Defining Creole

John H. McWhorter

Defining Creole

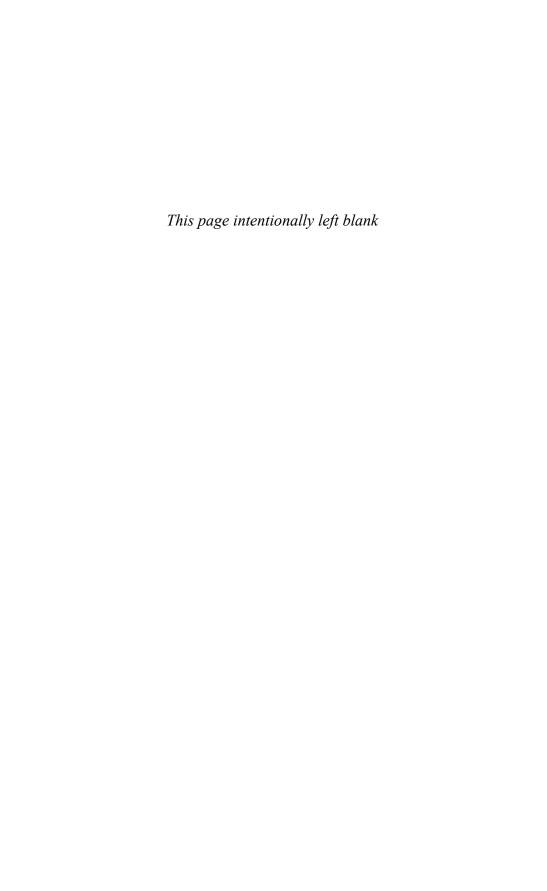*This page intentionally left blank*

Defining Creole

John H. McWhorter

OXFORD
UNIVERSITY PRESS

Oxford   New York

Auckland   Bangkok   Buenos Aires   Cape Town   Chennai
Dar es Salaam   Delhi   Hong Kong   Istanbul   Karachi   Kolkata
Kuala Lumpur   Madrid   Melbourne   Mexico City   Mumbai   Nairobi
São Paulo   Shanghai   Singapore   Taipei   Tokyo   Toronto

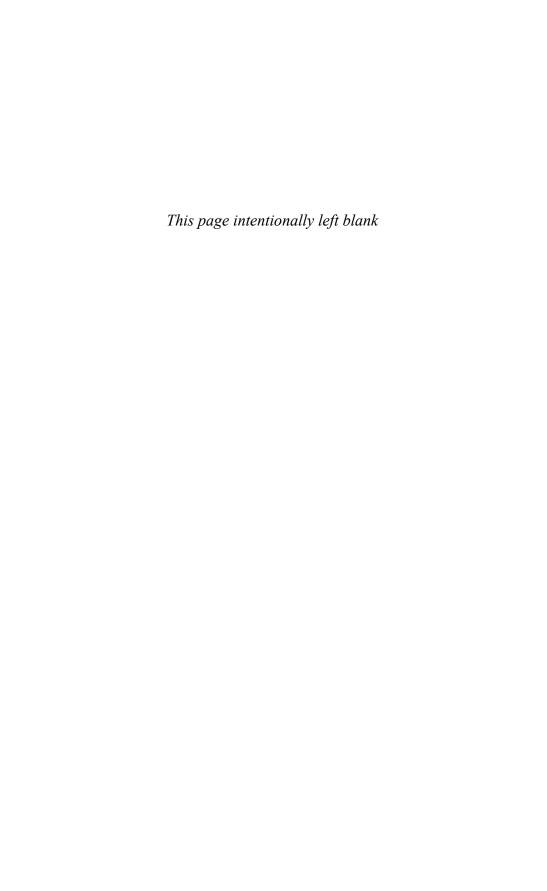Copyright © 2005 by Oxford University Press, Inc.

PREFACE

This volume gathers thirteen of my articles over the past decade on creole languages. I have chosen those pieces that demonstrate several related general points that have most concerned me in my work: the definition of creoles as a synchronic, rather than solely sociohistorical, type of language; the grammar-internal diachrony that creoles have undergone apart from contact-related processes; and the fact that structural reduction, far beyond mere inflectional loss, can play as significant a role in language contact as calquing.

Overall, I believe that in much work in creole studies over the past few decades, sociopolitical persuasions have had a way of channeling and even distorting empirical engagement. The themes I treat in this volume are an attempt to identify this tendency for the purposes of pointing the way beyond it, which I believe will benefit creole studies, as well as linguistics as a whole.

All of the papers have been dusted off as thoroughly as possible. New data and sources are included wherever possible. Bibliographical citations are updated. Small errors that have come to my attention over the years are corrected. In many cases, I have even altered or revised observations or argumentation to reflect progress in my own thinking or in scholarly consensus. Some of the chapters are considerably abbreviated versions of the articles they were based on, my aim having been to fashion them as much as possible for the purposes of this anthology.

While I have assembled the papers to illustrate general themes, and have provided section introductions in support of that goal, obviously I did not originally write the papers for the purpose of later including them in a single volume. As such, there are inevitable overlaps between many of the chapters—for example, in terms of data adduced for particular points. I have tried to minimize this as much as possible. However, the fact is that very few readers will have occasion to read the anthology in its entirety, and for that reason, there are various cases where I decided that allowing the overlaps was the best choice.

This page intentionally left blank

CONTENTS

Defining Creole

This page intentionally left blank

IS THERE SUCH A THING AS A CREOLE?

When I was teaching a general linguistics class in 1996 and giving an overview of pidgins and creoles, an undergraduate asked me whether creole languages were identifiable as creoles from a synchronic point of view, rather than from a sociohistorical one.

I gave him the conventionally accepted answer for a creolist: "Yes, *creole* is strictly a sociohistorical term. If you looked at a grammar of a creole language without knowing its history, there would be nothing distinguishing that grammar in any way from an older language. For example, remember that Chinese doesn't have inflections."

Yet in the back of my head, I felt vaguely dirty having said that, because I knew that in my heart of hearts, I did have a strong feeling—at this point only that—that there indeed was something "different" about the grammars of the languages I had by then been studying for several years.

The particular work I had concentrated on had required an intensely cross-creole perspective, such that I had had occasion to acquire a basic familiarity with the grammars of almost all of the creoles for which grammars or a fair number of articles had been written. I also started studying creoles when it was still easy to have read every issue of the *Journal of Pidgin and Creole Languages,* since only six issues of it existed when I began studying creoles in 1989.

My experience had lent me a sense that, taken together, creole languages were indeed a "type" of language—although the obvious fact that this was a gradient "type" was clear from the differences between "creole" and "semi-creole" varieties or between basilectal and mesolectal varieties of continuum creoles such as the English-based ones of the Caribbean.

However, common consensus in the field, flagged by countless authors in their work, was that creoles were synchronically indistinguishable in any qualitative sense from older languages. Moreover, there has even been a certain sociopolitical flavor to the assertion: since its inception as an institutionalized subfield in the late 1960s, a tacit assumption in creole studies has always been that our job is partly to show the linguistics community and the world beyond that creoles are "real languages." Obviously, the assertion that they are indistinguishable from older languages is commensurate with that impulse. But then it must be acknowledged that, given the sad history of creoles' dismissal as "baby talk," an implication that creoles are "different" can be taken as tempting a return to framing the languages as "lesser." This is especially so, given the common misimpression throughout history and among laymen that inflectional morphology is the essence of "grammar" and structural sophistication.

In a particularly clear demonstration that creolist investigation is colored by advocacy as well as curiosity, one article (Adamson and Smith 2003: 83) notes: "Firstly, it must be *admitted* that Creole languages are not noted for the possession of inflectional morphology." The italics are mine: note that this is considered something to "admit," whereas a Sinologist would consider it a mere neutral observation. Afterward, the same authors note that "when it comes to derivational morphology, Creoles perform better"—"better," as if there were some kind of competition at stake. The authors themselves seem almost to have internalized the very "inflection envy" that so much creolist work is aimed at dispelling.

While I did not enter creole studies with sociopolitical intentions, I could barely help being passively imprinted by this Zeitgeist in the field. As such, for years I assumed that the truism "creole is not a synchronic term" was valid—actually, I avoided thinking about it very much. When a graduate student colleague asked me, "So, *are* creoles different from other languages in any identifiable way?" I told her, "From what I see, no." But it happened that we did not have occasion to continue the conversation, so I did not have to justify the claim. I made a note to myself to think about it harder in the future. Unsurprisingly, I never did—until that day in 1996, when actually mouthing out loud to an auditorium full of students an assumption that did not square gracefully with my empirical experience made me so uncomfortable that I decided to look further into the issue.

My intention was to be as unbiased going into my investigation as possible. My initial assumption was that I was going to find older languages that would have struck me as "creole-like" if I hadn't known that they weren't creoles, and that my task was simply to smoke out some languages like this and make a small contribution to the field by calling them to attention, given that the truism had always been asserted rather than demonstrated.

Of course, some writers considered the case closed by noting that, for example, Chinese has no inflections (and has serial verbs, free markers of tense and aspect, etc.) and is not a creole. But it always seemed to me that a ready riposte here was that Chinese languages also make use of lexical tone in a far more functionally central fashion than any creole does, and they also have more tones than any creole (e.g., four in Mandarin, nine in Cantonese). Thus the first question I developed for my investigation was simply, "What non-creole language has neither inflectional morphology nor lexically or grammatically contrastive tone?"

That question alone stumped a great many linguists I asked, but, luckily, I worked in a department with a typological bent, and my colleague Jim Matisoff informed me that there were plenty of such languages in Southeast Asia, such as Khmer. As time went by, it occurred to me that Polynesian languages also fit this description.

So my next task was to examine grammars of languages like these and honestly assess whether they struck me as qualitatively indistinguishable from the creole grammars I had dwelled on over the years. I was quite ready to find that grammars like Khmer and Maori did fit this description, and I would have considered this alone a useful discovery.

But quite early in my investigation, there was clearly no question. Perusing any grammar of these older languages, even the briefer ones, it was impossible to pretend that there was nothing saliently different from the grammars of Sranan, São Tomense Creole Portuguese, and Mauritian Creole, for example. One was struck overall by a vaster degree of elaboration in the grammars—richer vowel inventories, or vast batteries of numeral classifiers, or paradigms of conventionalized particles marking pragmatic shadings à la German's modal particles, or particles marking distinctions in possession, or any number of other things absent in Haitian, Cape Verdean, Negerhollands, and others.

What I sought, however, was a feature that cut across all of these older languages that was absent or starkly less common in the creole "type" that haunted me. Clearly, for example, numeral classifiers would not do, as these are present only in a subset of the inflectionless, toneless languages in question. Was there any feature in all of these languages that marked them apart from the creole "type" that I could not help but perceive?

That feature was noncompositional derivational morphology, along the lines of English's *understand.* This is especially obvious in grammars of Mon-Khmer and Tibeto-Burman languages, which so often flag the feature as a challenge to the learner or analyst, but it is also readily observed in grammars of Polynesian languages. And I was struck by the fact that this feature plus inflection and contrastive tone did not constitute a random set. All three are the kinds of feature regularly eliminated in rapid, untutored second-language acquisition (as opposed to, for example, adpositions or markers of tense or aspect), and then all three only emerge in grammars via gradual reinterpretation of other material. Thus the absence or paucity of these features in creoles, the world's newest languages, passes from observation to prediction.

This struck me as an observation worth sharing, and at this point I ventured the Creole Prototype hypothesis: that the only natural languages in the world that lack, or all but lack, all three of the above features will be creole languages—that is, the result of rapid untutored acquisition by adults (that is, pidginization) followed by conventionalization of their version of the language as a natural language.

After that, however, I was still nagged by a sense that this was not the full story: the "elaboration" aspect appeared to constitute a further distinction between creoles and older languages. Even a brief description of an older language, inflectional or not, regularly reveals a degree of *overspecification*—marking of distinctions that natural languages lack as often as they display, and thus ornamental to nuanced communication—of phonological, semantic, or syntactic distinctions that descriptions of creoles, whether brief or detailed, do to a starkly lesser degree. To wit, no creole

has four tones, evidential marker paradigms, or ergativity. In later papers, I explored this distinction, presenting a metric of complexity that reveals even older analytic grammars as "busier" than creole ones, and demonstrating that creoles, rather than solely "relexifying" their source language grammars or merely shaving their lexifier grammars of inflectional morphology, consistently reflect less elaborated versions of their source languages' grammars.

Après ça, le déluge. My work in this vein has predictably been, as they say, controversial.

Claims that I am tagging creoles as "baby talk" in the vein of nineteenth-century thinkers and casting doubt upon the intelligence of creole speakers are, of course, a kind of willfully uncomprehending street theatre, which an element of modern academic tradition and educated Western sociopolitics encourages.

Beyond this, however, some have misinterpreted me as having claimed that creoles have "no morphology" and presented isolated examples of creole inflection and lists of derivational affixes in creoles—when, in fact, my claim is that creoles have little or no *inflectional* morphology while their *derivational* morphology, while obviously present, tends strongly to be semantically compositional. Meanwhile, the very nature of creole genesis entailed that some creoles had more contact with source languages over time than others, or that some creoles' source languages were more closely related than others' and allowed the retention of more "quirky" features than a context in which speakers spoke widely divergent languages, and so on. But some writers, constrained partly by the binary parametrical alternations of modern syntactic theory and partly by a natural human discomfort with gray zones, labor under the misimpression that the fact that some creoles display the Prototype less robustly than others, and somewhat more "elaborification" than others, refutes my conception. Because of the same discomfort with gradience, some address my hypothesis as claiming that creoles are maximally "simple," thereby assuming that the presentation of a "complex" feature or two in a creole language bodes ill for my model.

Yet the fact is that some of this misinterpretation is my fault in the end. I first introduced my idea in a paper in the journal *Language* that presented the core Prototype idea rather briefly, and whose main intent was to question the superstratist paradigm of Francophone creolists led by Robert Chaudenson and its Anglophone rendition presented by Salikoko Mufwene. As it happens, I initially did not expect the Prototype idea to occasion any particular controversy—given that no one until then had presented me with an older language contradicting it (nor has anyone to date). However, in real life, the Prototype section of the article attracted the most attention, while my impression is that what I considered the heart of the paper—the address of the superstratist school—has happened to elicit little interest over the years.

I unhesitatingly acknowledge that the outline of the Prototype idea in the *Language* paper was, in itself, an unsuitably brief and underargued presentation for a claim that has attracted so much examination. For this reason, I have since written a more detailed outline of the Prototype hypothesis, for a creole conference anthology, which also addresses the criticisms of the idea that had come to my attention by the time of its writing. That is chapter 1 in this volume, and it, rather than the *Language* paper, is what I consider the "official" statement of my thinking on the Prototype idea. Inevitably, a paper published in *Language* would always come more readily

to the attention of creolists and other linguists than one tucked away in one of a now lengthy series of anthologies. As such, I present the anthology paper here in a more accessible venue.

Overall, the fact is that the sum of my thesis on what distinguishes creoles from older languages has at present been scattered across three journals plus the anthology. This is awkward, because I believe that it is impossible to completely engage the thesis without reading all or most of the papers in question. The Prototype hypothesis alone is but a fraction of the claim. I outlined the broader complexity issue in *Linguistic Typology* (reproduced here as chapter 2). But then the cross-creole nature of the article understandably may leave a reader seeking a close engagement with a small set of creoles and their source languages—that is chapter 3. A reader might also seek an even closer demonstration entailing just one creole and its source language—and chapter 4 gets down to cases with a detailed comparison of Saramaccan and its main substrate language, Fongbe, using new informant data from Saramaccan and Claire Lefebvre's recently published Fongbe grammar.

The final chapter in Part I, chapter 5, is a recast version of the paper that appeared in *Language.* The Prototype section is removed. I assume that the reader will take the first paper in the section as representative of that argument, and within this anthology, a reproduction of its preliminary rendition would serve only archival rather than demonstrative purpose. As such, the argument of what is here chapter 5 better represents its core intention. Given Robert Chaudenson's three decades of superstratist work and, more immediately to most Anglophone readers, Salikoko Mufwene's twenty-year run of articles taking the same perspective as unrefuted, it will be natural for many to assume that the superstratist conception is less hypothesis than fact, and to therefore suppose that a hypothesis assuming that creoles begin with pidginization neglects established canon. My goal in this final paper in the section is to demonstrate that the superstratist "top-down" creole genesis scenario is unsupportable, not only in view of the Creole Prototype observation but also in view of synchronic, diachronic, documentational, and sociohistorical fact.

I believe that engagement with the totality of these papers will make it difficult for most readers to misinterpret my argumentation in the ways that have been common since 1998. Certainly, I remain open to criticisms, and significant ones. But hopefully, these can address the actuality of my thinking rather than misimpressions inevitable from engaging only a subset of it—something so difficult to avoid given the mayfly life cycle of the academic journal article, quickly consigned to the oblivion of bound fascicles on university library shelves, or the anthology article, hidden between the covers of a book constituting but one more spine in a long series, usually read closely only by reviewers.

This page intentionally left blank

Defining "Creole"
as a Synchronic Term

1. Introduction

It has often been claimed that there are no synchronic features distinguishing creole languages from other ones, such that the term *creole* is in the strict sense solely a sociohistorical one, referring to certain languages born as lingua francas amidst heavy contact between two or more languages (Kihm 1980a: 212, Mufwene 1986a, Chaudenson 1992: 135, Corne 1995a: 121).

This idea, however, has rarely been subjected to close scrutiny from a typological perspective. In this paper, I will explore the hypothesis of what I have called the Creole Prototype more closely.

2. Epistemology of the Creole Prototype

Markey (1982) proposed a definition of creole based on a list of features such as lack of gender distinctions, SVO word order, lack of overtly marked passive, tense-aspect markers indicating the three basic distinctions (anterior, nonpunctual, and irrealis), and "semantic repartitions" of lexifier features, such as the use of a locative copula as a nonpunctual marker. This approach has been found insufficient, partly because many creole languages lack a few or even many of these features, and partly because there are non-creole languages that combine many of them. Indeed, Markey's checklist can be considered in large part a typology of analytic languages in general rather than creole ones.

Yet the inadequacy of Markey's approach does not rule out the logical possibility that creoles may be synchronically defined in another way, especially since Markey was concerned more with evaluating whether Afrikaans is a creole language than developing a theoretically self-standing definition of *creole* itself. In fact, since creoles are indisputably new languages, we are faced with a crucial question: since grammars are dynamic rather than static systems, why would we not expect there to be definable signs of youth in the structure of a new grammar? It would seem logical, in fact, that if a grammar is new, then it might be distinguishable from older grammars in terms of particular grammatical features *which are known to arise only over time.* Three such features include:

Inflectional affixation. Over time, one possible fate of a free morpheme is to become a piece of bound inflectional morphology, having been gradually reanalyzed as grammatical rather than lexical. The development in Vulgar Latin, for example, of forms of the verb *habēre* into future and conditional marking inflections in many Romance languages is well known. (It must be clear that we refer not to inflection as an abstract feature of Universal Grammar, but to inflectional affixation.)

Tone. Over time, one result of ongoing phonetic erosion is the development of tonal contrasts beyond the phonological level, such as distinguishing monosyllabic lexical items as in the Chinese varieties, or encoding morphosyntactic distinctions as in Bantu. (This is not the only source of tonogenesis but is one possible one.)

Derivational noncompositionality. Over time, semantic drift leads some combinations of a derivational particle or affix with a root to become idiosyncratically noncompositional. For example, the Russian directional prefix *na-* signifies, compositionally, direction toward, as in *dvigat'sja* "to move" versus *nadvigat'sja*, "to move toward." However, there are many combinations of *na-* and a verb in which this semantic contribution is abstract to the point of lexicalization: *idti* "to go" versus *najti*, which compositionally would be "to go at" but in fact means "to find," or *kazat'* "to show" versus *nakazat'* "to punish."

The pathway from here to a proposed synchronic Creole Prototype begins with the very reason that these three particular features appear only over time. For example, whether or not it has tone, each language spoken by human beings is an expression of natural language generated via the principles of Universal Grammar (UG). Because of this, we can assume that tone is not a sine qua non of natural language but merely a possible manifestation thereof. More specifically, because tonal contrasts beyond the phonological level usually arise via phonetic change and suprasegmental reinterpretations of stress-based systems, we can specify that the tone traceable to this kind of change is ultimately but a by-product of the operations of such change, quite unconnected to any functional necessity inherent to UG. Similarly, inflectional affixation and noncompositional derivation are demonstrably unnecessary to natural language itself; they are frequently encountered permutations

of natural language, which arise only because of the erosional processes that continually shape syntax and semantics.

The fact that these traits are epiphenomenal to effective communication is important, because there is a communication strategy typically used between groups speaking different languages but seeking transitory, perfunctory exchange: namely, the creation of a makeshift speech variety encoding only those concepts fundamental to basic communication. This strategy is the *pidgin.* For example, while the Native American languages spoken by their creators are highly inflectional, inflectional affixation is completely absent in Eskimo Pidgin (Van der Voort 1995: 145–47) and Delaware Jargon (Goddard 1997: 57); Chinook Jargon had none except for a tendency for some latter-day speakers to borrow English plural -*s* for a few nouns (Thomason and Kaufman 1988: 30); Mobilian Jargon had only a negator inflection (Drechsel 1997: 103–4). Fanakalo Pidgin Zulu has no tone despite Zulu's complex tonal system, while Chinese Pidgin Russian has no tone despite Chinese's (Neumann 1966, Nichols 1980). Derivational morphemes (free and bound) can be found to a small degree in pidgins, but what is important is that their usages are *compositional*: for example, there are no examples of the use of -*man* in the Russenorsk corpus which stray beyond indicating nationality or group, such as *russman* "Russian" (Broch and Jahr 1984: 156–66), and I am unaware of any description of a pidgin that mentions noncompositional uses of derivational apparatus. Pidgins, serving as useful, but merely utilitarian, vehicles of communication, certainly require, for example, nouns, verbs, predication, and interrogative lexemes, but inflection, tone, and derivational noncompositionality—features marginal even to nuanced communication (witness the myriad natural languages that lack a subset, or in the case of many creoles, all of them)—tend naturally to be severely reduced or eliminated entirely by pidgin creators.

Few would disagree with my statements thus far; however, there are implications to be drawn from them which are, at this writing, a departure from common creolist consensus. To wit, in reference to a thesis that *creole* is a synchronic concept, it is important that pidgins tend strongly to have few or no such features, because creoles often stem from pidgins. Specifically, the birth of many creoles as pidgins leads us to a hypothesis: that the *natural* languages of the world (which do not include pidgins) displaying the three particular traits above will be creole languages, and that conversely, no older natural languages will display them.

Significantly, it is indeed the case that these three traits are combined not only in pidgins but in several of the languages traditionally called *creoles*—that is, documented to have been born in the middle of the second millennium amid displaced multiethnic populations and their descendants, with limited opportunity or motivation to acquire a dominant language fully. Moreover, as of this writing, I have not encountered an older language that *combines* these three traits. It is my claim that the combination of these three traits is an indication that creoles are *new* grammars and, as such, constitute a *predictable* synchronic delineation of creoles from older languages.

It is important to realize that there is no claim that such features cannot be found individually, or even in a pair, in older languages. Because creoles are natural languages, we would not expect them to harbor any individual features unknown in older languages. The claim is that creoles are unique in *combining* these three par-

ticular traits. It is indeed plausible that natural languages differ according to this *combination* of features: some natural languages are new while most are ancient, and correspondingly, this particular combination is predictable in a grammar without a lengthy diachrony, as we will see in this chapter.

3. Specifying the three traits of the Creole Prototype

3.1. Inflectional affixation

Diachronically, inflectional affixes usually arise via the reanalysis of free lexical morphemes, which become bound grammatical ones via gradual phonetic erosion and semantic bleaching, with cliticization often being an intermittent stage in this process (Hopper and Traugott 1993: 6–10). As noted, pidgins tend strongly to have few or no inflectional affixes, because the functions they serve tend to be incidental to the utilitarian level of communication that pidgins typically serve (cf. Mühlhäusler 1997: 142–44). Therefore, we would predict that if a language fulfilled the following two criteria—(1) descending directly from a pidgin and (2) having existed for a relatively short time—that it would have developed few or no inflectional affixes.

   This is indeed what was found in McWhorter (1998a) in a sample of eight languages traditionally called *creoles*, this term here taken sociohistorically to avoid circularity of argumentation—that is, all were developed via rapid adoption of a target language as a lingua franca by multiethnic populations in contexts discouraging the full acquisition of that target. Ndjuka English Creole, Saramaccan English Creole, Mauritian French Creole, St. Lucian French Creole, Angolar Portuguese Creole, Haitian French Creole (DeGraff 1999a)[1] and Negerhollands Dutch Creole[2] have no inflectional affixes. Tok Pisin English Creole has one, the adjectival marker *-pela* (the transitive marker *-im* is derivational).[3]

3.2. Tone

The use of tone to contrast monosyllables, like inflectional affixation, arises as the result of long-term change, often via consonantal erosion leaving formerly allophonic tonal contrasts to encode meaning contrast once indicated by the consonants themselves. Haudricourt (1954, cited in Matisoff 1973a) reconstructs, for example, the origin of three of the six tones in Vietnamese:

Vietnamese	*Vietnamese*
(*beginning of Christian era*)	(*sixth century*)
pa	pa
pah	pà
pa'	pá

   Similarly, the use of tone to encode morphosyntactic distinctions is a diachronic development, generally resulting from the erosion of a vowel, leaving behind its tone as the sole marker of a function (termed "cheshirization" by Matisoff [1991: 443], in

reference to the disappearance of the body of the eponymous cat leaving behind only its smile).

Pidgins developed by speakers of tonal languages tend strongly to reduce or eliminate tone *in these particular uses.* Kituba, for instance, was developed by West Africans and speakers of varieties of Kikongo, with the latter playing the dominant role in its stabilization and conventionalization. Despite the fact that Kikongo varieties are tonal, Mufwene (1997b: 176) notes that "Kituba has a predominantly phonological tone or accent system, instead of the lexical and/or grammatical tone system attested in ethnic Kikongo and in most Bantu languages" and that, "moreover, unlike in ethnic Kikongo, tone alone may not be used for tense/mood/aspect distinctions." When a smaller proportion of a pidgin's originators speak tonal languages, tone can disappear altogether, as it has in the pidginized Zulu, Fanakalo, which has been adopted by many South African Indians and whites.

Thus we predict that if a language is descended from a pidgin and is young, then it will make little or no use of tone to distinguish monosyllabic lexical items or to encode morphosyntactic distinctions. Again, this is the case: of all eight of our sample creoles, only Saramaccan makes marginal use of tone in these functions (and on this, see 4.2).

The claim here is certainly not that "creoles have no tone," because tone plays a role in a great many creole grammars. However, the roles it plays tend to be phonological ones, which there is no reason to suppose would be eschewed even in a makeshift, reduced variety like a pidgin. For example, Atlantic English creoles like Guyanese Creole English and West African Pidgin English use tone in various suprasegmental functions,[4] but native phonology, being the aspect of language most difficult to shed in second-language acquisition, often influences individual speakers' rendition of a pidgin. For example, Hiri Motu phonology differs according to speakers' native language (Dutton 1997: 26–27), and similar effects have been observed in Tok Pisin (Romaine 1992: 178–79, Muhlhäusler 1997: 139–40). Some creoles' originators have also substituted tone for a lexifier's stress, a fundamentally phonological process that leads epiphenomenally to some lexical pairs distinguished by tone: Papiamentu *papá* "father" vs. *pápa* "the pope" (Munteanu 1996: 185) and Saramaccan *kái* "call" from English *call*, *kaí* "to fall" from Portuguese *cair*.

Thus an originator of a pidgin can easily carry native *phonological* tone to even the most phonologically, not to mention grammatically, reduced pidgin, and in the case of segmentally identical bisyllabic words, this can extend to some *lexical* contrasts. However, to transfer tonal contrasts of *monosyllabic lexical items* would be formally impossible, given that the target language will have either polysyllabic words or monosyllabic words distinguishable by segmental contrasts. Even if the target did have monosyllabic words distinguished by tone, the correspondence between tone and meaning is so language-specific that the chances that any one syllable in the target would encode the particular range of tonally distinguished meanings that it did in the speaker's native language would be negligible. Meanwhile, transfer of tonally marked morphosyntactic contrasts would be blocked by the strong tendencies for pidgins to eschew inflectional affixation, and to the extent to which a speaker might be inclined to transfer a tonally marked derivational contrast, the opacity of the given

contrast to the speakers of other languages in the context would discourage this, just as it does the transfer of individual native language inflections.

Therefore a creole can reveal itself as young even with tone playing a vital role in its *phonology:* it is the absence or marginality of *monosyllabic lexical* and *morphosyntactic* tonal functions in creole grammars which is significant in the delineation of a creole prototype.

3.3. Noncompositional derivation

3.3.1. Metaphorical inference versus semantic drift

Preliminary responses to my observations on derivation have often been founded on a confusion between *institutionalization* and *lexicalization* (Matthews 1974: 193–94). Metaphorical and metonymic extensions, fundamental to human mental capacity, quite commonly distort the interpretation of derivation-root combinations from purely isomorphic interpretation. Unlike the long-term gradual process of *drift* yielding Russian's *najti* "to find," these extensions are easily *created spontaneously* by individuals, often on the basis of culturally contingent conceptions, without requiring long periods to develop. Aronoff (1976: 19) notes, for example, the use of *transmission* to refer to the engine component rather than the action: an engineer hardly required eons to apply the word *transmission* to the mechanism.

Because institutionalizations like these stem not from gradual, imperceptible drift but from synchronic human conceptual capacities, there is no motivation to hypothesize that they would be absent or even rare in creoles. For instance, the Saramaccan word for "supporter" is *báka-ma*, from behind-man, based on the expression *wáka a wã sɛmbɛ báka* "to walk behind a person" (Norval Smith, pers. comm.). While one certainly could only derive the meaning of *bákama* via explanation or context, as in *transmission*, the denotational relationship between the word's morphemes and its meaning is readily processable via the very powers of metaphorical inference that created the usage.

The type of noncompositional derivation-root combinations important in identifying a language as old are not these kinds of creative, culturally rooted institutionalizations of the sort that are rife in all natural languages, creoles as well as non-creoles. Our diagnostic is derivation-root combinations whose meanings are not only unpredictable from their parts by the first-time hearer, but where the semantic connection between the morphemes and their referent remains obscure even when the meaning of the word is known. In other words, our interest is in cases in which *the metaphorical connection between the synchronic interpretation and the original compositional one has become either completely unrecoverable or only gleanable to the etymologist or historical semanticist.*

Thus the Creole Prototype hypothesis does not entail a claim that creoles lack idioms and culturally embedded semantic extensions, for the simple reason that no natural language spoken by human beings does. As such, lists of such institutionalizations and idioms in a creole I have cited as fitting the Prototype cannot constitute refutations of my hypothesis, which was constructed in full awareness of such cases. *Transmission* and Saramaccan *bákama* contrast with a case like Russian's *najti* "to find" and *nakazat'* "to punish." The use of "go at" as "to find," or "show at" as "to

punish," finds elucidation neither in cultural context nor in metaphorical inference except of the most highly tenuous nature. These are cases not of dynamic idiomatization but of opacification due to inexorable semantic drift.

3.3.2. Productivity versus noncompositionality

Contrary to some responses to McWhorter (1998a), the issue of importance regarding the role of derivation in the Creole Prototype is not the *productivity* of a language's derivational morphemes but the extent to which combinations of a given derivational morpheme and a root are predictable or not, or, in the terms of Aronoff (1976: 38), the extent to which they display "semantic coherence."

Productivity is a misleading focus for our purposes, first because its equation with compositionality is quite partial. The prefix *re-* in English is quite productive, and yet there are many uses of it that have drifted semantically into noncompositionality (having actually done so within the European languages they were borrowed from), such as *represent* and *repose*. In contrast, *-ity* is only fitfully productive (*credulous– credulity* but *spurious–*spuriosity*), and the nominalizer *-th* is not productive (*warmth– *coolth*), and yet their combinations with adjectives are generally compositional.

Productivity is also inappropriate as a diagnostic for these purposes because productive processes are, properly speaking, but a subset of the derivation in a language. The criterion for treatment as morphology in the Creole Prototype hypothesis is not productivity but *analyzability* (cf. Bauer 1988: 61), whether or not speakers process the item as morphology. Because productive derivation is naturally of central interest in the study of the rules generating grammars synchronically, theoretical morphologists often discuss derivation under a shorthand assumption that, for the purposes at hand, *derivation* refers to *productive* derivation. This is natural and unexceptionable; however, the Creole Prototype hypothesis examines not synchronic generation but the results of semantic drift. As such, its proper domain is not just productive morphology but this plus all diachronic layers of morphology still synchronically perceptible as such regardless of semantic drift or loss of productivity—that is, *analyzable* morphology.

Thus here we are concerned not with the productivity of a derivational morpheme but with the combinations of such a morpheme with a root that have semantically drifted from compositionality to the point that they must now be stored in the lexicon rather than generated.[5]

Despite its cruciality to my thesis, noncompositional derivation only occasionally requires sustained attention in the context of linguistic research. Thus it will be useful to examine the phenomenon across various languages in the next section.

3.3.3. Noncompositional derivation in older languages

In Tok Pisin, there are no noncompositional derivation-root combinations (Peter Mühlhäusler, pers. comm.). For example, the abstract nominalizer *-pasin* is compositional in all of its uses (from Mühlhäusler 1985: 625):

gut "good"	*gutpasin* "virtue"
isi "slow"	*isipasin* "slowness"

prout "proud"   *proutpasin* "pride"
pait "fight"   *paitpasin* "warfare"

By contrast, in an older language like German, the semantic contribution of the prefix *ver-* is often quite obscure. One usage conveys the notion of "away": *jagen* "to hunt," *verjagen* "to chase away." There are several extended meanings from this one: error ("away" from the right path), as in *führen* "to lead," *verführen* "to lead astray"; consumption or waste, as in *hungern* "to be hungry," *verhungern* "to starve"; and antonymy, as in *lernen* "to learn," *verlernen* "to forget." Furthermore, there are usages unconnected (synchronically) with these, such as union (*schmelzen* "to melt," *verschmelzen* "to fuse") and as a simple verbalizer of other parts of speech (*Gott* "God," *vergöttern* "to deify"). All of these usages occur in several cases in the lexicon (and it is significant that there is no derivational affix or particle in the eight creoles in question with this extended a range of connotations). Most important, however, there are a great many uses of *ver-* that are unattributable to any of these meanings: *nehmen* "to take," *vernehmen* "to perceive"; *schaffen* "to manage to do, pull off," *verschaffen* "to obtain"; *mögen* "may, to be able," *vermögen* "to enable" (transitive), "to be able to" (intransitive). This prefix bedevils the second-language learner because its usages throughout the lexicon are so varied and unpredictable.

A similar case is the Russian prefix *ras/z.* The prefix has three basic and productive meanings: separation (*kuporit'* "to cork," *razkuporit'* "to uncork"), dissemination (*razbegat'sja* "to run off in various directions"), and inception (*smejat'sja* "to laugh," *rassmejat'sja* "to burst out laughing"). The Russian speaker easily perceives these core meanings. However, with many verbs, the combination of its meaning with the noun or verb is no longer, in Aronoff's terminology, "semantically coherent," and must be stored in the lexicon: *pisat'* "to write," *raspisat'* "to paint"; *plata* "pay," *rasplata* "retribution," *vedenie* "leading," *razvedenie* "animal breeding."

We see similar examples in Mande varieties such as Mandinka and Bambara. In the latter, the prefix *la-* often encodes causativity: *bo* "to leave," *labò* "to make leave" (Bazin 1965: 351). However, quite often, roots affixed with *la* have become compositionally opaque (Bailleul 1981; orthography follows that source in these and above examples):

bi̱ₙ "to fall"   *labi̱ₙ* "to help"
gǫsi "to hit"   *lagǫsi* "to criticize"
bǫto "to respect"   *labǫto* "to effect a law"
sòrò "to get, receive" *lasòrò* "to have time for"

Importantly, noncompositional derivation is also quite common in languages of Southeast Asia, and this is particularly important because some of these languages have neither inflectional affixation nor tone, such that the derivation is the pivotal feature distinguishing them from older languages. An example is the derivational affixes in Chrau, a Mon-Khmer language of Vietnam, which clearly show the effects of semantic drift over time (comments on the noncompositionality of derivational morphemes in languages of this region are particularly common in their grammars[6]). The core meaning of the affix *ta-* is causative (*chuq* "to wear," *tachuq* "to dress"), extended into

passive meaning (*ănh rung daq* "I pour water," *daq tarung* "the water got spilled") and unintentionality (*tapăng* "to close unintentionally"). However, there are also opaque lexicalizations with *ta-*: *dâp* "to dam up," *tadâp* "to fold or hem a shirt"; *chĕq* "to put, set," *tachĕq* "to slam down"; *trŏh* "drop," *tatrŏh* "jump down" (Thomas 1969: 102). Meanwhile, the prefix *pa-* has drifted so far from its original meaning that no synchronic meaning is perceivable (Thomas 1969: 103, Thomas 1971: 153):

găn "go across"	*pagăn* "crosswise"
le "dodge"	*pale* "roll over"
lôm "lure"	*palôm* "mislead"
lăm "set, point"	*palăm* "roll"
jŏq "long"	*pajŏq* "how long?"

There is also a prefix *n-* whose meaning is similarly uncoverable (ibid.):

hao "to ascend"	*n'hao* "up"
ta-ŭm "to make bathe"	*ta-n-ŭm* "to make bathe"
pajwăch "to crumple something light"	*pa-n-jwăch* "to crumple something stiff"

Importantly, speakers perceive these morphemes as affixes (Thomas 1969: 90–91): in other words, while no longer *productive*, they are *analyzable*.

In the preface to the most extensive dictionary of the Mon-Khmer language Khasi, Singh (1983: iii) specifies that examples with derivational prefixes will not be given, "excepting the case where the derivatives so formed bear a special meaning from that of the radicals." In modern terms, Singh meant that only institutionalizations and lexicalizations would be listed, and Khasi has many examples of both. For instance, *ia-* is an associative or reciprocal prefix, used compositionally in cases like *lekhai* "to play," *ia-lekhai* "to play together." There are some conventionalized institutionalizations like *ia-mai* "to quarrel" from *mai* "to scold." Quite common, however, are uses where no associative or reciprocal connotation holds any longer (*ia-lam* "to lead"). In many cases such as the previous one, the prefixed version coexists with a bare reflex of the verb with the same meaning. In others, however, there no longer exists any readily perceivable relationship between the root and the derived reflex: *poi* "to reach, arrive," *iapoi* "to cohabit."[7]

Noncompositional derivation is also found in Oceanic languages, many of which also have low or absent inflectional affixation and no tone. For example, in Fijian, the most productive use of the prefix *va'a* is as a causative prefix, as in *vuli-ca* "to learn" and *va'a-vuli-ca* "to teach" (Dixon 1988: 50). However, with intransitive verbs, its contribution becomes more idiosyncratic: *taro-ga* "to ask," *va'a-taro-ga* "to ask many times," but *muri-a* "to follow," *va'a-muri-a* "to follow where there is difficulty" (ibid. 51). *Va'a* can also be affixed to nouns, but in these cases the meanings not only depart from any conceivable metaphorical extension of causativity but are quite difficult to characterize as representing any single unified meaning: *mavoa* "wound," *va'a-mavoa* "harmful" (ibid. 182), *gauna* "time," *va'a-gauna* "occasionally," *mata'a* "morning," *va'a-mata'a* "breakfast" (ibid. 184).

Indeed, cognates of the Fijian *va'a* in its close relatives the Polynesian languages have typically drifted into noncompositional uses, a phenomenon characterized by

Neffgen (1918: 35) on Samoan: "In a great many cases these words formed with *fa'a* have lost their original signification, and in others they have come to bear quite a different one." In Samoan the prefix, besides its causative use, creates denominal verbs as in *ta'ita'i* "guide," *fa'ata'ita'i* "to convey"; however, there are also examples like *tau* "wages," *fa'atau* "trade, buy, sell" (ibid. 35–36). In Rapanui we find examples like *roŋo* "message," *hakaroŋo* "to obey" (Du Feu 1996: 179).

Finally, there are other noncompositional derivation-root combinations in Polynesian languages. In Rapanui, the abstract nominalizing suffix *-Vŋa* is used compositionally in cases like *mate* "death," *mateiŋa* "dying" but also in cases like *papaku* "corpse" versus *papakuiŋa* "low tide" (ibid). In Tokelauan, the reciprocal circumfix is *fe- -i/-aki*, as in *hogi* "to kiss," *feahogi* "to kiss each other"; the compositional uses occur alongside cases like *ilo* "to perceive," *feiloaki* "to meet" and *olo* "to rub, file," *feoloolo* "to be better" (reduplication signifies iteration or diminutivization) (Hovdhaugen, Hoëm, Iosefo, and Vonen 1989: 108).

Like productivity, noncompositionality is a gradient rather than a binary phenomenon, which arises via the accreted effect of small steps in reinterpretation over centuries. Aronoff and Anshen (1998: 242), for example, note slight departures from predictability like *immeasurable*, whose composition encodes "unable to be measured" but whose core meaning in practice is "very large." As such, the compositionality of words with Russian *ras/z-* manifests itself not according to the binary degree of contrast represented by the compositionally transparent *razkuporit'* and the opaque *rasplata*, but in intermediate cases such as *vraščhat'* "to turn" versus *razvraščhat,'* whose literal meaning of "to turn away" has an obvious metaphorical connection to its actual meaning "to corrupt." Another example would be the Bambara *fạsa* "to toughen, thicken" versus *lafạsa* "to encourage." As such, only a subset of the uses of German *ver-*, Russian *raz*, Bambara *la-*, or the Polynesian causative marker are completely noncompositional, a typical situation with derivational morphemes in old grammars. What is important to the hypothesis proposed is whether or not there is a strong tendency for creoles' derivational morphemes to *not* include such a subset of noncompositional, lexicalized usages.

Finally, it must be clear that I refer not solely to derivational *affixes* but to derivational *morphemes* in general, including both free and bound forms: affixation is not a necessary condition for lexicalization of derivation-root combinations. For example, the Lahu verb *te* "to do" has grammaticalized into a causativizer, but there are concatenations that have lost compositionality, such as its use with *tâʔ* "to carry," in which case it means "to carry along" (Matisoff 1991: 432). There are also institutionalized uses such as with *câ* "to cook," where compositionality has not been lost altogether, but the meaning is not "to make cook" or even "to feed" but "to make it so that people can eat" (Matisoff 1973b: 246).

Derivation is regularly compositional (with allowance made for the institutionalizations inherent to any natural language) in Ndjuka, Saramaccan, Tok Pisin, Angolar, and Negerhollands (confirmed for all five via reference to grammars, available glossaries and dictionaries, and personal communication with experienced researchers on each). There is a degree of noncompositional derivation in the French creoles—Haitian, Mauritian, and St. Lucian—but as we will see in section 5 in this chapter, this is easily accountable for under my hypothesis and, in fact, provides a useful illustration of certain aspects of it.

It is perhaps tempting to interpret these three features as an arbitrary set, the validity of my approach invalidated by a possibility that the conjunction of features is either accidental, or epiphenomenal to a broader factor, which could also be shown to operate on various subsets of older languages. For this reason, I must reiterate that these three features share something uniquely pertinent to my thesis: they are all symptoms of the aging of a natural language, in syntax, phonology, and semantics, respectively. In other words, my hypothesis is that these three traits will *not* be found to apply to any subset of older languages.

Linguistic argumentation does not typically occasion that three topics as particular and seemingly unconnected as inflectional affixation, monosyllabic lexical and morphosyntactic tone, and noncompositional derivation be treated as the central components of a unified thesis. Yet what is of concern to synchronic analysis can sometimes contrast strikingly with what is of concern to a diachronic one. The three features of the Creole Prototype, in this light, are analogous to proportions of decayed radioactive atoms in rocks: of no interest to the petroleum geologist, but all-important to the paleontologists interested in dating the rocks.

4. The gradience of the prototype

The hypothesis that creole is a synchronic concept is not based on an attempt to draw a binary distinction between creoles and older languages. Creole genesis was constrained by ratios of speaker to learner, how quickly the latter outnumbered the former, degree of homogeneity of the languages spoken by the learners, and how long source languages continued to be spoken. Because all of these are inherently gradient processes, it is the task of any language contact theorist to approach gradience as an unremarkable yet vital factor. A theory about language contact must be neither created nor evaluated on the misleading notion that the binary contrasts typical of quantum physics are appropriate to the subject matter.

As such, I propose not that every creole language has the above mentioned three traits. This claim would be false. Rather, I propose that as products of gradient language contact phenomena, creoles conform to the hypothesized prototype in degrees: some hew to it, while others fall away from it to varying extents.

To be sure, used inappropriately, an appeal to gradience can serve as a mere fig leaf for sweeping unruly data under the rug. As such, in reference to a hypothesis that there is a creole prototype, gradience can only be appropriately appealed to in an empirically falsifiable manner.

In this vein, there are precisely four factors that determine how closely a given creole will conform to the prototype.

4.1. Typological similarity of source languages

Most creoles were developed by people speaking typologically disparate languages, the usual situation being Romance or Germanic Indo-European speakers encountering speakers of various Niger-Congo and Austronesian languages. But in larger view, this was a by-product of the fact that so many creoles were born during a period when a few Western European powers were drawn to fertile subequatorial regions in pursuit

of profit and subjugated the peoples who happened to live there. There have arisen some creoles whose lexifier and substrates were all closely related languages. The similarity of the languages involved allowed speakers to retain structural idiosyncrasies particular to that language group which, in a more ethnically heterogeneous setting, would have impeded communication and thus not have entered the contact language.

Our hypothesis proposes that the three prototypical traits in question are due to the roots of a creole in a pidgin, the crucial traits of the pidgin being its virtual or complete lack of affixation or monosyllabic lexical and morphosyntactic tone. As such, this would lead us to predict that creoles descended from lingua francas with ample affixation and/or lexical and morphosyntactic tone would not conform to the Creole Prototype, and this is indeed the case.

Sango, for example, was developed and stabilized largely by speakers of a dialect continuum of Ubangian Niger-Congo languages. Although it is much more analytic than any of these languages, Sango nevertheless retains some inflectional affixes and lexical and morphosyntactic tonal contrasts, unlike creoles like Ndjuka or Angolar (Pasch 1997: 223–30). In these sentences we see two inflections, and in addition, they happen to be distinguished by tone (CONN = connective, SM = subject marker):

(1) (a) Lò fá **á**-kongba tí   yá   tí   dà   kíríkìrì.
          he cut PL-good CONN interior CONN house messily
          "He destroyed the things in the house left and right." (Samarin 1967: 80)

     (b) Zò   kíríkìrì **à**-língbì tí   mú yɔrɔ   pɛpɛ̀.
          person any   SM-can CONN take medicine NEG
          "Not just anybody can take the medicine." (ibid. 81)

Lingala and Kituba, both largely developed by speakers of Bantu languages, fall quite far from the Prototype as well, the written variety of the former being morphologically elaborated to the point that many are surprised that it is even classified as a pidgin or creole language.

4.2. Diachronic drift

The Creole Prototype hypothesis stipulates that creoles tend to have the three traits in question because not enough time has passed for the diachronic processes in question to have had significant effect. However, since most creoles have already existed for several centuries, we would predict that at least some of them would already show signs of such processes having taken place to some small extent.

This is indeed what we find, and as such, some creoles depart slightly from the Prototype. However, these cases do not speak against the hypothesis itself *when it can be firmly reconstructed that at its genesis*, *the creole lacked the nonprototypical traits in question.* (There can thus be no valid appeal to diachronic drift based merely on unconstrained speculation.)

For example, Tok Pisin is arguably developing a habitual inflection from the erstwhile free marker *save: mi save kaikai banana* "I eat bananas" is pronounced

[mi sakaikai banana] in rapid speech (Mühlhäusler 1985: 638–39). Meanwhile, Saramaccan has a few uses of tone to encode morphosyntactic contrasts, but they are relatively recent innovations, empirically traceable to diachronic evolution of original constructions in which tone was of no contrastive import (i.e., these features are absent in earliest documentation of the language). For example, *a* is the third-person pronoun while *á*, with high tone, is the predicate negator (*Kófi á wáka* "Kofi does not walk"). However, historical analysis reveals that in the original grammar, the negator was *ná*, with no high-tone *á* contrasting with the low-tone pronoun *a.* The negator *á* resulted from the fusion of a preceding pronoun *a* and a following negator *ná* in topic-comment constructions (see chapter 7 for details):

Stage 1	*Stage 2*	*Stage 3*
Kófi, **a ná** wáka	Kófi, **á** waka	Kófi **á** wáka.
"Kofi, he doesn't walk"	"Kofi, he doesn't walk"	"Kofi doesn't walk."
a wáka	a wáka	a wáka
"he walks"	"he walks"	"he walks"

Thus the modern tonal contrast between the pronoun *a* and the negator *á* is a recent development, in a grammar within which monosyllabic lexical and morphosyntactic tone is distinctly marginal; there are no such contrasts that are not readily analyzable as internal developments rather than original endowments. This is demonstrable not just through historical documentation and internal reconstruction but in synchronic fact. Saramaccan is one of several closely related Surinam creoles, and in its sister Ndjuka, the more conservative distinction between pronominal *a* and the negator *ná* survives (although *á* is also optional as a negator): *A **ná** abi mati* "He didn't have any friends" (Shanks 1994: 136).

4.3. Heavy substrate contact

Another factor that can draw a creole away from the prototype is strong influence on its development by an older language, with all of its historical accretions. For example, there are creoles whose current form was considerably shaped by contact with one or more of the languages spoken natively in its genesis context. This phenomenon can have effect either at the time of genesis or over the course of the creole's subsequent existence.

4.3.1. Substrate influence at genesis: Berbice Dutch Creole

Historical reconstruction suggests that speakers of the Nigerian Niger-Congo language Ijo predominated on the early plantations in the Berbice colony of present-day Guyana (Smith, Robertson, and Williamson 1987), and indeed this is the only possible explanation for the singularly heavy influence of the Eastern variety of Ijo on Berbice Dutch Creole's structure. It contains some inflectional affixes (as well as grammatical items) from the language, such as the plural marker -*apu* and a perfective marker –*tɛ*.[8]

4.3.2. Substrate influence after genesis: Sri Lankan Portuguese Creole

Sri Lanka Portuguese Creole was one creolization of a makeshift pidgin that the Portuguese used in their interracial contacts in Southern Asia (cf. Ferraz 1987); others include various Portuguese-lexicon creoles in India, Malaysia, Indonesia, and Macao. The Sri Lankan variety has been spoken alongside Tamil and Sinhala since its birth in the sixteenth century. As a result, it has recruited Portuguese items to create many nominal and verbal inflections functionally modeled on these two substrate languages (Sinhala, though genetically Indo-Aryan, has converged structurally with the Dravidian Tamil to a considerable degree) (Smith 1984):

(2) "E:w te:n dizey ta:l pesa:m-**pə**   **pə**-kəza:," fəla:-**tu**.
     I   have desire such person-ACC INF-marry QUOTE-PERF
     "I want to marry such-and-such a person." (Smith pers. comm., cited in Holm 1989: 290)

4.4. Heavy superstrate contact

Many creoles have arisen and survived in contexts where the lexifier language has continued to be spoken, the usual result being that the lexifier and the creole coexist in a diglossic relationship. Diglossic relationships are inherently porous, with varieties intermediate between the two speech varieties often occurring, such as Greek *mixti* between the "high" *katharévousa* and the "low" *dhimotikí*, and Arabic *al-lugah al-wusṭā* (Ferguson 1972 [1959]: 240). As such, contexts like these tend to pull a creole away from the prototype I propose.

Even though in many cases, only a minority of the creolophone population speaks the lexifier itself, low levels of bilingualism are well known for having a disproportionate effect, even on casual spoken language. Only a minority of English speakers were at any point bilingual in French during the Norman occupation of England, and yet the well-known predominance of French-derived words in even casual English speech traces directly to that bilingualism; the effect of Chinese on Japanese is a similar case among many (Miller 1967: 245).

Again, this lexifier influence can occur either at genesis or afterward.

4.4.1. Superstrate contact at genesis: Réunionnais

Réunionnais French is often termed a semi-creole because it is closer in structure to French itself than are creoles like Haitian or Mauritian. Baker and Corne (1982) show that this is because in Réunion there was a long period of several decades when the French coexisted with Malagasies and Indians (the initial servant class) in small-scale, intimate social contexts in relatively equal numbers. These settings conditioned less distance between the contact language and French than was the case in many other French plantation colonies.

For example, Réunionnais retains feminine gender inflection on some nouns, plural inflection in some (Corne 1999: 78), and various inflected forms of the verb

"to be" (ibid. 81). In some varieties, such inflections are retained on verbs in general: *mi i maṅz* "I am eating," *mi i maṅze* "I ate," *mi i maṅzre* "I would eat," *mi i maṅzra pa* "I will not eat" (the latter inflection used only with negation) (ibid. 80–83). Only the variety closest to French has verbal inflection to this extent, while the others restrict this to *et* "to be," *awar* "to have," and *fo* "to be necessary" (ibid. 81), but even this contrasts significantly with the markedly lower degree of verbal inflection even in acrolectal varieties of other continuum creoles like Cape Verdean Portuguese Creole or, more pointedly, the French creole of Louisiana (Neumann 1985: 52–68; see 4.4.2 in this chapter). The following passage demonstrates the relative closeness of Réunionnais to French, including its inflectional affixation:

(3) Li voud**ré**   bien qu'elle y   rogarde in pé   band' fim' dokimentaire . . .
     he want:COND well that-she VM look.at a little PL   film documentary
     "He would like [for her] to be able to watch some of the documentaries . . ."

     Elle y   pou**ra**   kiltive   a elle in pé.
     she VM can:FUT cultivate to she a little
     "She could improve her mind a bit." (Corne 1999: 77) (orthography based on French;
     VM = verb marker)

4.4.2. Superstrate contact after genesis: Louisiana French Creole

The French creole of Louisiana has coexisted alongside Cajun French for over 250 years, with contact increasing especially after the end of slavery. As a result, this creole is unique among French plantation creoles in having developed a "mesolect" variety that includes some inflection from (Cajun) French. This includes gender marking, albeit highly variable in occurrence, of indefinite and possessive determiners and adjectives (*ẽ gro ŝjẽ* "a big dog," *en gros ŝaʳ* "a big car" [Neumann 1985: 138]), and an alternation in verbs between a short form (using the finite Cajun forms) expressing habituality and a long form (using the Cajun infinitive form) expressing accomplished aspect:

(4) (a) Mo **res** isi ondõ la mezõ mo tu sel.
         I   stay here inside the house me all alone
         "I live alone in this house." (Neumann 1985: 195)

     (b) Mo **reste** a   Teksas trwas-õ.
         I   stay LOC Texas three-year
         "I have lived in Texas for three years." (ibid.)

The evidence that this creole has moved toward French over time, rather than having originated as a mesolectal variety as Réunionnais did, includes documentary evidence (cf. Neumann 1985: 44–70) and distributional facts such as that the variety of the creole which has been most isolated from Cajun French (the St. Tammany Parish variety) lacks the long-stem verbs described above (Marshall 1997: 344–45).

4.5. Implications for the Creole Prototype hypothesis

Because of the operations of these sociohistorical and diachronic factors, it would plainly be false to state that "all creole languages display these three states in their purest form." The falsity of that statement, however, signifies not that there is no synchronic result unique to creole genesis but, instead, that this synchronic result will be a *gradient* one, more evident in some creoles than others. Specifically, I predict (1) that one of the aforementioned four factors will apply to all creoles departing from the Prototype, and (2) that none of those four factors will apply to a creole conforming to the Prototype.

Thus our claim will not be "all creoles have these three features" but, rather, a bipartite claim that appears to account for the typological facts:

a. A *subset* of creole languages will display the three prototypical features
b. Any natural language that displays the three prototypical features is a new language that emerged as a pidgin spoken by adults and was transformed into a natural language: namely, a creole.

5. Situating gradience within the model: Demonstration case—Haitian Creole

DeGraff (1999a) observes that Haitian Creole has some nominal inflection and a degree of semantically opaque derivation. This observation is important to creole studies for myriad reasons, but contrary to DeGraff's implication that it constitutes a contradiction to the Creole Prototype hypothesis, in fact it is useful in lending a closer view to how this model accounts in a falsifiable fashion for gradience. Thus, Haitian Creole can be used to explain a language contact phenomenon as it has manifested itself in the real world, rather than a schematic abstraction thereof.

5.1. Haitian "inflection"?

DeGraff's claim that Haitian has gender inflection is mistaken. DeGraff usefully points out that Haitian has feminine allomorphs for various suffixes denoting origin, occupation, role, or quality, such as *Ameriken/Amerikèn*, *radotè/radòtèz* (< Fr. *radoteur/radoteuse*) "person who talks nonsense." Yet this is not grammatical gender but natural gender, which, in changing the denotation of the root and applying to only a subset of the nominal and adjectival classes, is traditionally treated not as inflection but as derivation (Matthews 1974: 47–48, Beard 1998: 57–58). In this light, our claim is not that creoles lack derivation but that its applications be compositional, and all of the examples DeGraff presents quite clearly denote a male/female gender distinction. These must be contrasted with noncompositional occurrences of natural gender marking in older languages, such as the masculine marking of the word for "daughter-in-law" in Latin *nurus*, traceable to a similarly marked Proto-Indo-European form *snus**ós** (Watkins 1985: xiii–xiv).[9]

5.2. Noncompositional derivation

The data DeGraff presents that is pertinent to the Creole Prototype hypothesis is noncompositional derived roots. Again, the data of interest in evaluating this hypothesis constitute a smaller set than DeGraff presents. For one, since I do not claim that creoles lack derivational affixes (McWhorter 1998a), DeGraff's ample listing of various Haitian derivational affixes and words containing them serves as a response to previous broader claims that creoles lack affixation as a whole (e.g., Seuren and Wekker 1986: 61), but not my own.[10]

In the meantime, the use of the derivational prefix *de-* in Haitian is much less semantically irregular than DeGraff implies. In my brief mention of the item in McWhorter (1998a: 797), I characterize its function as inversive, based on pairs like *grese* "to gain weight"/*degrese* "to lose weight," following Brousseau, Filipovich and Lefebvre (1989: 9). However, there is a second reflex of *de-* that is closely related semantically to the inversive one, which can be characterized as encoding "away from." This is its function in a great many of the examples that DeGraff lists, by virtue of not instantiating my particular "inversive" designation, as "noncompositional":

koupe "to cut"	*dekoupe* "to cut off"
tire "to pull"	*detire* "to stretch"
vire "to stroll, drive"	*devire* "to detour, go on an errand"
vide "to empty"	*devide* "to empty out"

Importantly, this usage has a semantic relationship to the inversive one, and this relationship is so intimate and readily perceived as to readily suggest a single semantic space rather than two separate ones. It is likely that this secondary usage evolved from the inversive one via intermediate cases like *mare* "to tie" and *demare* "to untie," which encodes not only the undoing of a knot but the freeing of the person or object tied "away from" what it was bound to; *dekoupe* would be a similar case. The Russian prefix *raz-* is again useful to us for two reasons. The first is that the semantic range of the "separative" use of this prefix covers that of both reflexes of Haitian's *de-*, demonstrating the essential unity of the two semantic uses of the latter:

	"to tie"	*"to untie"*	*"to pull"*	*"to stretch"*
Haitian	*de-[1]mare*	*demare*	*de-tire[2]*	*detire*
Russian	*vjazat'*	*razvjazat'*	*tjanut'*	*rastjanut'*

Second, as we have seen, the polysemy of *raz-* beyond this usage is of a degree quite foreign to any Haitian affix, also incorporating dispersal and inceptivity (see 3.3.1).

Meanwhile, some of the words DeGraff presents as "noncompositional" are actually institutionalizations of the sort discussed in 3.3.2: one cannot predict that *debabouye* means "to wash one's face or clean one's self up" based on the meaning of *babouye*, "to smear." However, the semantic connection between "to unsmear" and the actual meaning is easily processible via metaphorical inference. *Debarase* "to straighten out" from *barase* "clumsy" is a similar case.

In other examples, *de-* has been extended redundantly to verb roots whose meanings inherently include the notion of separation:

grennen "to shell, scatter"	*degrennen* "to shell, separate one by one"
kale "to peel, scrape"	*dekale* "to chip off, to peel off"
libere "to free"	*delibere* "to free"
pase "to pass"	*depase* "to exceed, overtake"

Yet even in these cases, although we have clearly passed the boundaries of strict compositionality, the connection between the morphemes in these combinations and the meaning of the word is clear, including the semantic motivation for the affixation of *de-*, despite its redundancy.

The cases that DeGraff presents of truly opaquely noncompositional uses of *de-* —where the semantic contribution of the prefix is unrecoverable—are few, including *deperi* "to perish" (*peri* "to perish"), *demefyan* "mistrustful, skeptical" (*mefyan* "mistrustful, suspicious"), and *demegri* "to lose weight" (*megri* "to lose weight" [emphatic]).

DeGraff also judges various uses of the prefix *en-* (*desan* "decent"/*endesan* "indecent") as "noncompositional" based on the fact that their roots are no longer, or in Haitian never were, used alone, such as *enkyè* "anxious" (**kyè*) and *enkòmòde* "to disturb" (**kòmòde*). However, the motivation for classifying a morpheme as opaque simply because the root it is combined with does not always occur alone is unclear. There are certainly cross-linguistic cases in which derivational morphemes lose compositionality in combination with roots which no longer occur alone, such as the notorious case of derived words based on *-ceive* and *-mit* in which sometimes the meaning of the prefix is no longer apparent (*receive, permit*) (Aronoff 1976: 12). But Haitian's *en-* is not this kind of case: every example DeGraff gives clearly has a negative or inversive meaning in which the core semantics of the prefix are quite salient, with the exception of *entatad* "senile" and *enbesil* "imbecile," in the latter of which cases it is questionable that *en-* is actually perceived as a prefix.

DeGraff presents a more substantial body of indisputably noncompositional derivation in the case of *re-*, which usually encodes repetition, but makes an opaque contribution in a number of combinations such as these and others:

jete "to throw away"	*rejete* "to reject"
konpanse "to compensate"	*rekonpanse* "to reward"
pare "to prepare"	*repare* "to repair"
poze "to pause, ask"	*repoze* "to rest"
tire "to pull"	*retire* "to remove"

5.3. Haitian within the Creole Prototype model

Thus the subset of the material in DeGraff (1999a) pertinent to evaluating the Creole Prototype hypothesis is neither the lists of derivational affixes (since my hypothesis does not predict that creoles will lack derivational morphemes) nor the claim that Haitian has gender inflection (because what it has is compositional natural gender

derivation, again, incidental to my model). The pertinent issue is the body of noncompositional words derived by the prefixes *de-* and *re-*, which is much smaller than DeGraff (1999a) claims but important nonetheless.

5.3.1. Import of Haitian derivation

As those familiar with French will note, the compositional and noncompositional uses of *re-* and *de-* in Haitian are derived from the French source words. I have stipulated that the lexifier pulled creoles significantly away from the Prototype only in situations in which speakers of the creole had high levels of contact with lexifier speakers, as they did in Réunion. However, DeGraff observes that the rich derivational inheritance from French in Haitian speaks against the Prototype model in that, unlike in Réunion, in colonial Haiti slaves vastly outnumbered whites and had mostly distant social relations with them. He thus interprets the coexistence of French-derived opaque derivation and radical demographic disproportion as counterevidence to my claim that Haitian, and by extension other creoles, emerged as radically reduced pidgins. Since the Creole Prototype is proposed as a direct descendant of a pidgin grammar, it follows that if pidgin ancestry for creoles is disproved, then there is no motivation for creoles to display a synchronic prototype.

At the same time, however, DeGraff's counteranalysis requires that Haitian Creole *emerged* with this noncompositional derivation, as opposed to having adopted these words as Gallicisms from contact with French over the centuries. In the latter case, we would simply have another example of the sort discussed in 4.4.2, in which contact with the lexifier over the centuries pulled the creole away from the Prototype to which it hewed at its genesis.

As it happens, DeGraff's thesis founders on this point: Goyette (2000) demonstrates through painstaking historical linguistic analysis that the derivational markers in modern Haitian Creole (including the natural gender markers) cannot have been incorporated into the creole at its birth and, in fact, were borrowed from French in later periods. There is not a single point on Haitian Creole in DeGraff (1999a) that this finding does not readily account for.

Meanwhile, DeGraff's (2001) response to Goyette founders. First, the response is caricature—assuming that a lexical item Goyette uses as an example of a general phenomenon is intended as a lone, isolated example. Second, the response is a miscomprehension. *If* Haitian almost always displays a rendition of a French derivational marker that is only phonetically derivable from a French allomorph that only became categorical long after Haitian jelled— *-eur* as opposed to earlier *-eux*— *then* this strong tendency renders irrelevant that French *-eur* was not utterly unknown in French before it became the default allomorph, having long been a marginal and/or a marked variant. If the slaves who created Haitian were readily processing *-eux*, then we would expect a reflex of it in Haitian—and that is the case. If they were by chance also processing the then-marked allomorphic alternate *-eur*, then by DeGraff's own stipulation elsewhere (1999b: 525) that creole creators eliminated "stochastically marked" features rarely encountered, we would predict that *-eur* would fail to be incorporated. Thus, under both Goyette's and DeGraff's scenarios,

we must assume that a reflex of the latterly triumphing *-eur* was incorporated later—
à la section 4.4.2.

5.3.2. *Accounting for gradience: Predictions from other perspectives*

Even though Haitian Creole did conform to the Creole Prototype at its genesis, the
very fashion in which contact with French has pulled it away from the Prototype
usefully demonstrates that this model accounts for gradience in a constrained fash-
ion commensurate with findings in other subfields. Specifically, the fact that Haitian
would have borrowed French derivation but not its inflection is predictable from a
variety of linguistic perspectives:

> *Language contact.* For example, on their scale charting typical effects of
> borrowing at five levels of intensity, Thomason and Kaufman (1988: 74–
> 75) note that cross-linguistically, derivational affixes are borrowed at
> their Stage Three, with the borrowing of inflection typical of the next
> stage of contact intensity, Stage Four. The authors illustrate this with
> examples of the influence of Spanish on dialects of Nahuatl, Slavic
> languages on Yiddish, and Sanskrit on high registers of Dravidian
> languages like Kannada (ibid. 79–82).

> *Theoretical morphology.* Lexicon is, obviously, the first level of language
> to be acquired in second-language acquisition and borrowing. In this
> light, it is significant that many theoretical treatments of derivation have
> located the process as a lexical one (Selkirk 1982, Scalise 1984), with
> inflection located in the syntactic module. Because borrowing of inflec-
> tion occurs at a higher intensity of contact than does borrowing of
> lexicon, the theories accounting for derivation in the lexicon would lead
> us to predict that one possible stage of a creole's borrowing from a
> lexifier would be to have borrowed its derivation (as a component of
> borrowing its lexicon) but not its inflection. This is what we see in
> Haitian Creole, which contrasts with the result of more intense contact in
> Louisiana, where the creole contains both French derivation and some
> reflections of its inflections.

> *Cross-creole comparison.* If the borrowing of derivation before inflection
> is predictable, then we would expect that no creole would exist which had
> incorporated its lexifiers' inflection without its derivation. This is exactly
> what we find. Papiamentu Spanish Creole has inherited several derivational
> markers from Ibero-Romance, such as the adverbializer *-mentu*, agentive
> *-dó* (< *-dor*), a past participial from Iberian *-ado* (*duna* "to give," *duná*
> "given [here, accent = stress]), and a gerundive *-ando* (Maurer 1998: 169,
> 181–82). Inflectional affixation, however, is absent. (Interestingly, like
> Haitian, Papiamentu has some natural gender derivation; for example,
> *kolombiano/kolombiana* [ibid. 155]). Jamaican patois has some deriva-
> tional markers from English (derived from comparative and agentive *-er*,

diminutive -*y*, nominalizer -*ness*, et al. [Bailey 1966: 16–17]); English inflection, however, is typically absent, a marker of acrolectal varieties (Sebba 1997: 209).[11] I am not aware of any creole language that has inherited inflection from its lexifier without its derivation.

5.3.3. Accounting for gradience: Specifying sociohistorical conditions for the prototype

The Haitian derivational inheritance is finally illuminating in that all of the other French plantation creoles in the world have similarly incorporated French derived roots, including the lexicalized ones. Opaquely noncompositional verbs with *de-* and *re-* of the sort discussed in 5.2 are found not only in Louisiana (cf. the dictionary Valdman, Klingler, Marshall, and Rottet 1998), where the intensity of borrowing would lead us to expect it, but also in French Guyanais (cf. Barthelemi 1995), Mauritian (cf. Baker and Hookoomsing 1987), Guadeloupean (cf. Poullet, Telchid, and Montbriand 1984), St. Lucian (cf. examples in Garrett 2000), Seychellois (Susanne Michaelis, pers. comm.), and others. This corresponds with a general observation that there exists no French plantation creole as removed from French as there exist creoles removed from English or Portuguese (Muysken 1994, Alleyne 1998, Parkvall 1999, McWhorter and Parkvall 2002). Compared to basilectal creoles like Ndjuka, Angolar, and Tok Pisin, French creoles stand out in that:

1. They lack a tendency toward CV phonotactics[12]
2. There is relatively little reanalysis of superstrate lexical items as grammatical (along the lines of the reanalysis of *there* as an imperfective marker in Sranan and Ndjuka)
3. Verb serialization is possible with fewer verbs and is less grammaticalized
4. There is less substratal transfer in general on all levels

At first glance, this situation appears to suggest something anomalous: that diglossic situations in French colonies for some reason pulled the creole away from the Prototype and toward the lexifier, while the same situation did not do so elsewhere. Yet in truth, the lexifier influence is not the only factor distinguishing the French creoles: a sociohistorical factor, corresponding causally with the linguistic difference, cuts across these creoles.

What distinguishes creoles that remain most basilectal today is that they are spoken in contexts where either speakers of the lexifier withdrew after a short period from the genesis context and did not return in significant numbers, or lexifier speakers were never a significant presence at all during the stabilization of the language. In Surinam, the English occupied the colony for only sixteen years, from 1651 to 1667; the Dutch ran it from then until Surinam's independence in 1975. After establishing plantations on the islands in the Gulf of Guinea in the early 1500s, the Portuguese began departing at the end of that century and never returned (Ferraz 1979). Portuguese has remained the official language of most of these islands, but there has existed no class of Portuguese-dominant "colonials" with a prestigious diglossic competence exerting an acrolectal pull on the creole over time. Tok Pisin expanded

and stabilized in use between people indigenous to New Guinea, many of whom until recently lived in remote areas in pre-literate cultural contexts, rarely encountering English itself in any form.

Crucially, no French creolophone contexts of this type happen to have arisen. In most of these contexts, French has been usually the official, and in any case always the sociologically dominant, language continuously since the birth of the creole (even in cases such as Haiti, where the French relinquished official control for a period in the 1800s, French remained the prestige language). In the cases where a French creole has survived in contexts in which English is now the politically and sociologically dominant European language, this latter situation arose only after the French creole had coexisted with French for an extended period (St. Lucia, St. Barthélemy, Trinidad). There exists no case of a French plantation creole that stabilized in a colony run by speakers of a European language other than French, or in one which the French abandoned shortly after the creole emerged.

The French colonies indicate, then, that even when a large percentage of a creolophone population does not control the lexifier language, the influence of the bilingual elite (as little as 10% in Haiti) on the creole is massive, particularly in the area of the lexicon. As noted previously, this is not an ad hoc proposition, but one founded on long-observed and well-documented diglossic contexts, as well as cases of borrowing, worldwide.[13]

As the historical work on Haitian by Goyette helps to show, even in French colonies, plantation colonization strongly tended to produce creoles close to the Prototype *at genesis.* However, in terms of *diachronic* development, the uniformity of the lexifier influence among the various French creoles suggests that in the present day, creoles closest to the Prototype will be found in particular conditions. This means that there were two possible diachronic fates for a creole that emerged honing to the Prototype.

5.3.3.1. ISOLATION AND PRESERVATION   A creole honing to the Prototype today is most likely to be found in situations that offer two crucial conditions. First, the initial social context so limited learners' ability or desire to acquire the lexifier that a pidgin variety of that lexifier developed (unlike, for example, Réunion). Second, the lexifier was withdrawn, such that the expansion of the pidgin into a natural language did not include borrowing from the lexifier but, instead, occurred mostly or entirely via the recruitment of language-internal resources.

This second condition was vital to the development and preservation of a creole conforming to the Prototype because it allowed a creole to develop without "interference" from the lexifier. By definition, pidgin languages tend to have (among other features of less pertinence here) small lexicons and little or no inflectional or derivational affixation. One component of the transformation of a pidgin into a natural language is expansion of the lexicon (Mühlhäusler 1980). Because a pidgin lexicon is small, the pidgin that expands into a natural language while removed from lexifier influence necessarily expands its lexicon not via borrowing but via new uses of the lexical resources it has. One aspect of this expansion is the development of derivational mechanisms. As we have seen, it is natural to language change in general that derivational morphemes develop gradually via the grammaticalization of lexical items. As such, a creole that began as a pidgin with little or no derivation, and sub-

sequently changes system-internally, will recruit derivational morphemes from its stock of free lexical items, as Tok Pisin has done with *-pasin* (< *fashion*) as an abstract nominalizer (see 3.3.1). But since the opacification via lexicalization of derived roots is a very gradual process, we would predict that after a mere few hundred years little such opacification would have had a chance to occur. Similarly, if a creole changing system-internally develops inflection, this will not be via borrowing from the lexifier as in Louisiana but via (among occasional other processes) grammaticalization of lexical items, a gradual process that we would expect to have rarely proceeded very far in a language born as a pidgin (significantly, in creoles we do find ample *cliticization*, a phase often intermediate between free lexical item and affix). A similar argument applies to monosyllabic lexical and morphosyntactic (but not phonological) tone.

This conception is well demonstrated in Surinam. The English were in Surinam for but sixteen years, and there are only roughly 600 English words in the Sranan lexicon (Koefoed and Tarenskeen 1996: 120),[14] and of these, many are compounds such as *fesi ede* "forehead" from "face-head," lowering the number of actual borrowings from English even more. Thus the transformation into a full language of the material slaves had available to them after the English departed required system-internal expansion rather than borrowing from the lexifier. As a result, the creole has yet to develop inflectional affixes internally because this takes time; it is not a tonal language; and it has developed a few derivational affixes from lexical items, but, predictably, these have yet to drift with the words they affix to into noncompositionality.

5.3.3.2. DIGLOSSIA AND BORROWING   In those colonies in which the speakers of the lexifier stayed on site and imposed their language as the top pole in a diglossic continuum, as they did in the French colonies, we can expect that the creole will have been drawn away from the Prototype to a degree, even if conditions at genesis produced a more prototypical creole.

This is the case, for example, with the Caribbean English–based continuum creoles. Jamaican patois, for instance, has some English-derived derivational morphology. Evidence suggests, however, that this creole originated as a variety much further from English, specifically as Sranan in Surinam. Sranan shares with Jamaican and other Atlantic English–based creoles idiosyncratic correspondences in the etymology of grammatical items that reveal their common ancestry in one original contact language (cf. chapter 8). Various lines of evidence indicate that this ancestor was early Sranan, the most indicative being that Jamaican maroons (descendants of slaves who escaped plantations and founded communities in the mountains) speak a ceremonial variety that parallels Sranan closely enough to reveal a direct historical relationship (McWhorter 2000a: 83–86). This historical relationship is not only linguistically but also historically confirmed: when the Dutch took over Surinam from the English in 1667, English planters brought about 900 slaves to the new colony Jamaica (Bilby 1983: 60).

Significantly, Sranan lacks all of the English-derived derivational morphology of Jamaican, with the exception of agentive *-man*; even here, however, while Jamaican also has the agentive *-er*, Sranan does not. Jamaican has the comparative *-er*; Sranan uses *more* or a serial construction with *pass*; Jamaican has the diminutive *-y*

(-*i*), Sranan encodes the diminutive with reduplication and preposing of *piki* "small"; Jamaican has -*ness* (-*nis*), Sranan makes use of zero-derivation to nominalize (Adamson and Smith 1995: 222–23); and so on. In general, Sranan indeed conforms to the Creole Prototype, with no inflectional affixes, no tone, and no noncompositional derivation. This, then, was the nature of Jamaican patois at its origin in Surinam. In Jamaica the creole was in constant contact with English and thus moved closer to it on all levels, including the borrowing of English morphology. From the perspective of Jamaica alone, it is plausible to suppose that this morphology was in the language at its origins: but the roots of the creole in Sranan indicate that there was an initial stage in the development of Jamaican patois' grammar when this English derivation did not exist. This classifies Jamaican patois, then, as another example of the phenomenon described in 4.4.2 in which a creole beginning at the prototype is brought away from it over time by lexifier contact.

The creoles that have both emerged as prototypical creoles and remained so (except for slight and empirically documented movement away over the past few centuries in a few cases) include Sranan, Saramaccan, Ndjuka, São Tomense, Principense, Fa D'Ambu, Angolar, Tok Pisin, Bislama, Solomon Islands Pijin, Torres Strait Broken, Aboriginal English Kriol, Baba Malay, and Negerhollands (the latter now extinct).

5.3.3.3. PIDGIN, APPROXIMATION, AND SECOND-LANGUAGE ACQUISITION: DIFFERENT PATHS TO THE SAME MOUNTAINTOP   Though this might seem surprising to those outside of creole studies, the claim that creoles arise from pidgins arouses discomfort from some creolists, particularly those of the Francophone school. Reconstructing creoles as having developed "top-down" via successive approximations of a lexifier by adult non-native speakers, authors such as Chaudenson (1992) see no break in transmission of the lexifier as having occurred at any particular point. They instead classify creoles as essentially varieties of their lexifiers, their development mediated by a leaning toward analyticity by second-language learners.

Yet Chaudenson does not consider the modern creoles to have been the immediate result of this approximation process. He considers the initial stage to have been utilitarian, non-native reductions of French offering a variable body of materials from which slaves selected features to "autonomize" into new functions in constructing a natural language (136). While I have reservations about the extent of Chaudenson's skepticism regarding substrate influence in creoles (McWhorter and Parkvall 2002), it is unclear that his conception differs significantly from the general definition of pidgin in linguistic terms. His emphasis on elimination of inflection, omission of overt copula morphemes, and generalization of tonic pronouns parallels innumerable characterizations of the pidgin (e.g., Foley 1988: 165, Romaine 1988: 25–31, Sebba 1997: 39–47), and one's assessment of the degree of substrate influence on such a variety is largely immaterial to this particular issue since substratal contributions to creoles are reduced just as superstratal ones are (Keesing 1988: 89–104, McWhorter 1997a: 155–59). The French creolist tradition tends to restrict the term *pidgin* to varieties used by adults for utilitarian communication while retaining their native languages, and it refrains from extending this term to the initial stage in the birth of plantation creoles. This, however, is essentially an issue of terminology and differing scholarly traditions. For all intents and purposes, what most creolists refer to as *pidgin* while

Chaudenson and his followers refer to it as "approximative varieties" is the same type of language variety in the linguistic sense.

Meanwhile, DeGraff (1999a) urges that the essence of creole genesis be sought in second-language acquisition. Again, however, the issue is one of overlapping terminologies. The observation that pidginization—acquisition of a language by adult learners—is a form of second-language acquisition has been made often, having even inspired a volume of articles (Andersen 1983). Regarding the thesis of this paper, it is significant that second-language acquisition is well known to entail reduction or elimination of affixes; DeGraff himself makes this observation (1999b: 517, 525), citing, for example, Zobl and Liceras (1994). While DeGraff emphasizes the elimination only of inflectional morphology (perhaps in view of the ample derivational morphology on view in modern Haitian), derivational morphology is also often reduced or eliminated in second-language acquisition (Dittmar 1984: 262, Broeder, Extra, Van Hout, and Voionmaa 1993: 56). The essential isomorphy of pidginization, second-language acquisition, and the French creolist school's "approximation" conception is finally underlined by the fact that Chaudenson (1992) makes frequent reference to second-language acquisition as an analog to the "approximated" French on colonial plantations.

The phenomena designated *second-language acquisition* and *pidginization* do not overlap perfectly, of course; more properly, pidgins are qualitatively equivalent to an *early* stage of second-language acquisition. Yet the fact of this very equivalence is indicative: it would be difficult to argue that the native-language influenced, structurally minimal, inflection-free Hawaiian Pidgin English described by Bickerton (1984) and Roberts (1998) differs in any theoretically significant way from the Guest Worker's German (Gastarbeiterdeutsch) often cited as a case of second-language acquisition:

Hawaiian Pidgin English:

(5)   Gud, dis wan. Kaukau enikain dis wan. Pilipin ailaen no gud. No mo mani.
      "It's better here than in the Philippines—here you can get all kinds of food—but over
      there isn't any money." (Bickerton 1984: 175)

Gastarbeiterdeutsch:

(6)   Un dan E. täläfoniiə kliinik, klinik haidälbärk. Ambulants un dan foət in kliinik.
      and then E. call   clinic   clinic Heidelberg ambulance and then off in clinic
      "And then E. called the clinic, the Heidelberg clinic. An ambulance came and then
      they took him away to the clinic." (Heidelberger Forschungsprojekt "Pidgin Deutsch"
      1975: 141)

Second-language acquisition, to be sure, manifests itself along a cline, upon which the Gastarbeiterdeutsch passage falls quite far from full German. Yet pidginization expresses itself along the same cline depending on access to the target, motivation to acquire it, and typological closeness of lexifier and substrates. The Nagas who developed Naga Pidgin Assamese had enough access to Assamese and Bengali to incorporate some markers of case and tense (Bhattachariya 1994), and Sango, de-

veloped by people speaking closely related Ubangian languages, has retained enough inflections and tonal distinctions that some analysts prefer to classify it as a koine rather than as a pidgin or creole (Morrill 1997).

Thus the pidgin source, which I refer to as crucial to the development of a creole displaying the three features in question, is formally homologous to what in other frameworks is referred to as "approximation," or second-language acquisition.

Some scholars have questioned whether creoles were preceded by pidgins, given the lack of clear attestation of the pidgin stage of the plantation creoles (e.g., Alleyne 1980: 126); indeed, this perspective informs much of the preference of various creolists over the last twenty years to focus on "approximations of approximations" and second-language acquisition as the essence of creole genesis. In this light, it is important to realize that in addition to the vastly unclear difference between pidginization and second-language acquisition, there are clear signs in plantation creoles' grammars of pidgin ancestry (McWhorter 1998a: 805, McWhorter 2000a, McWhorter and Parkvall 2002), of a sort which, if "approximation" is expanded to encompass them, render "approximation" and pidginization—once again—synonymous.

In the meantime, it must also be clear that while documentation of the pidgin stages of plantation creoles is lost to us, there are indeed several *documented* cases of pidgins developing into natural languages (i.e., creoles) more recently, such as Hawaiian Pidgin English (Bickerton 1981, Roberts 1998), Sango (Samarin 1980), Chinook Jargon (Grant 1996a), Tok Pisin (Mühlhäusler 1980, 1997; Romaine 1992), and Solomon Islands Pijin (Jourdan and Keesing 1997). Few would argue that anything significantly distinguishes Hawaiian Creole English, Sango, or creolized Tok Pisin qualitatively from other creoles; on the contrary, all three of these creoles have been discussed alongside all of the others with no objection for forty years. Those deriving creoles from pidgins, then, are hypothesizing based not only on synchronic traces of pidginization but also on the fact that multiethnic contact languages of like grammatical and sociohistorical profile are *concretely* documented to have developed from pidgins.

6. Older languages conforming to the prototype?

A final possible refutation would be the identification of an older language, with no history of radical reduction by non-natives, followed by reconstitution into a natural language, which combines the three features I have cited. One might expect that such a language would be an impossibility, given how readily inflection, monosyllabic lexical and morphosyntactic tone, and semantic drift of derivation-root combinations emerge in grammars. However, since inflectional affixes and tonally-marked contrasts also wear away to be replaced by analytic constructions, myriad languages have replaced tone with phonational or vocalic contrasts, and derivational affixes can gradually lose phonetic form and be replaced cyclically by new ones, there is also nothing ruling out a priori that a given grammar might reach a stage at which all inflectional affixation had been lost, there now was or never had been any tone, and all derivational affixation was new and thus consistently compositional. Indeed, when I first began investigating the Creole Prototype question, my intention was to identify just

such a language, in order to give concrete support to the claim that creole is solely a sociohistorical term. The Creole Prototype hypothesis resulted from my not encountering such a language.

Obviously, most of the world's languages are disqualified from the Prototype either by being inflected or using tone to encode monosyllabic lexical and morphosyntactic contrasts. Most linguists draw a blank on identifying an older language with neither of these features unless they happen to be specialists in languages of Southeast Asia or Austronesia. Yet the languages of these groups that I have examined nevertheless have ample noncompositional derivation.

Eric Pederson (pers. comm.) once suggested to me that this suggests that the derivation feature alone could serve as the diagnostic of creolization. Yet there apparently exist older languages whose derivation-root combinations are consistently transparent—but the one that has come to my attention (Soninke, of the Mande subgroup of Niger-Congo) contains inflectional affixation and lexical and/or morphosyntactic tone. Judging from available sources, the derivation-root combinations in this language, while predictably displaying institutionalizations and idiomaticizations (see 3.3.2), present no opacities of the *understand* type. Yet Soninke displays signs of its age with several inflectional affixes:

1. Three plural affixes[15]
2. Two singular nominal inflections (Diagana 1995: 48–49)
3. A marker -*n*V of unrealization (*inaccompli*): *à ró* "he came in, *à róonó* "he will come in" (ibid. 254)
4. A marker of unrealization via gemination: *nà wùtú* "to take," *à w*[*á*] *á wùttú* "he will take it" (ibid. 256)

Soninke also has some lexical and morphosyntactic uses of tone:

5. There are a few tonally distinguished monosyllables: *ro* "to enter" or "to put," *ña* "to become" or "to make," *te* "field" or "oil" (Girier 1996: 127–28)
6. The definite marker -*n* with low tone can in some contexts be omitted, leaving behind only low tone on the preceding syllable as a marker of definiteness (Diagana 1995: 45–46)
7. Third-person pronouns *à* (sing.) and *ì* (pl.) are rendered possessive by the addition of a high tone (ibid. 180–81).[16]

If it is true that older languages conforming to the Creole Prototype do not exist, then this nonexistence may be accidental, or it is possible that it is ruled out by laws of probability. Specifically, it is already clear on typological grounds that the chance that one grammar might at any time display neither inflections or lexical/morphosyntactic tone is extremely small. It also appears to be the quite extremely marked case that an old grammar has no noncompositional derivation (and given that Soninke has as yet no comprehensive dictionary, even this one case may prove to be a false alarm). Grammars in which most derivation has become affixed and begun to erode away, thus receding from analyzability by speakers, tend to have maintained at least

a derivational affix or two, since there is no reason that all affixes would erode at the same rate, or that all of their semantic functions would be equally susceptible to bleaching and ambiguation. Furthermore, even if a grammar has shed all of its derivational affixes, then given the centrality of derivation to natural language, it develops new derivational morphemes (e.g., Lahu formerly had a bound causative affix *s-, which now exists only as phonetic remnants and has been replaced by the grammaticalized use of the verb *te* "to do" [Matisoff 1973b: 243]).

This means that finding an older language with no noncompositional derivation involves first the small chance that all of the derivational morphemes in the grammar will have either worn away or been bleached of all regular meaning, combined with the equally small chance that we encounter the grammar at a stage when the new derivational morphemes are still so young that noncompositional uses have yet to arise. As such, while it is certainly possible that an older language may have no inflection and no tone (Chrau), or that an older language may have these but no noncompositional derivation (perhaps Soninke), the chance that these two states *coincide* in an older language may be rendered unlikely or perhaps impossible by sheer probability.

7. Conclusion

I have argued that creole languages cluster around a prototype comprising three features symptomatic of a language having emerged recently from a pidgin, and that we would predict that this confluence of features would not occur in an older language, thus rendering *creole* a synchronic, as well as sociohistorical, term.

> The *weak version* of the hypothesis appears well-supported on empirical grounds: that older languages exhibiting these three traits are extremely rare (given that none have come to the attention of this author at this writing), and that therefore creoles quite often display a confluence of features that older languages display only rarely and fortuitously.

> The *strong version* of this hypothesis remains at this writing a speculation that will hopefully inspire further research: that *no* older language exists which combines these three features.

If proven valid, this hypothesis will contribute usefully to the development of useful typologies of language contact, as our insights into phenomena such as code-switching, language "intertwining," clines of contact-induced interference, as well as pidginization and creolization, continue to deepen. Furthermore, in calling attention to the crucial role of the semantic drift of derivation in determining whether or not a language has a creole history, the Creole Prototype hypothesis complements various studies that have appeared in the 1990s, suggesting that the essence of creolization lies in the grammar-wide syntactic results of the loss of inflectional morphology (cf. Veenstra 1996, Roberts 1999). This idea is both ingenious and highly promising, but the derivational evidence I have presented suggests that there is a significant body of data distinguishing creole grammars from older ones