8) indicate, by the more general rule:

RULE IV: Simplification of geminates

$$X_i \rightarrow (\emptyset) \; / \; X_i \; \#\#\underline{\quad}$$

Example (7) is especially interesting. The subject pronoun (dɛm) has lost its final nasal. (The lone nasal in the subject auxiliary sequence is clearly part of the habitual auxiliary). We could account for this by a possible RULE IV' applying to the output of II or III:

RULE IV': Alternative simplification of geminates

$$X_i \rightarrow (\emptyset) \; / \; \underline{\quad}\#\#X_i$$

The most obvious objection to this rule is that it would have the exact opposite effect of RULE IV as it stands: i.e., it would remove the *first* of two adjacent identical segments rather than the *second*. But apart from the ad hoc nature of such a formulation, RULE IV' would not allow speakers to produce *either* (7) *or* (8), as speakers in fact do.

A better way of accounting for (8) is by RULE V:

RULE V: Resyllabification of nasal

$$\begin{matrix} \text{dɛN} \\ [+\text{pro}] \end{matrix} \; \$ \; \begin{matrix} \text{VC} \\ \begin{bmatrix} \text{aux} \\ +\text{iter} \end{bmatrix} \end{matrix} \rightarrow \begin{matrix} (\text{dɛ} \\ [+\text{pro}] \end{matrix} \; \$ \; \begin{matrix} \text{NVC} \;) \\ \begin{bmatrix} \text{aux} \\ +\text{iter} \end{bmatrix} \end{matrix}$$

RULE V would allow for the generation of (7) without excluding the possibility of (8) (by RULE IV), and is further justified by the fact that dɛm and dɛ are normal pronominal variants in mesolectal levels of both GC and SIC. It appears that, given the output of RULE IV (e.g., dɛn əz), and somehow still feeling the need for an initial consonant on what was originally *doz*, speakers resyllabify--transferring the nasal from the pronoun to the iterative marker. This option is made possible by the independent existence of dɛ as a pronominal variant.

Here are some sample derivations for underlying dɛm##dəz, which can go two possible routes, and for underlying lan##dəz, which can only go one. Note that while dɛm##məz and dɛ##məz are not actually attested in the recorded data, dɛm##əz is attested, and the former two, which would precede and follow this in the derivation, seem intuitively possible where something like *la##nəz does not.

	dɛm##dəz	dɛm##dəz	lan##dəz
RII	Option not taken	dɛn##dəz	Vacuous application
RIII*	dɛm##məz	dɛn##nəz	lan##nəz
RIV	dɛm##əz	dɛn##əz	lan##əz
RV	*dɛ##məz	dɛ##nəz	Not applicable

In the case of preceding liquids, we find evidence for some of the very processes which operate in nasal environments. In no event is the subject NP affected (as in (9) above), but *doz* itself may be modified as in:

(10) l##ləz: pipl ləz plenti he.
There are usually plenty of people here.

(11) l##{Iz, əz}: pipl iz bi baIjIn sun.
People usually start buying soon.

(10) may be accounted for by amending RULE III to provide for assimilation of the stop to a preceding sonorant instead of a nasal. (11) requires no further modification of RULE IV.

PRECEDING OBSTRUENTS (STOPS AND FRICATIVES)

Preceding stops and fricatives simply do not provide enough data to allow us to work out finer processes with any reliability. Two *d*-less forms of *doz* occur after stops:

(12) dem wId strɛŋk ŋʌz wʌk.
Those with (the) strength work.

(13) Gad əz drim i waIf.
God makes his wife dream...

In view of examples like (9) above, (12) could probably be derived by allowing RULE III to operate as a distant assimilation rule. From

(13), and the fact that all the full forms of *doz* are preceded by *t##* (*naIt dəz; pa:t dəz, wat dʌz*), we must assume that *d*-undoing takes place most often in stop environments by a process of geminate simplification, when the preceding stop happens itself to be *d*.

In the fricative environments, no intermediate forms of *doz* (**səz *zəz* for instance) are attested, and we are not therefore justified in positing any modified form of the assimilation rule III for fricatives. However, in both cases in which the *##d* is deleted, the preceding fricative is a sibilant (*a:lwIz Iz, perənts əz*), suggesting that sibilants perhaps trigger *d*-undoing more often than other fricatives.

PRECEDING VOWELS

No finer rules can be established as to how preceding vowels function in the *d*-undoing of *doz*. Tense vs. lax, front vs. back--none of these nor any other distinctions seem to correlate with any greater or less deletion. There is at least one case of an initial ð instead of *d* in *doz*, and several cases in which the *d-* is more tenuous (which we might write as *ḍ*əz). These suggest that a process of weakening often takes place as a prelude to, or instead of total deletion. But beyond this we can say little more.

The deletion of initial stops in auxiliaries--a pan-creole rule:

We have now covered the general, and as far as possible, the specific processes by which the initial *d* in *doz* is removed. As was mentioned before, the deletion of an initial voiced stop seems at first like a rare phenomenon in English dialects. But in English creoles and decreolized dialects such as Black English, we discover several other similar cases.

In Sea-Island Creole, for instance, the basilectal continuative/habitual marker is normally *da*, as in:

(14) shi mʌsi *da* hʌnt hʌzbən.
She must be hunting (for a) husband.

However, *da* alternates with *a* after *bIn*, as in:

(15) bai, andi bin*a* hala.
Boy, Andy was hollering.

Note that *bIn* ends in a *nasal*, and as we have already seen in the case of *doz*, preceding nasals provide one of the most favorable environments for the deletion of the initial stop via assimilation.

In Guyana and Jamaica today, only *a* is used for the basilectal continuative/iterative marker. It is very likely that this *a* is a derived form of an earlier *da*,[10] and that the complete loss of *##d* was preceded by a *da/a* alternation such as still exists in SIC.

Brn, a marker of anterior aspect or past tense in almost all the Atlantic creoles, provides another example--the first to suggest that

the deletion rule is not limited to dentals or alveolars, but extends to all voiced stops. The form occurs as *mIn* in Antigua and St. Kitts, *wen* in Hawaiian Creole, and *en* in Jamaican Creole. The variants themselves suggest the diachronic processes which might have been involved: nasalization of the initial *b*, lenition to a glide, complete deletion of the initial segment.

It should be added here that the pronominal morphology of creoles is likely to have played some part in the development of these processes, given that the effect of a preceding nasal is always so strong. Unlike the S.E. subject pronouns, *none* of which ends in a nasal at least one (*dem*--third person plural) and frequently another (*Im*--third person singular, as in Jamaica) of the creole subject pronouns and in nasals. Add to this the fact that in our data pronouns are the most frequent NP before the auxiliary, and that third person pronouns occur with particular frequency, and it can be seen how the process of initial stop assimilation and deletion might have been facilitated by the regular occurrence of favorable environments.

GC and SIC furnish yet another example of initial stop deletion in the alternation of *bi* and *i*--most widely demonstrated in the use of *mʌs##i* for "must be", as in (14) above. I have also been told that an alternation between *go* and *o* exists in Sranan, a well-known English creole in Surinam. There is a similar alternation between future *gun* and *un* in GC.

The final three examples come from Black English. The fact that they are peculiar to Black dialects in the U.S. has frequently been noted, but no explanations have been offered for their idiosyncracy.

Labov et al. (1968:255-257) point out that the use of *ain't* for *didn't*, and the realization of *don't* as simply a nasal vowel (ɔ̃ or ɯ̃ or õ), differentiate Black non-standard dialects from White non-standard ones. But they offer no rules for such alternations, stating that this would require "further investigations." Undoubtedly it does. But it seems clear that to provide for the use of *ain't* for *didn't* and a nasal vowel for *don't*, we would require rules deleting the initial voiced segment--the same phenomenon we witness in the Caribbean creole auxiliaries. Note too that where the GC basilect has *no* or *na*, the GC mesolect uses *en*, *ɛn*, *In*, *ən*, or *n̩* for the acrolectal forms *didn't* and *don't*. The B.E. situation is therefore not as unfamiliar as it might at first appear.

Black English furnishes an additional example that the deletion rule might apply to all kinds of voiced stops: *##b, ##d* and *##g*. The example in question is the possible reduction of "(I) *am going to*" in B.E. to *mən, mnə* and *mə*. Ignoring the earlier stages which are irrelevant to this discussion, we may enter the derivation provided by Labov et al. (1968:251-252) at *mgənə*. The authors point out that the B.E. sub-path on the reduction route from this point on "is unusual, involving as it does, the assimilation of the stop to the nasal--unusual in English, but the rule in other languages such as Korean."[11] The derivation for the B.E. sub-path runs as follows:

(16) *mgənə*
(17) *mmənə* : assimilation of stop to nasal
(18) *mənə* : simplification of geminates
(19) *mnə* : ə - elision
(20) *mmə* : assimilation of nasal to preceding nasal
(21) *mə* : simplification of geminates

We do not need to turn to languages as distant as Korean for precedents for this kind of derivation, however. Note how closely the processes involved in (16) to (21) parallel Rules II to IV devised for *doz* above.

Each of these cases merits further individual investigation to see what specific role phonological environments play in the deletion of their initial segments. But we can capture the general nature of the phenomenon in a preliminary way (much as we did with RULE I above) by the following pan-creole rule:[12]

RULE VI: Deletion of initial voiced stops in creole auxiliaries

$$\begin{bmatrix}\text{-contin.}\\ \text{+voice}\end{bmatrix} \rightarrow (\emptyset) \;/\; \#\#\_\_\_\_\_V(C)\;\#\#$$
$$[+\text{ aux}]$$

We still need to find out a lot more about the possible application and non-application of RULE VI. (For instance, why no single creole seems to allow it to apply to *all* the cases discussed in this section; or why certain possible candidates for this rule, like anterior or past *dId* seem never to be affected in *any* creole.) But the need for some rule of this type seems incontrovertible.

Loss of the Vowel in (d)oz:

Let us now return to the specific case of *doz*. We have provided now for the removal of its initial segments, after which the variant forms remaining consist of *Vz* (əz and *Iz* are the most common realizations).

But further condensation can occur. The lone vowel can itself be removed, leaving a vestigial z to mark iterative or habitual aspect. Our discussion of this step will not be as involved as our discussion of the removal of initial *d*, because the patterns represented here are much more transparent. Table 3 for instance, displays the relative frequency of z out of all z and *Vz* tokens, according to preceding phonological environment (i.e., the relative frequency of z out of all forms in which the initial segment has been removed) in the speech of the seven Guyanese speakers I recorded myself.

The pattern revealed in table 3 is totally unambiguous: further reduction of *doz* to z occurs only after a vowel. Not only are z forms unattested in the other environments in the data, but intuitively they seem quite unlikely: While *də brɛd əz hard* or *di pipl̩ əz wʌk* have iterative interpretations ("The bread is usually hard" and "The people work"), *də brɛdz hard* could only mean "The bread is hard", and *di pipl̩z*

TABLE 3. Relative Frequency of z Out of Vz + z Tokens in GC, By Preceding Environment

VOWEL_____: 74% (n=42)	CONSONANT_____: 0% (n=11)

Note: No data were available in this sub-sample on the effect of PAUSE_____.

wʌk "the people's work". That is, the z in these cases cannot come, it seems, from an underlying iterative *doz*.

Since we are dealing here with the removal of a *vowel*, it is natural to expect that an immediately preceding vowel would favor removal. But the apparent impossibility of any such reduction after consonants is not what we might normally expect. The restriction on the reduction of *(d)oz* to z to vocalic environments effectively helps to distinguish the iterative marker from the English copula, which *can* be contracted in consonantal environments albeit less frequently than in vocalic environments.

In the condensation of iterative *doz*, then, we see the deceptiveness of first appearances. The removal of the initial voiced stop seemed at first to be an unprecedented phenomenon, but turned out to be part of a widespread process in the English creoles. The reduction of iterative *Iz* or əz seemed at first to involve nothing more than the processes involved in the widely attested contraction and deletion of the English copula, but turns out to be subtly different.

Within the category of preceding vowels, I have not as yet been able to establish any internal constraints on the reduction of *(d)oz* to z . So we must simply account for this kind of reduction by the optional RULE VII.

RULE VII: Vowel elision in iterative Vz forms

$$\begin{bmatrix}\text{-cons}\\ \text{+syll}\end{bmatrix} \rightarrow (\emptyset) \;/\; \begin{bmatrix}\text{-cons}\\ \text{+syll}\end{bmatrix} \;\#\#\_\_\_\_\begin{bmatrix}\text{+aux}\\ \text{+iter}\end{bmatrix} z\;\#\#$$

The final disappearance of doz

If the lone z remaining after RULE VII has applied, or the z remaining when RULE VII does not apply, were to be deleted, the effect would be the complete disappearance of iterative *doz*. And in cases where the *doz* had preceded an invariant verb-stem, as in (22):

(22) hi *(ə)z go* der

the verb-stem by itself would be left to signal the meaning of a habitual or repeated action:

(23) hi *go* der

Now in cases like (23) in which there is a third-person singular subject, it is theoretically possible to differentiate between the signalling of habitual aspect by a lone verb-stem (remaining after a preceding *doz* has been wiped out), and the signalling of habitual aspect by means of the SE present tense,[13] since the latter would require the third-person suffix on the verb, as in:

(24) hi *goz* der

However, with *first* and *second* person subjects, or third-person *plural* subjects, in which the verb is not marked with a present tense suffix, it would be impossible to differentiate verb-stem forms (from deleted *doz*) from present tense forms. Even with third-person singular subjects the distinction would be more theoretical than practical, because mastery of the third-person present inflection is characteristic of only the very highest lects in a creole continuum. (Note that only one speaker in table 1 has any *-s* tokens.) Essentially, therefore, we must conclude that in practice it is difficult to distinguish between cases in which an underlying *doz* is deleted on the surface and the verb stem is left as the sole habitual marker, and cases in which there is no underlying *doz* and the SE present tense is used to mark habitual aspect.[14]

Problematic though this may be for the linguist, note how it facilitates the native speaker in the process of decreolization. To achieve the present tense forms used for the expression of habitual aspect in standard English, he does not need to master an entirely new system, but simply to extend the condensation processes which have been nibbling away at his old habitual marker *doz*, allowing them now to swallow it altogether.[15]

The synchronic problem for the linguist also has its diachronic counterpart: in those creoles or dialects which currently use verb-stem as habitual marker, can we infer earlier stages in which *doz* was used, but subsequently deleted? Without documentary or other evidence, such an inference might be difficult to justify.

In American Black English, however, there seems to be good justification for positing the earlier existence of *doz*, in the light of the present-day use of invariant *be* as a habitual or iterative marker. I have argued this position at length elsewhere (Rickford 1974), so will offer only a brief summary here. Essentially, the argument is as follows. Sentences like "He *be* working", "He *be* sick", and "He *be* in the club", which occur with iterative meaning in Black English, would result automatically if *doz* were deleted completely from the antecedent creole structures "He *doz be* working", "He *doz be* sick", and "He *doz be* in the club". In most urban settings, one finds only the iterative *be* structures, but among Black Americans on the S. Carolina Sea-Islands,

one finds both iterative *be* and *doz be*, the latter often in the reduced forms discussed above in this paper. When the *doz* disappears completely, the habitual or iterative function is carried solely by the remaining *be*.

An interesting question is why invariant *be* has not, as far as I know, been adopted as an iterative marker in "decreolized" lects outside of American Black English. In Guyana, I have collected this single example, which seems to be derived from a deleted *doz*:

(25) These days the sun *be* down fast. But August i gon steady back. "In these days (i.e., in the month of November) the sun goes ("does be") down fast. But in August it will become steady again (i.e., it will go down later)".

But *be* never becomes a stable part of the grammar, attested on a general scale. One reason for this may have to do with the tenacity of *doz*--if only in highly condensed form--among Guyanese speakers. I think a precondition for the emergence of invariant *be* as iterative marker would be that *doz* is completely deleted so often in the community, that the "dummy" *be* could be reinterpreted as the real iterative signal. This is not (yet?) the situation in the Caribbean creoles, although it is more so on the Sea Islands, where *be* is rapidly replacing *doz be*.

Another explanation may be that in some creole environments, there is not always a "dummy" *be* to take over the habitual function of *doz* if the latter is lost. GC adjectives, for instance, often behave more like verbs than true adjectives, and frequently occur after *doz* (and other auxiliaries) without *be*, as in:

(26) Shi doz sIk plɛnti. "She gets sick often"

Obviously, if there is no *be* in such environments when *doz* is present, no iterative *be* can emerge after the *doz* is deleted.

Concluding Remarks

I have attempted, in this paper, to shed some light on the phonological reduction processes to which *doz* is subject in two English creole communities. In the process, we have unearthed a subtle but widespread pan-creole rule by which initial voiced stops in auxiliaries are deleted, and have seen some of the *grammatical* effects of the *phonological* reductions, and some of the contributions they make to upward style-shifting and decreolization. There is more to be learned about and from the reduction of *doz* than I have been able to set out above. And there is even more to be learned about and from reduction processes in creole communities in general. Hopefully this paper has provided a hint of the value to be derived from this kind of learning, and will encourage other creolists to join in the quest for it.

NOTES

[1]This paper is substantially the same as that prepared for the Hawaii creole conference in 1975; changes made were primarily updatings, corrections, and modifications of wording. The reader familiar with Rickford (1974) will notice some similarities between this paper and that one; the major difference is that this concentrates on the reduction processes which are only dealt with in passing in the earlier paper, and also makes use of an expanded data base. The origin of Black English *be*--central to the earlier paper--is marginal in this one, although the question of why iterative *be* does not emerge in other English creoles or ex-creoles is explored for the first time in this paper. For their helpful comments on a 1973 draft, I wish to thank C. J. Bailey, Derek Bickerton, William Labov and William S. Y. Wang, while disassociating them from any of the defects of the present paper.

[2]Sentences will be recorded in a broad phonetic transcription. I continue to use the form *doz* adopted by Bickerton (1972) when making general reference to the iterative morpheme. In fact however, the phonetic realizations of this morpheme are *dəz*, *dʌz*, sometimes *das*, *daz*. Of these *dəz* is the most frequent in the data, and I shall therefore use the schwa in derivatives, and when making reference to condensed forms of *doz*.

[3]Basilectal and lower-mesolectal speakers are also frequently distinguished from upper mesolectal ones by the fact that their *doz* is unmarked for time or tense. Whereas mesolectal speakers typically use *doz* only for iterative non-past events (and *useta* for iterative past), basilectal speakers have no such restriction. For instance, in response to the question, "What kind of work you used to do when you were small?", Baby Sookhia responds: watə dam bed, ken tap--den *dʌz* plant stʌmp laŋ taIm, an ju watə stʌmp an tIŋ. "Water dam beds, cane tops--they *used to* plant stumps long ago, and you had to water the stumps and so on."

This difference in the tense marking of *doz* is an interesting subject, but is not really pertinent to this paper, and will not be discussed further.

[4]In this regard, folk-usage may provide a more realistic and useful model. In Guyana, for instance, "Creolese" is used to refer to a wide range of varieties short of the acrolect or most standard-like variety.

[5]Labov (1971) cites the extreme difficulty which researchers working on Hawaiian Creole experienced in trying to transcribe auxiliaries which occurred in reduced form: "Condensation of the auxiliaries is so extreme that the outside listener often does not perceive the relevant bits of sound, and thinks that he is hearing zero forms ..."

[6]I am alluding here to an intriguing suggestion made by Labov (1971) that one reason for the replacement of adverbs of time by tense auxiliaries in many creoles is that the latter, appearing in a wider range of variant condensed forms, offer more scope for *stylistic* variation.

[7]C. J. Bailey (personal communication) has pointed out that examples like ənə for "on the", ɔlə for "all the" (where *n* and *l* are interdental) are quite frequent in "standard American colloquial English".

[8]Forty-one of the GC tokens are from interviews with fourteen Guyanese speakers conducted by Derek Bickerton and his field assistants. I am indebted to him for the opportunity to draw on these data. The remaining one hundred and fifty-five GC tokens are from longer interviews with seven Guyanese speakers which I conducted myself between July and September 1974. The SIC data are from recordings which I made on one of the S. Carolina Sea-Islands in summer 1972.

[9]As is customary, the angled brackets around the output signify that this is a variable rule, its probability of application depending on the presence or absence of the favoring variable constraints--also within angled brackets--in the environment. In this case, for instance, rule application is most likely when the preceding environment is [+cons, +son], less when it is [+cons, -son], and even less when it is [-cons, +son]. Features within square brackets must be present for the rule to operate at all.

[10]When I first made this claim that GC and JC *a* might be a derived form of an earlier *da* (at the 1975 Hawaii conference), I was using only the comparative evidence of SIC and the phonological inference permitted by the pan-creole initial stop deletion rule. However, I have since found textual support for this claim, for GC at least, in McTurk's (1881) short story, "A Case in Court", in which the following sentences occur, the first with iterative *da*, the second continuative:

(i) sometime dem fowl *da* lay, too . . .
"Sometimes those fowls used to lay, too . . ."

(ii) you ebba see um *da* waak wid razah?
"you ever see it walking with razor?"

Support for the additional claim that the loss of *da* might have been preceded by *da/a* alternation is provided in the same text, in the fact that *a* is also used therein for iterative and continuative functions:

(iii) an' som time dem duck *a* lay . . .
"and sometimes those ducks used to lay . . ."

(iv) you see da man *a* call me liah.
"You see that man is calling me a liar."

Note finally that the text provides evidence only of *bin a* and not *bin da*, precisely as in modern-day SIC:

(v) me does see he *bin a* watch dem.
I used to see him watching them.

Another piece of textual evidence for an earlier *da* is in proverb 689 in Speir's (1902) Guyanese collection, although it seems to have a possible future interpretation as well as a continuative one:

(vi) Nobody go beg w'en rain *da* come.
"Nobody will beg when the rain is coming."

I am grateful to Ian Robertson, U.G., for drawing my attention to this example in Speirs (1902), and would be happy to receive similar textual evidence for earlier varieties of *Jamaican* Creole.

[11]C. J. Bailey has drawn my attention to examples like *plen(t)y, twen(t)y, cen(t)er* and *win(t)er* in some varieties of American English, suggesting that the assimilation of the stop to the nasal is not in fact unusual in English. But these examples do not involve progressive assimilation across a morpheme or word-boundary, and seem less close to the case of "I am going to" in B.E. than the examples of creole reductions discussed in this section, all of which involve members of the auxiliary.

[12]Since there are no auxiliaries in the English creoles or B.E. which begin with an affricate, [-continuant] will suffice to cover the actual cases with initial voiced stops. Alternatively, we could use Schane's (1973) feature, [-delayed release], to exclude affricates, but this feature does not appear to be as well-established or agreed upon.

The role of Aux. in the rule (i.e., the fact that all the forms to which the rule applies occur in preverbal positions, and may be treated as members of the auxiliary) is not entirely clear, but probably relates to the weak stress which auxiliaries typically receive. (Cf. Labov 1971.)

[13]As Charleston (1955) and others have pointed out, the so-called present tense of English usually indicates the general or habitual occurrence of an action, and only in specialized speech-events like sports-commentaries does it refer to an action taking place at the moment of speaking without any habitual or iterative sense. Of course, the habitual sense is most explicit when the present tense forms co-occur with such adverbials as "usually", "sometimes", and "often".

[14]The problem of circularity also bedevils the suggestion made in Bickerton (1975:136), and informally discussed by Jerrie Scott and myself at the 1973 Linguistic Institute, that the last stage of *doz* reduction might involve the hopping over of preverbal z to postverbal position. Confronted with examples like *hi goz der*, or even *wi goz der*, it is virtually impossible to decide whether the z in these cases represents the transferred remnant of an originally preverbal *doz*, or an attempt to use the English present tense. Since the present tense normally expresses habitual aspect anyway (see fn. 13 above), it is also impossible to establish that what is often regarded as "hypercorrect" *-s* insertion in B.E. or the English creoles is in fact an attempt to express habitual aspect instead of present tense, as argued in Roberts (1976).

[15]In a comment on an earlier draft of this paper, Derek Bickerton raised the question of whether the phonological attrition of *doz*, or the realization that it is a non-standard form, should be held responsible for its final disappearance in the upper mesolect. However, I don't think that there is any crucial opposition between these two possibilities. Granted a realization that *doz* is non-standard, a speaker may decreolize most simply, as I argue in this paper, by allowing his condensation and reduction rules for *doz* to apply more extensively.

REFERENCES

Bickerton, D. 1972. System into system. Paper presented at the Conference on Creole Languages and Educational Development, St. Augustine, Trinidad. Mimeo.

_____. 1975. Dynamics of a creole system. Cambridge, Cambridge University Press.

Charleston, R. 1955. A reconsideration of the problem of time, tense and aspect in English. English Studies 36:263-278.

Cofer, T. M. 1973. A variable rule for DH. Paper presented at the Thirty-fifth summer meeting of the LSA, Ann Arbor, University of Michigan. Mimeo.

Collymore, F. 1965. Notes for a glossary of words and phrases of Barbadian dialect. 3rd ed. Bridgetown, Barbados, Advocate Company.

Labov, W. 1969. Contraction, deletion, and inherent variability of the English copula. Language 45:715-762.

_____. 1971. On the adequacy of natural languages: I--the development of tense. Mimeo.

Labov, W. P. Cohen, C. Robbins, and J. Lewis. 1968. A study of the non-standard English of Negro and Puerto-Rican Speakers in New York City. Vol. I, Final report to U.S. Office of Education (Co-operative Research Project No. 3288). Columbia University. Mimeo.

McTurk, Michael "Quow". 1881. A Case in Court. In: Essays and fables in prose and verse, written in the vernacular of the Creoles of British Guiana. Georgetown, Argosy Press. Reprinted in: Rickford, John R. (ed.) 1978. A festival of Guyanese words. 2nd ed. Georgetown, University of Guyana.

Rickford, J. R. 1974. The insights of the mesolect. In: Pidgins and creoles: current trends and prospects, ed. by D. DeCamp and I. Hancock, pp. 92-117. Washington, D.C., Georgetown University Press.

Roberts, Peter. 1976. Hypercorrection as systematic variation. Paper presented at the conference on New Directions in Creole Studies, Georgetown, Guyana.

Ryan, J. 1973. Blayk is White on the Bay Islands. University of Michigan Papers in Linguistics, vol. 1, no. 2.

Schane, S. A. 1973. Generative phonology. New Jersey, Prentice Hall.

Solomon, D. 1966. The system of predication in the speech of Trinidad: a quantitative study of decreolization. M.A. thesis, Columbia University.

Speirs, James. 1902. The proverbs of British Guiana. Demerara, The Argosy Company.

FROM PREPOSITION TO COMPLEMENTIZER IN CARIBBEAN ENGLISH CREOLE*

William Washabaugh
University of Wisconsin-Milwaukee

My intention here is to add to this growing list of studies in creolization which support the hypothesis that abstract, grammatical categories develop from concrete spatio-temporal categories (Sankoff and Laberge 1974; Sankoff 1975; Traugott 1974). I will show that, in the formation of Providence Island Creole (PIC), the *grammatical complementizer evolved from a locative or directional preposition.* More specifically I will demonstrate that the non-finite sentential complementizer *fi* evolved from a locative preposition.

Before presenting evidence in support of the hypothesis, I must point out the *fi* as a surface morpheme performs a number of syntactic functions, not all of which have been thoroughly described and analyzed in studies of Caribbean English. First, *fi* serves as a general dative preposition:

(1) *ai me fried fi i sniek.*
I was afraid of the snake.

Besides marking datives, *fi* serves to mark possession:

(2) *dem brienz fi im bettaz.*
They fooled his betters.

Also, *fi* serves as a non-finite complementizer as in (3), and as some sort of marker of obligation (4). Neither of these two functions is well described in the literature (Bailey 1966; Cassidy and LePage 1967).

(3) *ai mek fi stan op.*
I tried to stand up.

(4) *ah me fi aks dem if dem neva gi im no nurishment.*
I was supposed to ask them if they gave him any food.

The hypothesis that the complementizer *fi* evolved in creolization from a locative use of the proposition *fi* implies the broader claim that all these other functions of *fi* in PIC have similarly evolved from that preposition *fi*. A strong and empirically falsifiable claim is being made here, that all the uses of *fi* are evolutionarily related to the locative preposition. Should any one of the above uses of *fi* be found to be structurally or historically unrelated to the original preposition *fi*, that finding would be sufficient to nullify the hypothesis.

My support for the strong claim will be entirely indirect. Unlike languages like Tok Pisin or Hawaiian English, PIC has long since been completely creolized. No speakers are available who are making the sorts of syntactic extensions which would support this hypothesis. Given