



# Anthropological Linguistics

---

VOLUME 44, NUMBER 4

WINTER 2002

**Offprint**

**Relexification: A Reevaluation**

**MICHEL DEGRAFF**

# Contents

<b>Abstract</b>	<b>321</b>
<b>1 Whence “relexification”?</b>	<b>321</b>
<b>2 “Strict relexification”: The benefits of an explicit hypothesis.</b>	<b>325</b>
2.1 The benefits. . . . .	325
2.2 The explicit hypothesis. . . . .	326
<b>3 Reevaluation of the hypothesis.</b>	<b>328</b>
3.1 The morphology: Matches and mismatches. . . . .	330
3.1.1 Is HC <i>-yon</i> a productive suffix (cf. French <i>plantation</i> )? . . . . .	331
3.1.2 On the structure of ordinal and cardinal numbers in HC, French and Fongbè. . . . .	334
3.1.3 Inversive prefixes in Haitian Creole, French and (Fon)Gbe. . . . .	337
3.1.4 Suffixes for inhabitant names in Haitian Creole, French and Fongbè. .	343
3.1.5 The morphology: Recapitulation. . . . .	345
3.2 A global comparison of lexica. . . . .	346
3.2.1 Empirical challenges. . . . .	346
3.2.2 Conceptual challenges. . . . .	347

3.3	Word order and functional heads: Empirical and theoretical challenges. . . .	354
3.3.1	Theory-internal inconsistencies. . . . .	355
3.3.2	Relexification and Haitian Creole functional heads. . . . .	359
3.3.3	The locus of word-order parameters. . . . .	363
<b>4</b>	<b>Relexification vs. acquisition.</b>	<b>368</b>
4.1	Relexification vs. second-language acquisition (L2A). . . . .	369
4.2	Relexification vs. the sociohistory and demographics of colonial Haiti. . . . .	374
4.3	Relexification in L2A vs. the creation of “Creole” I-languages in first-Language acquisition (L1A). . . . .	382
4.4	L1A in Creole genesis. . . . .	386
4.5	An “L2A-L1A cascade” in Creole genesis. . . . .	391
	<b>Notes</b>	<b>394</b>
	<b>References</b>	<b>405</b>

## Relexification: A Reevaluation

MICHEL DEGRAFF

*Massachusetts Institute of Technology*

**Abstract.** According to one version of the Relexification Hypothesis, creole genesis is an instance of incomplete second-language acquisition whereby substrate speakers systematically fail to acquire the structural properties of their distant target, the superstrate (lexifier) language. The output of relexification is an “early creole” with substrate-derived grammar and with superstrate-derived phonetic strings. To date, the most thoroughly argued technical implementation of this version of the Relexification Hypothesis is the study of Haitian Creole by Claire Lefebvre. In this article, I examine and refute the empirical-comparative, theoretical, and sociohistorical bases of the Relexification Hypothesis as implemented by Lefebvre and colleagues. Firstly, the basic assumptions and predictions of the Relexification Hypothesis are inconsistent with well-documented details about the sociohistorical and linguistic profiles of Haitian Creole. Secondly, a systematic comparison of the morphosyntax of Haitian Creole with that of the languages which were in contact during its formation suggests a diachronic scenario that is fundamentally distinct from that envisaged in the Relexification Hypothesis. Lastly, the foundational principles and central claims of the Relexification Hypothesis are mutually inconsistent, inconsistent with our current knowledge about language acquisition, or inconsistent with the Principles-and-Parameters framework in which Lefebvre couches her analyses. I conclude by sketching an alternative scenario for the diachrony of Haitian Creole that is compatible with the sociohistorical and linguistic details of the language and with basic results in language-acquisition research.

**1. Whence “relexification”?** The Relexification Hypothesis is, alongside Bickerton’s (e.g., 1984, 1999) Language Bioprogram Hypothesis, the most discussed scenario of creole genesis. One even finds relexification cited as unquestioned truism in the pages of widely read and sophisticated literary journals such as the *Times Literary Supplement*: “A creole [is] an African language, or languages, upon whose syntax the vocabulary of another language is laid. The clearest example from the New World is [Haitian Creole], a creole which appears to be composed of French vocabulary overlaid on the grammar of the African language Ewe” (Greppin 2002:3–4).

The most technical and most explicit relexification-based scenario for creole genesis is the one elaborated by Claire Lefebvre in her book *Creole Genesis and the Acquisition of Grammar: The Case of Haitian* (1998, hereafter “L”). In that scenario, creole creators in Saint-Domingue (modern-day Haiti) were essentially adult Africans during the years 1680–1740. “These adults were native speakers

of languages of the Niger-Congo group and more specifically the Kwa languages, with a majority of Gbe speakers" (L:57). According to Lefebvre, these Niger-Congo speakers were trying to acquire, with little success, the European target language, namely, French, to which they "had very limited access" (L:36; also see L:65, 386, 394). In this hypothesis, creole genesis is induced by repeated and across-the-board instances of an extraordinary sort of imperfect second-language acquisition with Niger-Congo languages (the "substrate" languages) as native (first) languages and with French (the "superstrate" or "lexifier" language) as target (second) language.

What makes these hypothetical creole-inducing instances of second-language acquisition extraordinary is that they produce, as the structural endstate of relexification, a nonnative idiolect with target-derived phonetics and a grammar that is virtually isomorphic to that of the learner's first language—a grammar left mostly untouched by the target language. Extraordinarily, whatever second-language acquisition took place in colonial Haiti during the initial creole-genesis period, it did not, according to Lefebvre, endow African learners with any substantial set of grammatical properties with analogues in the European target grammar. In other words, the Relexification Hypothesis in the case of Haitian Creole is the story of how African slaves in colonial Haiti systematically failed to acquire any structural aspect of the French varieties spoken by the socially dominant classes. And, by definition, child learners (i.e., first-language acquisition) contribute nothing to the central stages of Creole genesis: relexification, which plays "a central role in creole genesis" (L:15), is the exclusive province of "adult native speakers in possession of mature lexicons and grammars" (L:394; also see L:10).

It is the relexified interlanguages of individual African speakers from a variety of Niger-Congo languages that, by hypothesis, constitute the "early creole" grammars. Lefebvre's approach is mentalist: the early creole varieties, which are the main focus of the Relexification Hypothesis, are treated as mental objects, namely, as Internal Languages (I-languages) in Chomsky's (1986) sense. In other words, the early creole grammars (i.e., the postulated output of relexification) are, in Chomsky's terms, "internally represented in the mind/brain" (Chomsky 1986:22) of individual African speakers. In Lefebvre's scenario, each of these relexified and nonnative grammars will, by hypothesis, be structurally similar to the speaker's native I-language.

In addition to relexification proper, Lefebvre also postulates two important processes: "reanalysis" and "dialect leveling." The output of the early creole grammars are subject to reanalysis, the technical definition of which, to be discussed below, is reminiscent of grammaticalization à la Bopp, Meillet, and others. Then dialect leveling takes place across the typologically disparate lects of early creole speakers, toward the creation of a relatively homogeneous creole grammar, which in turn is used as an identity marker for the creole community.

Lefebvre's scenerio will be presented in more detail in section 2. My own

contention in this critique is that, given well-documented sociohistorical and linguistic evidence, this scenario cannot account for the diachrony and synchrony of Haitian Creole, my native language. I will argue instead, in sections 3 and 4, in uniformitarian fashion, that the African adults who participated in the development of Haitian Creole, like other adult learners in situations of language contact, did approximate various aspects of their target grammar, with a certain degree of restructuring influenced by, *inter alia*, the learners' first languages. Thus, alongside substratal features, structural aspects of the superstrate language did play a role in creole diachrony—a much larger role than Lefebvre's scenario allows for. In this vein, I will also argue that speakers of the earliest (Proto-)Haitian Creole varieties did analyze, or reanalyze, substantial amounts of morphosyntactic target (superstrate) patterns: they incorporated such target-oriented approximations, alongside other sorts of structural innovations, into the early creole. Then, in section 4, I will argue, *contra* Lefebvre, that first-language acquisition by children, in this case by locally born (i.e., "creole") children, plays an important function in creole genesis in the sense of creation of stable and relatively homogeneous "Haitian Creole" I-languages. In fact, my argument will be even stronger: given the very theoretical premises of Lefebvre's analytical framework, it is logically impossible for relexification to play the "central role" that is envisaged by Lefebvre *vis-à-vis* the development of an aggregate of creole I-languages such as those of Haitian speakers. But I am already getting ahead of the story. So let me step back a bit and spell out the details of Lefebvre's scenario and some of its many positive contributions, before putting on my skeptical—devil's advocate's—hat for a constructive critique.

Relexification, as in Lefebvre's title, can, at first approximation, be loosely defined as a phylogenetic process based on second-language acquisition whereby one language (e.g., Fongbè) seeds a creole by having the phonetic shapes of its vocabulary replaced by phonetic strings derived from some other language (e.g., French) while almost everything else in the original language remains unchanged. I label Lefebvre's specific proposal the "Strict Relexification Hypothesis" to distinguish it from more nuanced substratist hypotheses such as those of Sylvain (1936) and Muysken (1981) that shy away from Lefebvre's categorical claims and that admit the possibility of superstrate-derived properties at all levels of a Creole grammar in a way similar to how target-language patterns influence the development of learners' interlanguages in second-language acquisition.<sup>1</sup>

The basic predictions of the Strict Relexification Hypothesis are these:

Creole lexical entries [will] have the same semantic and syntactic properties as the corresponding lexical entries in the substratum languages, but phonological representations derived from the phonetic strings of the superstratum language. [L:48]

The creators of a creole use . . . the parametric values . . . the semantic interpretation rules . . . the principles of morpheme and word concatenation . . . of their own [substrate] grammars in developing the creole. [L:47]

Its overall conclusion as regards Haitian Creole is as follows:

[Haitian Creole] was created by adult native speakers in possession of mature lexicons and grammars. The data presented throughout this book massively support the claim that these adult native speakers used the properties of their lexicons and grammars in creating the creole. The division of properties found in the [Haitian Creole] argues that the genesis of creole languages is a particular case of [second-language acquisition] in a context where the substratum speakers have little exposure to the superstratum languages. [L:394]

In this scenario, the relexifying Niger-Congo speakers (in their role as language learners and creole creators) seem to have been irremediably bounded by the grammatical structures of their native languages: the only contributions of French to Haitian Creole amount to unanalyzed chunks of French-derived phonetic strings (L:16) and word-order patterns for major-category lexical items (L:39–40, 341–42, 387–88). In this light, relexification somewhat resembles a fallback strategy that is enlisted when “normal” acquisition is preempted by one factor or another.<sup>2</sup>

Recourse to relexification is a function of very limited access to the superstratum data. In cases where the speakers of the substratum languages have more access to the superstratum data, acquisition is facilitated and relexification might be less important than in the [Haitian Creole] case. . . . [L:386]

(Also see L:36, 65, 394; contrast L:28–29, 395, and the discussion in n. 3 below.)

In the Strict Relexification Hypothesis, it is the social context—in particular, overly restricted access to target data—that gives to relexification its central role in creole genesis. Lefebvre’s key assumption about the sociolinguistic context of relexification, and this is crucial to the Strict Relexification Hypothesis, is that creators of radical creoles such as Haitian Creole had such limited exposure to target data that they were unable to entertain any abstract and structural hypotheses about target phonetic strings. It is postulated that all the learners could do was to use target phonetic strings to derive the emergent creole’s phonological representations; they could not map these target strings into target(-like) structures. So, it is claimed, few, if any, superstrate-derived structural properties could enter radical creoles.

We will see below, in sections 3 and 4, that this assumption of “very limited access” and its correlates for (non)acquisition are empirically, theoretically, and sociohistorically problematic. Furthermore, the basic theoretical assumptions and analytical details of the Strict Relexification Hypothesis, once carefully examined, lead to both internal inconsistency and inconsistency with respect to the relevant databases.

This said, the Strict Relexification Hypothesis and its concomitant research program have made many positive and constructive contributions, to which I now turn.

## 2. "Strict relexification": the benefits of an explicit hypothesis.

**2.1. The benefits.** Lefebvre provides a comprehensive and enthusiastic summary of the extensive series of papers published by her research team, the Groupe de recherche sur la genèse du créole haïtien at the Université du Québec à Montréal. In the past couple of decades, Lefebvre and her co-workers have adopted and adapted Muysken's (1981) proposal for Media Lengua's genesis (but see n. 3) and they have elaborated the most theoretically sophisticated argument for relexification as the central mental process underlying creole genesis.

Lefebvre's research program has been, indirectly at least, constructive and insightful in many ways, especially as regards the descriptive and comparative databases and the methodological and theoretical toolkits of both creolists and Africanists. To date, Lefebvre's is the most explicit and most comprehensive project on the development of morphosyntax and lexical semantics in a creole language.

Lefebvre provides extensive three-way comparisons—thus far, the most extensive in creole studies—that survey many domains of the grammar of Haitian Creole, French, and Fongbè: the nominal and pronominal system, the tense-mood-aspect system, clausal structure, verbal syntax and semantics, derivational morphology and compounding, and possible syntactic parameters. Some of the empirical details in Lefebvre's book (e.g., some of the data on postnominal definite determiners, predicate-clefting [also known as "verb-doubling"], serial verbs, etc.) will lay to rest any claim to the effect that substrate languages had little role in creole genesis (for an earlier review of some of these data, see DeGraff [1994a, 1994b]). Altogether, the research program carried out by Lefebvre and her team has vastly increased our knowledge or, at the very least, our interest in Gbe languages, in Haitian Creole, in creole genesis and in the relationship thereof to language acquisition.

Lefebvre is not the first linguist who has proposed (something like) relexification. I have already mentioned Muysken's influential claim about the genesis of Media Lengua in Ecuador—"Media Lengua is a form of [Quechua] with [Spanish] vocabulary" (1981:71).<sup>3</sup> Before Muysken, the hypothesis that relexification plays an important role in creole genesis can be traced as far back as the nineteenth-century writings of the Trinidadian creolist J. J. Thomas (1869) and of the French philologist Lucien Adam (1883) (see n. 2). An early twentieth-century pioneering work on Haitian Creole by Haitian scholar Suzanne Sylvain also offered the much-quoted relexificationist slogan that Haitian Creole is "French cast in the mold of African syntax or . . . an Ewe tongue with a French lexicon" (1936:178; but see n. 1). Sylvain, like Lefebvre, carried out extensive three-way comparisons between Haitian Creole, French, and Ewe(gbe), a sister language of Fongbè from the Gbe grouping.



**2.2. The explicit hypothesis.** Not only does Lefebvre substantially expand Sylvain's database, but she, like Muysken, couches her synchronic comparative data and her diachronic genetic claims within a formal framework ("Principles and Parameters"). In so doing, she brings much needed explicitness to a relatively old hypothesis, and this is a very welcome development. Thanks to its explicitness and falsifiability, the Strict Relexification Hypothesis provides an ideal stimulus for reevaluating relexification-related claims.

Lefebvre's claim that relexification plays a central role in creole genesis, as the formation of a certain sort of I-languages in Chomsky's (1986) sense, carries precise and intriguing implications for Haitian Creole diachrony and synchrony, language acquisition, historical linguistics, linguistic theory, and the socio-history of (colonial) Haiti. Lefebvre is to be commended for substantially raising the theoretical level of creole-genesis hypotheses. Her hypotheses are worth quoting at length, as I will be inspecting them with great care from a variety of perspectives.

The Strict Relexification Hypothesis implicates two major individual-level mental processes in creole genesis: relexification (which includes "copying" and "relabeling") and reanalysis at the post-relexification stage.

Relexification is . . . a mental process that builds new lexical entries by copying lexical entries of an already established lexicon and replacing (i.e., relabelling their phonological representations with representations derived from [the phonetic strings of] another language.) [L:16]

This second phase of relexification [i.e., the replacement of phonological representations, is referred to] as relabelling. . . . Relabelling proceeds on the basis of *phonetic strings* found in the superstratum language rather than the phonological representations of the superstratum lexical entries . . .

. . . [*From the relexifier's perspective,*] the lexifier language lexical entry [that provides the phonetic string for relabelling] is deprived of [abstract] features [such as syntactic and semantic features]. This is because . . . relexifiers either do not have access to this information or, if they do, they do not use it in creating the new lexical entry . . .

. . . The meaning of the phonetic string selected to relabel a copied lexical entry is deduced from its use in specific semantic and pragmatic contexts . . . [L:16-17; italics added]

Copying applies to *all* lexical entries and . . . Relabelling . . . is semantically driven. . . . [For example] functional categories which have some semantic content . . . may be assigned a new label during relexification [but] functional categories which have no semantic content . . . are copied but not relabelled. They are assigned a null form at relabelling. [L:17; italics added]

The null form produced at relabeling can subsequently be replaced via reanalysis.

Reanalysis in creole genesis takes place when (early) creole speakers "assign the form of [a] major category lexical item as the phonological form of [a] covert functional category" (L:45); such reanalysis applies to relexified entries that

were “assigned a phonologically null form at relabelling because the creators of the creole did not find an appropriate [relabeling] form in the superstratum language or because [the relexified entry] had no semantic content” (L:44).

The Relexification Hypothesis as just presented is “strict” insofar as it forces, vis-à-vis the development of creole grammars, a strict language-wide compartmentalization of phonetic strings, which are derived from the superstratum, versus everything abstract (e.g., morphophonology, syntax, semantics, parameter-settings, etc.), which is derived from the substratum:

By definition, lexical entries produced by relexification have the semantic and syntactic properties of those in the original lexicons; they differ from the original entries only in their phonological representations. [L:18]

Since relexification is a mental process that applies to lexical entries, by hypothesis, it should apply to all types of lexical entries. Current theories distinguish between major category lexical items (i.e., nouns, verbs, adjectives, prepositions, adverbs and derivational affixes identified for major categorial features) and minor or functional category lexical items (i.e., determiners, complementisers, Tense markers, etc.). . . . Relexification may, in principle, apply to minor as well as major category lexical entries. [L:18]

It is thus that the relexified lexical entries, which bring along the morpho-syntactic properties and semantic principles of the corresponding substrate languages (i.e., the learners’ respective L1s), exhaustively define the array of parametrically distinct “early creole” grammars that live in the individual minds of the original creole speakers. The output of these grammars are then subject to reanalysis (as defined just above)<sup>4</sup> and dialect leveling. By definition, relexification and reanalysis are cognitive processes taking scope over individual I-languages, whereas dialect leveling is defined as a social process that takes scope within and across communities of early creole speakers. Dialect leveling is fed by the aggregate output of diverse early creole grammars that have disparate substrates and thus disparate parametric values:

Relexification is a mental process . . . therefore, it is an individual activity. This being the case, Fongbè speakers will use the properties of their own lexicon in relexification. So will the Yoruba, Ewe, Bantu, etc., speakers. [L:67]

Speakers of various substratum languages reproduce the idiosyncratic semantic and syntactic properties of their own lexicons in relexification and thus the product of relexification is not uniform across the creole community. [L:46]

When language learners begin to target the language of their own community (the early Creole), some compromises may be required to reconcile these variants. The process of dialect levelling, observed in dialect contact situations . . . , is proposed to account for the compromises that speakers of different relexified lexicons may have to make in creating a new language. . . . Dialect levelling operates on the variation resulting from the relexification of the various substratum lexicons. [L:11]

While relexification and reanalysis are cognitive, and hence individual, processes, dialect levelling is clearly a social process. . . . The purpose of dialect levelling is to reduce variation between the various dialects produced by relexification. [L:393]

Hereafter, the label "Strict Relexification Hypothesis" will refer to the hypothesis outlined in this section.

**3. Reevaluation of the hypothesis.** Based on the linguistic data and analyses and the sociohistorical factors to be discussed below, my own conclusion is that Lefebvre has overstated her case. I will also suggest that the Strict Relexification Hypothesis's basic theoretical assumptions are undermined by debilitating contradictions.

At the outset of my reevaluation, I must stress that many creolists take it as established, and correctly so it seems to me, that substrate influence via L1 transfer in second-language acquisition or some sort of substrate-creole bilingualism or both did play a role in the development of Caribbean creoles (see DeGraff [1999b], Mufwene [2001a], and Siegel [forthcoming] for recent surveys). As language-acquisition researchers have documented all along, structures from the learner's native language (the L1) do influence the creation and the use of the learner's interlanguages, especially at the earliest stages of second-language acquisition. Thus the inevitability of substrate influence, once we assume, in uniformitarian fashion, that Africans in the Caribbean context of creole development are cognitively on a par with language learners everywhere else. There is therefore no doubt in my mind that some sort of transfer from the first language on the part Niger-Congo speakers was instrumental in creating certain, but by no means all, aspects of Haitian Creole grammar (see, e.g., DeGraff 1999b:502).

Some of the comparative data presented by Lefebvre and her colleagues further support the claim that certain substrate features did influence the development of Haitian Creole. Substrate influence in the development of Haitian Creole has also been documented in a long series of studies, starting with the comparative work of Sylvain (1936), a triangulation of Haitian Creole, French, and Ewe. Alleyne (1980) extends Sylvain's methodology to a variety of English-lexicon Creoles in Africa and the New World. Even "substratophobe" Bickerton—in his early work (see, e.g., 1977:53–55), unlike in his later claims (e.g., 1984)—makes room for relexification, which he takes as instrumental in creating "pidgins." Unlike Lefebvre, Bickerton draws a sharp distinction between pidginization, "second-language learning with restricted input," and creolization, "first-language learning with restricted input" (1977:49). Yet Bickerton, like Lefebvre, considers that relexification is the cognitive palliative to "[second-language acquisition] with restricted input" (1977:49). But while the Strict Relexification Hypothesis, by definition, precludes superstrate structures from the creole, Bickerton allows superstrate structural contributions, alongside

substrate influence, in his version of “handicapped [second-language acquisition]” (1977:64).<sup>5</sup>

Pidginization is a process that begins by the speaker using his native tongue and relexifying first only a few key words. . . . Subsequently, more superstrate lexicon will be acquired . . . and will be, for the most part, slotted into syntactic surface structures drawn from the substrate; . . . even when relexification is complete down to grammatical items, substrate syntax will be partially retained, and will alternate, apparently unpredictably, with structures imported from the superstrate. [Bickerton 1977:53–55]

Koopman’s (1986) argument for substrate influence in Haitian Creole extends beyond the pidginization phase. Contra Bickerton, Koopman argues that various substratal pidgin features should be expected to survive in Haitian Creole via iterative instances of language acquisition (language creation) with primary linguistic data that include substrate-influenced pidginlike utterances. One mentalist reading of Koopman’s observations would locate relexification as the central process in “pidginization,” understood as the creation of initial interlanguages, the ones produced when African speakers in (say) colonial Haiti were first exposed to the superstrate or some approximation thereof (see DeGraff [1999b:495–513] for further comments in this vein).

In this light, many of the cases of substrate influence discussed by Lefebvre and her colleagues and by other creole-genesis theorists are quite convincing, in addition to being descriptively constructive. I myself have no doubt that there is an important subset of Haitian Creole properties that can be insightfully related to properties in the native I-languages of substrate speakers in seventeenth to nineteenth-century Saint-Domingue (I have made similar points in DeGraff 1994b, 1994c, 1999b, 2000, 2001b, forthcoming b, forthcoming d). Furthermore, the “mixed languages” studied in Muysken (1981) and Bakker and Mous (1994) add empirical support to the claim that some version of relexification (“language intertwining” in Bakker and Mous’s terminology) does play a role in the creation of new language varieties. Note though that the cognitive and sociohistorical characteristics of the “language intertwining” cases (e.g., the prevalence of bilingualism and the emergence of the mixed language for intragroup communication) are quite distinct from the conditions that obtained through the development of Haitian Creole (see n. 3). My critique of relexification below concerns mostly the Strict Relexification Hypothesis and its categorical claims.

What I find deeply problematic about the Strict Relexification Hypothesis are its theoretical implementation and its empirical and sociohistorical bases. Most problematic are the Strict Relexification Hypothesis’s biased comparisons of Haitian Creole and substrate patterns, its systematic downplaying of both the creative aspects of creole genesis and the superstrate’s structural contributions thereto and, lastly, its recurrent neglect of well-documented linguistic and sociohistorical evidence. In sections 3.1–3.3, I examine the Strict Relexification Hypothesis’s comparative and theoretical claims. I conclude, in section 4, with a

general critique of the conceptual foundations of the hypothesis, and of its implications for language acquisition, linguistic theory, and the sociohistorical matrix of creolization, with a focus on the Haitian Creole case.<sup>6</sup>

How shall we begin to evaluate Lefebvre's strong claim that, modulo its French-derived phonetic strings, Haitian Creole is essentially a Kwa language with Kwa morphology, Kwa morphosyntax, Kwa (lexical) semantics, Kwa parametric values, etc. Lefebvre judiciously warns: "One or two examples either way are not enough to falsify or support the hypothesis. The real test involves a global comparison of the lexicons of these languages. . . . Again, *the test must be based on quantity as well as quality*" (L:48; italics added).

To start my own "global comparison," I look at the Haitian Creole lexicon, starting with a sample of affixes (sections 3.1–3.2). This comparison will offer many opportunities to evaluate the quality of Lefebvre's own empirical and theoretical claims.

The lexicon is perhaps the domain where relexification as defined in section 2.2 above—the relabeling of substrate morphemes with lexifier-derived phonetic strings—is expected to apply most straightforwardly to the largest quantity of substrate items. Is it true, then, that Haitian Creole morphemes, bound or unbound, are structurally isomorphic to substrate morphemes?

After evaluating Lefebvre's claims regarding Haitian Creole affixes and unbound morphemes, I evaluate, in section 3.3, her claims about word order. In both cases, I compare Haitian Creole with its putative ancestors. The goal of this global comparative tour of Haitian Creole is to economically illustrate the sort of flaws that fatally undermine both Lefebvre's methodology and her conclusion that Haitian Creole is essentially a Kwa language with French-derived phonetic strings. Much more could, and should, be said about Lefebvre's empirical details, but doing so would turn this article into a monograph.

**3.1. The morphology: matches and mismatches.** In Lefebvre's chapter 10, a couple of straightforward claims are made about the diachrony and synchrony of Haitian Creole morphology:

The inventory of productive affixes in [Haitian Creole] reduces to ten or eleven. [L:311]

With two exceptions . . . and [one] partial mismatch, there is a one-to-one correspondence between [Haitian Creole] and [Fongbè] affixes. [L:333]

These claims entail a nearly perfect isomorphism between Fongbè and Haitian Creole derivational affixes. As I have recently argued, using diachronic and (cross-dialectal) synchronic data from Haitian Creole (see, e.g., DeGraff 1999d, 2001a, 2001b; also see Valdman 2000), these claims are empirically disconfirmed, and robustly so. The four case studies below, in sections 3.1.1–3.1.4, will suffice to demonstrate the empirical, methodological, and theoretical fallacies in Lefebvre's argumentation regarding Haitian Creole morphology and the genesis

thereof. All four cases studies share the following four properties: (i) Lefebvre unsuccessfully tries to fit Haitian Creole affixes in the mold of Fongbè morphology while many important mismatches between Haitian Creole and Fongbè remain unaddressed; (ii) Lefebvre systematically ignores structural correspondences between Haitian Creole and French; (iii) the relevant data are relatively straightforward to establish; (iv) Lefebvre misrepresents the relevant Haitian Creole data, even contradicting her own bibliographical sources. (For a much larger sampling of the relevant evidence vis-à-vis the diachrony and synchrony of Haitian Creole morphology and lexicon, see Fattier [1998].)

**3.1.1. Is Haitian Creole *-yon* a productive suffix?** Let us consider the Haitian Creole string *yon* as it occurs word-finally in, for example, *pinisyon* ‘punishment’ and *plantasyon* ‘plantation’ (cf. Haitian Creole *pini* ‘to punish’ and *plante* ‘to plant’). I have discussed this case elsewhere (e.g., DeGraff 2001a: 62–69, 85), arguing (contra L:311), that Haitian Creole *-yon* is a bona fide productive suffix.<sup>7</sup> Independently of my own claims, the ending *-yon* is documented in a great many Haitian Creole words—about three pages in Freeman’s (1989) eighty seven-page inverse word list—including Haitianisms, derivations with no counterparts in (modern) French, to which I return below (see also DeGraff 2001a:65). It is uncontroversial that this ending *-yon* in Haitian Creole is etymologically related to the French suffix *-ion* (cf. the French verb-noun pairs *punir*, *punition* and *planter*, *plantation*). But, since Fongbè is taken as having no “one-to-one” counterpart to French *-ion*, the Strict Relexification Hypothesis must rule out the possibility that Haitian Creole *-yon* realizes a productive suffix on a par with French *-ion*.

Recall Lefebvre’s assertion that there are “ten or eleven” Haitian Creole affixes (L:11). These affixes are, by hypothesis, in “one-to-one correspondence [with Fongbè] affixes” (L:333). Lefebvre further considers that, besides these ten or eleven Haitian Creole affixes, any other Haitian Creole string that resembles a French productive affix is actually fossilized (i.e., part of a simplex Haitian Creole word) (L:311).

Lefebvre takes Haitian Creole *-yon* to be a paradigmatic example of affix fossilization. In this analysis, the resemblance Haitian Creole *-yon* to French *-ion* is only a superficial phonetic effect: the Haitian Creole string *-yon* in words like *pinisyon*, unlike its French etymon in words like *punition*, is deprived of abstract affixal features. Lefebvre thus stipulates that the many Haitian Creole nouns ending in *-yon* (e.g., *pinisyon* and *plantasyon*) are monomorphemic words—words without internal structure. That is, notwithstanding their semantic and phonological relatedness, *pinisyon* ‘punishment’ and *pini* ‘to punish’ are considered to be morphologically unrelated in the I-languages of Haitian Creole speakers. Similarly, all other similar noun-verb pairs are morphologically unrelated, in spite of the systematic semantic and phonological relatedness in such pairs. In Lefebvre’s scenario, *pinisyon*, *plantasyon*, and all

such nouns whose French etyma end in the suffix *-ion* were borrowed as fossilized simplex words, and have remained simplex throughout the course of Haitian Creole diachrony.

For terminological convenience, I refer to this fossilization claim as one of “pseudoaffixation”: a “pseudoaffix” in Haitian Creole is any string that, like *-yon*, “corresponds to a productive affix in French,” but, unlike its French etymon, is morphologically inactive (cf. L:311). In the Strict Relexification Hypothesis, such pseudoaffixes are a side effect of relexification: because their French etyma have no equivalents in Fongbè, the Fongbè speakers in their role as relexifiers could not identify them in the French input and could not incorporate them as affixes in the morphology of their interlanguages (i.e., in the incipient creole). (See DeGraff [2001a:62–69] for a critique of other claims of pseudoaffixation related, e.g., to notions of decreolization.)

Here the methodology and the data that are enlisted to support the Strict Relexification Hypothesis (see, e.g., L:304, 311) merit a close analysis, as they tellingly encapsulate the drawbacks of the Strict Relexification Hypothesis.

First, Lefebvre provides a list of sufficient, but not necessary, conditions to determine whether a particular form is “native” to Haitian Creole:<sup>8</sup>

Five criteria to identify [whether a given form is one of] the native derivational affixes of [Haitian Creole:] First, . . . if it is found affixed to a base which is foreign to French . . . Second, . . . if it is used with a base that is derived from a French word that does not take the equivalent affix . . . Third, . . . if it appears in a different position from the parallel affix in French . . . Fourth . . . if the semantic and syntactic properties of a word that it derives are different from those of the corresponding word in French . . . Finally, if a morphological process in [Haitian Creole] has no French counterpart, this argues that the process is native to [Haitian Creole]. [L:304]

Let us now see how Lefebvre applies the tests above to Haitian Creole *-yon*:

Unlike the affixes identified as productive in [Haitian Creole], *yon* is only found in [Haitian Creole] words that correspond exactly to French words. . . . An examination of the list of [Haitian Creole] nouns in Freeman’s (1989) inverse dictionary supports this claim. . . . Furthermore, the inventory of nouns in Valdman et al.’s (1981) dictionary shows that [Haitian Creole] words ending in *-yon* represent only a small fraction of words ending in *-ion* in French. . . . Words such as *\*admirasyon* ‘admiration’ (= *admirat-ion* in French) and *\*adopsyon* ‘adoption’ (= *adopt-ion* in French), etc., are not [listed in Valdman et al. 1981]. . . . [Haitian Creole] words which contain the sequence *-yon* are thus best analyzed as simplexes, that is, as words without internal structure. . . . These words, and many others which are derived words in French, have entered [Haitian Creole] as simplexes and are therefore listed individually in the [Haitian Creole] lexicon. [L:311]

The Haitian Creole words in table 1 disconfirm Lefebvre’s claims: either these words are “used with a base that is derived from a French word that does

not take the equivalent affix” or their “semantic . . . properties . . . are different from those of the corresponding word[s] in French” (L:304) or both.

**Table 1. Haitian Creole Nominalizations in *-yon* without French Equivalents**

NOMINALIZATION	RELATED VERB
<i>dekoupasyon</i> ‘dividing wall, screen’	<i>dekoupe</i> ‘to cut up, to carve’
<i>desidasyon</i> ‘decision’	<i>deside</i> ‘to decide’
<i>eklerasyon</i> ‘enlightenment’	<i>eklere</i> ‘to enlighten’
<i>levasyon</i> ‘education, upbringing’	<i>leve</i> ‘to educate, to rear’
<i>pansyon</i> ‘anxiety’	<i>panse</i> ‘to think’
<i>pèdisyon</i> ‘false pregnancy, menorrhagia’	<i>pèdi</i> ‘to lose’
<i>vivasyon</i> ‘conviviality’	<i>viv</i> ‘to live’

SOURCE: DeGraff (2001a:62, 65).

The Haitian Creole words in *-yon* in table 1 have no apparent analogues in French; they are Haitianisms.<sup>9</sup> Based on Lefebvre’s own criteria cited above (subject to the caveats in n. 8 and n. 9), these Haitianisms straightforwardly contradict Lefebvre’s claims about *-yon*. The list in table 1 suggests that Haitian Creole speakers have made creative (i.e., productive) use of the ending *-yon* to derive new lexemes. Thus, Haitian Creole words like *desidasyon*, *pinisyon*, *plantasyon*, *dekoupasyon*, *pansyon*, *vivasyon*, etc., do have internal structure, something like [<sub>N</sub> √V + ((a)s)yon].<sup>10</sup>

As it turns out, some of the Haitianisms in table 1 are taken from Freeman’s inverse word list, contra Lefebvre (L:311). (Freeman also lists both *admirasyon* and *adopsyon*—again, contrary to Lefebvre’s assertion.)

On a more general methodological note, it must be remembered that dictionaries, especially dictionaries for languages like Haitian Creole with a relatively shallow lexicographic tradition, are only partial descriptions of the aggregate (i.e., E[xternal]-language) output of I-languages. (For an extended critique, see Corbin [1987: chap. 2], tellingly entitled “La fausse evidence des matériaux lexicaux” [The False Evidence of Lexical Sources].) That the list of Haitian Creole words ending in *-yon* in Freeman’s inverse word list (1989) does not match that in Valdman et al.’s (1981) dictionary suggests that Lefebvre’s productivity tests, which compare these two word lists with existing French words, constitute “false evidence.”<sup>11</sup> What crucially matters in determining morphological productivity is the systematicity and the creativity manifested by I-languages in employing lexical patterns that involve (putative) affixes; such systematicity and creativity can be evaluated independently of etymology (see n. 8). This said, the dictionaries and word lists cited by Lefebvre do contain Haitianisms that entered the language via neological, thus productive, uses of the *-yon* suffix, contra Lefebvre’s claims. Fattier (1998) also documents neologisms derived with *-yon* in monolingual Haitian Creole speech. Given Lefebvre’s very own criteria, *-yon* must be considered a productive Haitian Creole suffix. If Haitian Creole *-yon* has no counterpart in Fongbè (as is implied in Lefebvre’s



inventory of Fongbè affixes), then Haitian Creole *-yon* is not, and could not be, a product of relexification.

That Haitian Creole *-yon* is productive is not a surprising conclusion. In fact, it is Lefebvre's claim that seems surprising. Claiming *-yon* as a pseudosuffix implies that the originators of Haitian Creole were unable to perceive the phonologically and semantically transparent systematicity of *-ion* affixation in French, notwithstanding the robustness of this systematicity in the target primary language data and notwithstanding the many instances of the corresponding verb-noun pairs that were inherited in the creole.<sup>12</sup> Moreover, Lefebvre's claims entail that (Proto-)Haitian Creole speakers, from the seventeenth century onwards, were somehow unable to (re)analyze *yon*-related patterns in their own languages—patterns to which they had unlimited access, and continuously so. These patterns, like their French analogues, involve verb-noun pairs with straightforward morphophonological and semantic relatedness (e.g., *pini* 'to punish' and *pinisyon* 'punishment').<sup>13</sup>

The empirical problem illustrated by Haitian Creole *-yon* is more general: the evidence in the very Haitian Creole dictionaries and word lists cited by Lefebvre repeatedly contradicts her claims about the structure of the Haitian Creole lexicon. This is true as well for the morphophonology of Haitian Creole cardinal and ordinal numbers, to which I now turn.

**3.1.2. On the structure of ordinal and cardinal numbers in Haitian Creole, French, and Fongbè.** Let us start with ordinal numbers. All three languages under consideration have ordinal suffixes that attach to cardinal numbers. As expected, the form of the Haitian Creole ordinal affix, *-yèm* [jɛm], as in *senkyèm* [sɛkjɛm] 'fifth' (cf. *senk* [sɛk] 'five'), is derived from French (see, e.g., French *-ième* [jɛm] in *cinquième* [sɛkjɛm] 'fifth'; cf. *cinq* [sɛk] 'five'). Lefebvre claims, however, that the morphophonology of Haitian Creole *-yèm* is quite different from that of French *-ième* and is instead a direct reflection of Fongbè morphophonology: the Haitian Creole ordinal suffix is claimed as a relexification of the Fongbè ordinal suffix *-gò* while the phonetics, and only the phonetics, of the Haitian Creole suffix is taken to derive from the French ordinal suffix *-ième*, whose phonetic label has been adopted into Haitian Creole without any abstract morphophonological analysis. I will first inspect the empirical basis of Lefebvre's argumentation.

What seems to me most peculiar about Lefebvre's argumentation is that some of the ordinal numbers that she claims (L:310–11) are "Haitian" (e.g., *twayèm* 'third', *katyèm* 'fourth', and *sanyèm* 'one hundredth') are not attested in the standard word-list references that she cites on the same page for other purposes (e.g., to erroneously argue for the fossilization of Haitian Creole *-yon*; see section 3.1.1 above). Also striking is the following fact: the most commonly attested Haitian Creole word for 'third' is *twazyèm*, which, exactly like French *troisième* (cf. Dell 1973:181), realizes the long form of the stem, *twaz* (with the

“latent consonant” *z*), instead of the short form *twa*. Although Haitian Creole *twazyèm* is part of all Haitian Creole dialects that have been documented thus far, Lefebvre categorically claims that it is “not attested in [Haitian Creole]” (L:311). Strangely enough, *twazyèm* is the one and only form for ‘third’ that is documented in all the standard Haitian Creole word lists cited by Lefebvre.

More generally, the forms that Lefebvre’s Strict Relexification Hypothesis requires to be unattested in Haitian Creole—in order to establish that the morphophonology of Haitian Creole ordinal numbers is inherited, not from French, but from Fongbè—are exactly those that are most common across Haitian Creole dialects, including those spoken by monolinguals (as attested in, e.g., Fattier 1998); to wit, *twazyèm* ‘third’, *katriyèm* ‘fourth’, *santiyèm* ‘one hundredth’. These typically Haitian forms realize the “latent consonant” (in bold-face) of their respective stems, just as in their French etyma (spoken French often produces *kat* instead of *katr* for ‘four’, so *r* is latent in this stem). The forms cited as “Haitian” by Lefebvre (*twayèm* ‘third’, *katyèm* ‘fourth’, and *sanyèm* ‘one hundredth’, where the stems correspond to the French short forms) are, at best, dialectal variants. It is worth stressing that these variants are not found in the Haitian Creole dictionaries and word lists cited elsewhere by Lefebvre (see, e.g., Valdman et al. 1981; Freeman 1989). And neither are these forms reported in Fattier’s (1998) dialect atlas. As the only reference for her variants, Lefebvre cites a personal communication from Anne-Marie Brousseau, a noncreolophone Canadian linguist. No indication is given as to where such (possibly) dialectal variants may be found.<sup>14</sup>

Why do forms like *twayèm*, *katyèm*, and *sanyèm* matter so much to Lefebvre? Why would Lefebvre contradict her own bibliographical sources by erroneously claiming that *twazyèm*, *katryèm*, and *santiyèm* are not attested in Haitian Creole? Lefebvre alleges this non-attestation as evidence that

It is unlikely that the creators of [Haitian Creole] learned the ordinal numbers of French one by one. If they had, we would expect the [Haitian Creole] forms to be phonologically closer to the corresponding French phonetic strings. For example, the [Haitian Creole] phonemic representation of the lexical entry meaning ‘third’ is [twa-*jèm*]. If this form had been derived from the French phonetic string [trwazjem/], we would expect it to be [twazjem/]. The latter form is not attested in [Haitian Creole], however. [L:310–11]

The Haitian Creole suffix *-yèm* and its morphophonological properties are thus analyzed, not as a straightforward inheritance from French, but as a relexification of the Fongbè suffix *-gòò*. In Lefebvre’s empirically disconfirmed scenario, the French contribution to the Haitian Creole ordinal suffix is strictly limited to the latter’s phonetic label, namely, [*jèm*]: no abstract property of the French ordinal system (e.g., its short-vs.-long alternation with its latent consonant) was transmitted to Haitian Creole.

In reality—and contrary to Lefebvre’s claim just quoted—both Haitian Creole and French cardinal numbers realize the latent consonant of their long

forms (if any), when followed by the ordinal affix [-jɛm]. This sandhi phenomenon, which is one of the rare cases of “liaison” that Haitian Creole inherited from French, is an abstract morphophonological property, with reflexes in a small and apparently idiosyncratic domain of Haitian Creole grammar. For example, the long forms of the relevant Haitian Creole cardinal numbers are manifested in other cases where they are followed by a vowel-initial morpheme from a lexically restricted set (e.g., *an* ‘year’, *è* ‘hour’ and *òm* ‘man’). To wit: [dezā] ‘two years’, [twazā] ‘three years’, [katrā] ‘four years’, [sātā] ‘one hundred years’; and [dezɔm] ‘two men’, [twazɔm] ‘three men’, [katrɔm] ‘four men’, [sātɔm] ‘one hundred men’ (see Dejean [1980:141] for further details on these and related sandhi phenomena and constraints therein).

The formal combinatorics and the morphophonology of Haitian Creole ordinal numbers are thus “phonologically closer” to their French counterparts than Lefebvre claims. Haitian Creole forms like *twazyèm*, *katryèm*, *santyeèm*, etc., fall within a larger set of so-called sandhi phenomena that Haitian Creole inherited from French. Such inheritance goes against Lefebvre’s empirical and theoretical claims about the French (non)contribution to Haitian Creole.

Another difference between the Haitian Creole and Fongbè ordinal numbers involves the morphological structure of the ordinals for ‘first’ and ‘last’. The Haitian Creole equivalents are nearly identical to their French counterparts; compare Haitian Creole *premye* [premjɛ] with French *premier* [prɛmjɛ]; and Haitian Creole *dènye* [dɛnyɛ] with French *dernier* [dɛrnyɛ]. In contrast, the Fongbè equivalent for ‘first’, *nukòntò(n)*, can be glossed as ‘(the one) of the front’ and is derived from *nukòn* ‘front’; similarly, at least one Fongbè equivalent for ‘last’, namely, *gúdòtòn*, can be glossed as ‘of the back’ and is derived from *gúdò* ‘back’ (Anonymous 1983:4.6; Rassinoux 1974). Haitian Creole has no analogous derivations. Haitian Creole ‘first’ and ‘last’ follow the French model, not the Fongbè one: Haitian Creole *premye* ‘first’ is not derived from *devan* ‘front’; nor is Haitian Creole *dènye* ‘last’ derived from *dèyè* ‘back’. In these cases at least, the creators of Haitian Creole did learn the French forms and their semantics individually, pace Lefebvre.

That the morphophonological structure of Haitian Creole ordinal numbers would reflect that of the substratum is all the more unlikely since no such correspondence is found among the cardinal numbers, be they morphologically simplex or complex. One striking fact about Fongbè is that the morphological and arithmetic structure of its counting system is quite different from that of French. In French, as in English, counting is based on a decimal system and proceeds, *grosso modo*, by adding units smaller than ten to multiples of ten. As described in Anonymous (1983:4.5), “Fon[gbe] does not use the decimal system.” Instead, counting in Fongbè proceeds, *grosso modo*, by adding units smaller than five to multiples of five up to forty (e.g., seven is *ténwè* from *atòòn wè* ‘five-two’ [Rassinoux 1974]); then Fongbè speakers add units smaller than five and multiples of five to multiples of forty up to two hundred, and so on. This is a

rather complex system that is quite different from its French counterpart. Furthermore, certain counting units in Fongbè are lexicalized with the nouns for ‘eye’ *nùkùn*, ‘rope’ *kan*, and ‘foot’ *afɔ* (Anonymous 1983:4.5). No such arithmetic system is found in any dialect of Haitian Creole. The morphological and arithmetic structure of the Haitian Creole counting system uniformly follows that of the superstratum, not that of the substratum. This is surprising if, as claimed by Lefebvre, abstract properties of the Fongbè substrate, including Fongbè morphosyntax and lexical semantics, had determined the structural bases of the Haitian Creole lexicon, with French providing phonetic strings only.

The facts noted in this section contradict the claim that the structure of Haitian Creole cardinal and ordinal numbers was shaped by that of the substratum; it is not the case that the structure of the Haitian Creole counting system is isomorphic to that of Gbe, modulo a superficial overlay of French-derived phonetic strings that have remained unanalyzed. What we find in the Haitian Creole counting system—and, more generally, throughout Haitian Creole morphology and lexicon—are systematic and abstract correspondences with superstrate etyma. The evidence in this section suggests that—as for the Haitian Creole nominal suffix *-yon* (cf. French *-ion*), the Haitian Creole verbal suffix *-e* (cf. French *-er*), the Haitian Creole adverbial suffix *-man* (cf. French *-ment*), etc. (see section 3.1.1, n. 13)—the creators of Haitian Creole did store French-derived morphologically complex words in their I-languages, which forms they (re)analyzed to extract at least some, though not all, of the abstract (e.g., morphophonological and semantic) properties associated with the target forms.

**3.1.3. Inversive prefixes in Haitian Creole, French, and (Fon)Gbe.** The Haitian Creole prefix *de-* (cf. French *dé-*) is yet another Haitian Creole affix, among many others, that challenges Lefebvre’s claim that Haitian Creole and Fongbè are isomorphic in their morphology. With respect to Haitian Creole *de-*, the now-familiar Strict Relexification Hypothesis argument goes as follows (see, e.g., L:313, 316, 324): through relexification, Haitian Creole *de-* takes its phonological shape (its label), and nothing more, from the French prefix *dé-*, even though both share a common meaning; as for the combinatorics and semantic properties of Haitian Creole *de-*, they are identical to those of the Fongbè inversive prefix *mà*.

Is the contribution of French *dé-* to Haitian Creole *de-* strictly limited to phonetics? Are the morphosyntax and semantics of Haitian Creole *de-* really identical to the semantics of Fongbè *mà*? For example, is Haitian Creole *de-* consistently inversive, on a par with Fongbè *mà*?

First of all, there is no doubt that Haitian Creole *de-*, like French *dé-*, has (at least) an inversive interpretation. For example, Haitian Creole *kouvri* means ‘to cover’ while *dekouvri* means ‘to uncover’. And this semantic contrast is similar to the one in the French pair *couvrir/découvrir*. Given the parallel in this

example between Haitian Creole *de-* and French *dé-*, could it not be argued that Haitian Creole *de-*, in addition to its phonetic label, also inherits (some of) its semantics and combinatorics from French?

Lefebvre says no. One of her arguments is that its semantics and distribution make Haitian Creole *de-* more similar to its Fongbè analogue, namely, the inversive prefix *mà*, than to its French etymon *dé-*. Lefebvre claims:

Although the individual affixes in [Haitian Creole and French] share a common meaning, and although there are [Haitian Creole] derived words which have the same structure as and a similar interpretation to French derived words, a large number of [Haitian Creole] derived words have a different meaning from their French counterparts or simply do not have French counterparts. [L:316]

Lefebvre is surely right that Haitian Creole words, including words prefixed with *de-*, are not identical to French words. This is not surprising, given the well-documented role of (L1-influenced) restructuring in second language-acquisition and in contact-induced language change. In this light, Lefebvre's statement raises at least two conceptual issues; the first is really a nonissue, whereas the second relates to a more substantial and more pervasive contradiction in Lefebvre's argumentation.

Firstly, it is a matter of course that any "new" language variety is not identical to its ancestor. The observation just quoted would also obtain if "French" and "Haitian Creole" were replaced by the labels of any two sufficiently differentiated diachronic stages of some communal language (e.g., "Middle English" and "Modern English").<sup>15</sup>

Secondly, note that Lefebvre does admit that "there are [Haitian Creole] derived words which have the same structure as and a similar interpretation to French derived words." Actually, such words seem to be in the majority in Haitian Creole, especially if seventeenth- and eighteenth-century regional varieties of French are taken into account, as in Fattier (1998). Whether or not they are the majority, the existence of such structural and interpretive parallels challenges the "very limited access" postulate that is central to the Strict Relexification Hypothesis (i.e., the postulate that all that the relexifiers could use from the superstrate are phonetic strings without any abstract information [L:16, 36, 65, 386, 394]). Similarity of structure and interpretation across Haitian Creole and French words could not obtain if the creators of Haitian Creole were deprived of all abstract information about French. (I discuss related contradictions in n. 13 and in section 3.2.)

Leaving conceptual issues aside for a moment, let us ask, from the empirical standpoint, whether or not the available data warrant the claim that the creole-vs.-superstratum divergences vastly outweigh the creole-vs.-substratum ones.

As one such example of divergence between Haitian Creole and French, Lefebvre offers Haitian Creole *derespekte* 'to insult' as a derived word that is

“made up of the inersive affix *de-* . . . and the verb *respekte*” (L:316). (*Respekte* means ‘to respect’ and derives from the noun *respè* ‘respect’ via affixation with the productive verbal suffix *-e* [see n. 13]). Lefebvre contrasts the synthetic *derespekte* in Haitian Creole with its periphrastic French translation *manquer de respect* ‘to lack respect’; it is assumed that French has no \**dérespecter*.

Here, Lefebvre unfortunately glosses over both the issue of dialectal and idiolectal variations and the issue of actual versus possible words.

Regarding the first issue, one relevant question is whether the seventeenth- and eighteenth-century French regional and colloquial dialects spoken in colonial Haiti could have offered *dérespecter* as a direct etymon for Haitian Creole *derespekte*. I do not know the answer, but what I do know is that *dérespecter* is a possible, if not an attested, French word.<sup>16</sup> French has both the noun *respect* and its negative *dérespect* ‘disrespect’. Furthermore, French *-er*, like Haitian Creole *-e*, is a productive verbal suffix that can derive verbs from various classes of nouns. This entails that French morphology offers three possible, if not actual, ways in which *dérespecter* can be derived: from the noun *dérespect* ‘disrespect’ (as a denominal verb); from the verb *respecter* (as an inersive); and from the noun *respect* (as a privative, whose derivation I address below). The inersive derivation from *respecter* is perhaps excluded on the semantic grounds that inersive *dé-* does not attach to stative psychological predicates; witness the ungrammaticality of \**déconnaître* from *connaître* ‘to know’.<sup>17</sup> But that still leaves us with two other potential derivations for *dérespecter*. In this light, *dérespecter* is surely a possible, if not an actual, word in (contemporary) French; its unacceptability in certain dialects may be an arbitrary lexical gap of the familiar sort (on the nonstructural basis of such gaps, see, e.g., Aronoff [1976: 17–19] and, for a comprehensive review, Corbin [1987:36–83, 153–70]).

Whether or not seventeenth- and eighteenth-century French offered a direct model for Haitian Creole *derespekte*, that the latter is an actual Haitian Creole word is not at all unexpected, independently of substratum influence. Given that both Haitian Creole *de-* and *-e* are fully productive like their French etyma, and given that Haitian Creole has the nouns *respè* ‘respect’ and *derespè* ‘disrespect’, a Haitian Creole verb *derespekte*—as a (lexicalized) derivation from either of the nouns *respè* or *derespè*, if not from the verb *respekte* ‘to respect’—is a possible, and in this case an attested, Haitian Creole word whose ambiguous derivations match those of the possible, though perhaps not attested, French word *dérespecter* (but see n. 16). Below I return to privative *de-* and its affixation to denominal verbs whose nominal stem denotes the object of deprivation (also see n. 19).

What I will now proceed to show is that the details of Lefebvre’s morpho-syntactic and semantic analysis are erroneous and, as elsewhere, systematically designed to make Haitian Creole appear more Fongbè-like, and less French-like, than it actually is. Then I will show that, once a larger data set is taken into account, the semantics and distribution of Haitian Creole *de-* are actually quite

different from those of Fongbè *mà-* and much closer to French *dé-* (see DeGraff 2001a:78–81, 84). In particular, Haitian Creole *de-* manifests the kinds of semantic nuances (e.g., privative-ablative and emphatic) that are also relevant to the interpretation of French *dé-*, and seem not to apply at all to Fongbè *má*. These semantic contrasts have morphosyntactic correlates that also make Haitian Creole *de-* more similar to French *dé-* than to Fongbè *má*. All of these observations run straightforwardly against Lefebvre's predictions.

To begin with, let us reevaluate Lefebvre's analysis of Haitian Creole *de-* in *derespekte*. Actually, *derespekte* is a dynamic predicate with the English equivalent 'to show disrespect'. A Haitian Creole speaker would say that *X derespekte Y* only if some agent *X* has performed some action (e.g., a verbal insult or an act of desecration) that expresses overt disrespect for *Y*. As for *respekte*, it need not involve any overt action; the utterance *X respekte Y* only entails the existence of a psychological state whereby *X* has respect for *Y*. If the "inversive" function of *de-* is defined as "deriv[ing] new verbs which have a meaning opposite to that of the base form" (L:305), then *derespekte* is not the "inversive" of *respekte*. The closest (truth-conditional) "inversive" of *respekte* is expressed periphrastically with the clausal negation marker *pa* as in *Mari pa respekte Jan* 'Mary does not respect John', which is not truth-conditionally equivalent to *Mari derespekte Jan* 'Mary has shown disrespect (e.g., verbally insulted) John'. It is conceivable that *Mari pa respekte Jan* is true (because of, say, John's political affiliation) while *Mari derespekte Jan* is false (Mary has never been in any form of contact with John, and thus has never had the opportunity to overtly express her disrespect for John).

Furthermore, Damoiseau (1991:31–32) has correctly shown that *respekte* and *derespekte* have distinct thematic and aspectual properties: *derespekte* is a dynamic verb that takes an agentive subject while *respekte* is a stative (psychological) verb that assigns an experiencer thematic role to its subject (see n. 17 and DeGraff [2001a:78–82] for further discussion). No such thematic-cum-aspectual differences exist between *respekte* and *pa respekte*. This is as expected given the facts noted in the preceding paragraph.<sup>18</sup>

More generally, it would be quite inaccurate to posit that the semantics of Haitian Creole *de-* is the same as that of Fongbè *mà-*. The semantics of Haitian Creole *de-* are not exclusively "inversive." This seems unlike the situation for Fongbè *mà-*. In fact, as noted by Lefebvre herself (L:305–6), Haitian Creole *de-* can also have, in the appropriate context, a privative (ablative) interpretation. The morphosyntax of privative *de-* in Haitian Creole is unlike that of inversive *de-*. Whereas inversive *de-* yields a verb from a verbal stem, privative *de-* takes a nominal stem and yields a verb with the following word structure [<sub>v</sub> *de-* [<sub>v</sub> N-*e*]], where N-*e*, although a possible word, is not necessarily an actual word. This is also noted by Lefebvre. In Lefebvre's words, "This derivation yields privative meaning: to remove, or deprive of, the entity denoted by the nominal base" (L:306).<sup>19</sup>

Typical uses of privative *de-* in Haitian Creole are found, for instance, in *dekrase* ‘to remove dirt from’ (cf. the noun *kras* ‘dirt’) and *dezose* ‘to remove the bones from’ (cf. the noun *zo* ‘bone’). As it turns out, the French form *dé-*, the etymon for Haitian Creole *de-*, also has, alongside its inersive function, a privative function with a derivation similar to that of its Haitian Creole descendent, as in the French verbs *décrasser* ‘to remove dirt from’ (cf. the noun *crasse* ‘dirt’) and *désosser* ‘to remove the bones from’ (cf. the noun *os* ‘bone’). Furthermore, the Haitian Creole privative prefix *de-* is productive, just like French privative *dé-*. We find (apparent) Haitianisms such as *dechanse* ‘to remove luck, to bring bad luck’ (cf. *chans* ‘luck’), *degagannen* ‘to cut the throat of’ (cf. *gagann* ‘throat’), *depalete* ‘to remove from a goat, a pig, or a cow the shoulder(-blade) muscle called *palèt* (in Haitian Creole)’ and *dekreta* ‘to remove the crest’ (cf. *krèt* ‘crest’). And, as it turns out, the so-called “two-step . . . parasynthetic” analysis for Haitian Creole privative *de-* (L:306) is similar to the analysis of its French etymon (see, e.g., Corbin 1987:122–23, 252–53, 314, 472, 491, 557). The similarity in the privative function of Haitian Creole *de-* and French *dé-* is further illustrated in the Haitian Creole and French translations of the Ewe items in (1a)–(1e) below, where we can clearly see the contrast in the expression of privative in Haitian Creole and French on one hand versus Gbe on the other hand.

Since Haitian Creole *de-* can function as either inersive or privative, cases of ambiguity are expected (as with its French etymon *dé-*; see, e.g., Corbin 1987: 252–53). One such case in Haitian Creole is *degrese*, which can be interpreted either as an intransitive inersive verb that means ‘to lose weight’ (cf. *grese* ‘to gain weight’) or as a transitive privative verb that means ‘to remove fat, grease’ (cf. *grès* ‘fat, grease’). As Chaudenson (1996b:27–28) points out, seventeenth-century French *dégraisser* shows a similar ambiguity. This seems to be a clear case where an instance of Haitian Creole morphological derivation parallels the phonetics, the morphosyntax and the (subtle) semantics of its seventeenth-century French counterpart, contra Lefebvre’s predictions (see DeGraff [2001a: 80]; also see Fattier [1998] and Valdman [2000] for additional case studies).

Do Gbe languages follow Haitian Creole and French in expressing the privative with an affix that is homophonous to the inersive prefix? Lefebvre does not tell us whether the inersive Fongbè prefix *mà-* lends itself to an additional privative interpretation in the relevant contexts. If not, then this is yet another case where Haitian Creole and Fongbè affixes are not in one-to-one correspondence.

Given the limited evidence that I was able to examine from Rassinoux’s (1974) French-Ewe dictionary, Rongier’s (1995) French-Ewe dictionary, and Segurolo and Rassinoux’s (2000) Fongbè-French dictionary, it seems that Gbe *mà*, unlike Haitian Creole *de-* and French *dé*, does not have a privative function. As far as I can tell, morphologically complex privative verbs in both Haitian Creole and French typically have periphrastic equivalents in Gbe, alongside words like Ewe *hò* ‘to uproot’ that do not show any overt privative morpheme (cf.



Haitian Creole *derasinen*, French *déraciner* ‘to uproot’, from Haitian Creole *rasin*, French *racine* ‘root’) In (1a)–(1e), Haitian Creole *de*-V and French *dé*-V privative verbs are translated into Ewe through periphrasis, using the verb *dè* ‘to remove, to take off’.<sup>20</sup>

- (1a) *dè àgbà lè...mè* (Ewe)  
 remove charge be in  
 ‘unload’ (Rongier 1995:106)  
 (cf. Haitian Creole *dechanje* from *chaj*, French *décharger*, from *charge*)
- (1b) *dè ... dò gó* (Ewe)  
 remove go.out outside  
 ‘to leave home, to evict’ (Rongier 1995:113)  
 (cf. Haitian Creole *deloje* ‘to dislodge’ from *lòj*, French *déloger* from *loge*)
- (1c) *dè mòxévò* (Ewe)  
 remove mask  
 ‘to unmask’ (Rongier 1995:114)  
 (cf. Haitian Creole *demaske* from *mask*, French *démasquer* from *masque*)
- (1d) *dè àtò* (Ewe)  
 remove nest  
 ‘to discover, to unearth’ (Rongier 1995:115)  
 (cf. Haitian Creole *deniche* from *nich* ‘nest’, French *dénicher* from *niche*)
- (1e) *dè ... lè...tèfè* (Ewe)  
 remove be place.of  
 ‘to displace’ (Rongier 1995:117)  
 (cf. Haitian Creole *deplase* from *plas*, French *déplacer* from *place*)

Fongbè offers similar examples of periphrastic privatives, such as that in (2).

- (2) *dè hùnjén* (Fongbè)  
 remove nail  
 ‘to remove nail’ (Rassinoux 1974:92)  
 (cf. Haitian Creole *dekloue* from *klou* ‘nail’, French *déclouer* from *clou*)

It thus appears that Gbe *mà*-, unlike both Haitian Creole *de*- and French *dé*, is exclusively inersive and does not allow the privative interpretation.

As I have discussed elsewhere (DeGraff 2001a:78–81), there are other challenges to the claim that Haitian Creole *de*-, modulo its phonetic label, equals the Fongbè inersive suffix *mà*-. One such additional challenge is the fact that Haitian Creole *de*-, in addition to its inersive and privative uses, also has what can be dubbed an “intensifying” function. Examples include *demegri* ‘to lose lots of weight’ (cf. *megri* ‘to lose weight’); *depale* ‘to ramble’ (cf. *pale* ‘to speak’); *deperi* ‘to waste away’ (cf. *peri* ‘to perish’); *derefize* ‘to refuse emphatically’ (cf. *refize* ‘to refuse’); *devide* ‘to empty out’ (cf. *vide* ‘to empty’). A somewhat similar intensi-

fying function also exists for French *dé-*, as in the French etyma *démaigrir*, *déparler*, *dépérir*, and *dévider* (see, e.g., Corbin 1987:148, 248–49). As noted by Corbin (1987:248–49, 560 n. 63), “intensive” as a label for the function of *de-* in *démaigrir* and similar words is actually an atheoretical cover term for a variety of aspect-related modifications.<sup>21</sup> As far as I can tell, this aspectual function of Haitian Creole *de-* and French *dé*, just like the privative function of these two etymologically related forms, is not documented for Fongbè *mà-*, contrary to the predictions of the Strict Relexification Hypothesis.

To round off this step of our ongoing global comparison, we may note that a careful inspection of the entries in Freeman and Laguerre’s (1998) dictionary suggests that the inversive use of Haitian Creole *de-* is not the most common. In addition to its inversive, privative, and emphatic functions, many other uses of Haitian Creole *de-* are part of now-lexicalized neologisms (Haitianisms) with apparently unpredictable semantics. Interestingly, a large number of the various interpretations of Haitian Creole *de-*, although by no means all, have (seventeenth- or eighteenth-century) French parallels with quite similar morphosyntax and semantics. Such a range of facts disconfirms the claim that its combinatorics and semantics makes Haitian Creole *de-* identical to Fongbè *mà-* modulo the former’s French-derived phonetic label.

**3.1.4. Suffixes for inhabitant names in Haitian Creole, French and Fongbè.** Lefebvre claims that Haitian Creole has only two affixes for the derivation, of inhabitant names or nouns of origins (“gentilés” in the French onomastic tradition; see, e.g., Eggert, Maurel, and Belkil 1998) from place names (toponyms). The two gentilé-forming affixes in Lefebvre’s scenario are *-wa* as in *Senmakwa* ‘someone who lives in, or is from, Saint-Marc’ (cf. Haitian Creole *Senmak*) and *-yen*, as in *Jakmelyen* ‘someone who lives in, or is from, Jacmel’ (cf. Haitian Creole *Jakmèl*) (L:310, 314; here too Lefebvre cites “Brousseau p.c.” [L:310] without further documentation). This situation is taken by Lefebvre as support for the Strict Relexification Hypothesis: “It is a remarkable fact that, in both [Haitian Creole] and Fongbè, there are exactly two suffixes referring to a place of origin/residence” (L:321), namely, Fongbè *-tò* and *-nù*; “there is a one-to-one correspondence between the [Haitian Creole] and Fongbè . . . place of origin affixes” (L:324, 420 n. 9).

It must first be noted that the preceding statement seems quite astonishing when one considers the history of toponyms and gentilés in (colonial) Haiti and elsewhere. Throughout Haitian history, many Haitian toponyms and their morphologically complex gentilés have been deliberately created by the ruling élites (e.g., municipal councils, mayors, and other civil servants), all of whom spoke French, alongside the local creole variety and perhaps other languages (see section 4.2 for a sociohistorical sketch). It thus seems surprising that the morphology of Haitian Creole gentilés is claimed to be isomorphic to the morphological system of Fongbè gentilés, due to relexification by substrate speakers.

This claim is all the more surprising given that many Haitian toponyms have French models and that all Haitian Creole gentilé-making suffixes have French etyma, and considering that the majority of the ruling élites would have been unfamiliar with Fongbè morphology and most familiar, and most admiring of, French language and culture, including French onomastic traditions.

This said, let us assume, with Lefebvre and strictly for the sake of argument, that Haitian Creole's structural means for deriving gentilés from toponyms can teach us something interesting about Haitian Creole morphology and its development. Here too, it can be shown that Lefebvre's structural claims are as inadequate as her (implicit) sociohistorical presuppositions. She ignores four crucial pieces of evidence regarding Haitian Creole place-of-origin suffixes and their alleged Fongbè sources. The first two facts are documented in such works as Freeman (1989), which is cited by Lefebvre.

First, there is, at least, a third inhabitant-name suffix in Haitian Creole, one that is not mentioned in Lefebvre: *-è* as in *Kavayonè* (cf. *Kavayon*), *Leyoganè* (cf. *Leyogàn*) and *Miragwanè* (cf. *Miragwàn*). Haitian Creole *-è*, like the other inhabitant-name suffixes, has a French etymon—in this case *-ais* as in *Martiniquais* (cf. *Martinique*). Given simple arithmetic, this third inhabitant-name suffix in Haitian Creole could not be in “one-to-one correspondence” with either of the two inhabitant-name suffixes in Fongbè, pace Lefebvre.

Second, certain inhabitant names in Haitian Creole may take inflection for natural gender, e.g., *Ayisyen* ‘Haitian (masculine)’ vs. *Ayisyèn* ‘Haitian (feminine)’. Such gender inflection is productive: *Jakmelyen/Jakmelyèn*, *Jeremyen/Jeremyèn*, *Kanadyen/Kanadyèn*, *Pòtoprensyen/Pòtoprensyèn*, etc. This inflectional paradigm and its abstract (morphosyntactic and semantic) properties, although not identical to those of its French counterpart, were inherited from French (cf. French *Haïtien* vs. *Haïtienne*); see DeGraff (2001a:73–74) for further details. Fongbè, unlike Haitian Creole, evinces no gender marking on its gentilés.

Third, morphologically complex gentilés in Haitian Creole have widespread periphrastic equivalents. The latter follow the schema *moun X* ‘person X’. In my own experience and that of other native speakers (e.g., Yves Dejean p.c. 2002), the periphrastic variant often seems more popular than the synthetic one, especially among monolingual speakers, and in many cases the periphrastic variant seems the only alternative, as in *moun Boudon*, *moun Bwa-Kayiman*, *moun Dèlma*, *moun Fò-Jak*, *moun Fisi*, *moun Gresye*, *moun Lili*, *moun Marigo*, *moun Monwi*, *moun Pò-a-Piman*, *moun Ponsonde*, *moun Saltrou*, *moun Segen*, *moun Tomazo*, *moun Vyalè*, and so on. These gentilés have no (readily available) synthetic equivalents. No such restrictions are reported in the description of Fongbè gentilés in Anonymous (1983:7.10).<sup>22</sup>

Fourth, and lastly, even if Haitian Creole had exactly two place-of-origin suffixes, they could not be in one-to-one correspondence with Fongbè place-of-origin suffixes for the following reason. Although Fongbè does have two place-

of-origin suffixes, as noted by Lefebvre, what Lefebvre fails to note is that the respective distribution of these two Fongbè suffixes depends on the details of their respective Fongbè-specific phonotactics: the suffix *-nù* (e.g., in *Glèxwé-nù* from *Glèxwé* ‘Ouidah’) seems to be the unmarked gentilé-making suffix, while the other suffix, *-tò*, is used when the place name already ends in *nu*, as in *Kútònu-tò* (from *Kútònu* ‘Cotonou’) and *Xogbónú-tò* (from *Xogbónú* ‘Portonovo’) (Anonymous 1983:7.10). Since the phonological shapes of the Haitian Creole place-of-origin suffixes are derived from French, and not from Fongbè, the phonotactic constraints on Fongbè place-of-origin suffixes could not have been transmitted to Haitian Creole.

Instead of the “one-to-one correspondence between the [Haitian Creole] and Fongbè . . . place of origin affixes” postulated by Lefebvre (1998:324, 420 n. 9), what we find is as follows. At first approximation, and not surprisingly so, the derivation of Haitian Creole gentilés with the three aforementioned suffixes (*-yen/-yèn*, *-waz/-waz*, *-è/-èz*) by and large follows the structural tendencies that have been documented for French (see, e.g., Eggert, Maurel, and Belleil 1998:119–20), modulo the aforementioned periphrastic and suppletive cases. It is also not accidental, and neither is it a result of relexification, that it is the three most productive inhabitant-name suffixes of French—namely, *-ien/-ienne*, *-ois/-oise* and *-ais/-aise* (Eggert, Maurel, and Belleil 1998:114; Denis Maurel p.c. 2002)—that have been inherited into Haitian Creole. Obviously the creators of Haitian Creole, like language learners everywhere else (see, e.g., n. 13 and Lowie 2000), were sensitive to frequency effects in superstrate (target) primary linguistic data, and extracted the most productive or most frequent inhabitant-name affixes from the said primary linguistic data.<sup>23</sup> Lastly, both the Haitian Creole and the French toponym-gentilé systems show morphological irregularities (i.e., gaps and suppletion) that, as far as I can tell, do not appear to exist in the (quasi)regular Fongbè system that is described in Anonymous (1983).

**3.1.5. The morphology: recapitulation.** In the spirit of our ongoing global comparison, it must be concluded that the bulk of Haitian Creole affixes, only some of which have Fongbè analogues, is etymologically and structurally related to (seventeenth- and eighteenth-century) French. These affixes have, of course, been restructured and reinterpreted as they have become an integral part of the idiolects of the vast majority of Haitian Creole speakers who, by now, have little, if any, contact with French. Such restructuring of French morphological input was surely influenced, especially at the peak of the colonial slave trade, by the substrate speakers’ native Niger-Congo languages via repeated instances of second-language acquisition by newly arrived African learners in Saint-Domingue. The (fossilized) interlanguages in these iterative instances of second-language acquisition did provide part of the primary linguistic data for generations of creole speakers in colonial Haiti.

Notwithstanding robust evidence for substrate influence in Haitian Creole's genesis, the crucial point to bear in mind is that many Haitian Creole affixes show no isomorphism to the substrate affixes that Lefebvre presents (L:318–33). In fact, most of the Haitian Creole affixes discussed here and by Fattier (1998) and by DeGraff (1999d, 2001a) have been left out of Lefebvre's discussion. Be that as it may, the alleged "one-to-one correspondence between the [Fongbè] and [Haitian Creole] affixes" (L:321, 324, 333) that Lefebvre finds "striking" (L:192, 321) and "remarkable" (L:321), etc., now seems rather illusory. Given the data available to us, two things can be said with relative certainty: Haitian Creole morphology is not at all parallel to Fongbè morphology and Haitian Creole morphology offers many more structural correspondences with French morphology than the Strict Relexification Hypothesis would allow.

### 3.2. A global comparison of lexica.

**3.2.1. Empirical challenges.** When we focus on lexemes—the largest and most unpredictable component of any language—it is a striking and incontrovertible fact that the Haitian Creole lexicon extensively and systematically shares arbitrary features (phonological, morphological, and semantic) with the French lexicon. The overwhelming majority of Haitian Creole morphemes, including affixes like those in section 3.1, are etymologically derived from French, with recurrent structural and interpretive overlap and with systematic sound correspondences, to an extent that renders suspect any postulation of a one-to-one correspondence between Haitian Creole and Fongbè affixes.

Of course, the Haitian Creole lexicon is not isomorphic to that of French, and neither are the lexica of twenty-first-century French (or Fongbè or English or . . .) dialects isomorphic to their seventeenth- and eighteenth-century counterparts. One sort of difference between Haitian Creole and French implicates the phonetic shapes of words. There exist a number of mismatches that illustrate missegmentation of French words by the creators of Haitian Creole. These mismatches implicate Haitian Creole words whose phonetic labels do not line up with those of the corresponding French words. Examples of missegmentation include cases of so-called determiner agglutination as in Haitian Creole *lari a* 'the street' (lit., 'street the'). In this case, "agglutination" refers to a process of morphological reanalysis whereby the form of the French definite determiner *la* in *la rue* 'the street' and the form of the French noun *rue* became fused as the form for the (determinerless) noun *lari* 'street' in the grammars of early Haitian Creole speakers. Another well-known example of such morphological reanalysis—whereby separate (unbound) morphemes in some target language are reanalyzed, or "fused," by the learner as one single lexical item—is the monomorphemic Haitian Creole *dlo* 'water', whose French etymon *de l'eau* (lit., 'of/PARTITIVE the water') is trimorphemic.<sup>24</sup>

Lefebvre provides a few of these examples, including Haitian Creole *larivyè*

'river' (cf. French *la rivière* 'the river'); Haitian Creole *lakay* 'house' (cf. French *la case* 'the house'); Haitian Creole *listwa* 'history' (cf. French *l'histoire* 'the history'); Haitian Creole *latè* (cf. French *la terre* 'the earth') (L:64, 81).<sup>25</sup> Elsewhere, she claims that "there are numerous examples in the literature showing that a phonetic string [from the lexifier language] used to relabel a copied lexical entry [from the substrate language] does not necessarily correspond to a word in the lexifier language" (L:17).

Actually, in the case of Haitian Creole, there are relatively few arbitrary mismatches between the phonetic signals of creole words and those of their superstrate etyma. What we do find, and systematically so, are regular phonological changes influenced by the phonological structure of the native substrate languages as L1s in the second-language acquisition of French in the colonial period (cf. L:17, 400–401). This is reminiscent of the so-called foreign accent effects that are familiar in nonnative speech. In the Caribbean colonial case, the end result of such "foreign accent" is a creole phonological system with regular correspondences vis-à-vis its superstrate. In comparing the phonology of French and Haitian Creole, Tinelli (1970:119) offers "evidence for the superficial and deep-structural relatedness of Haitian and French phonologies":

[Haitian Creole] and French phonologies have been sharing some aspects of the same general (Northern Romance) drift; they undergo some strikingly similar types of changes, although with different superficial results, and at different rates. [Tinelli 1970: abstract]

Going beyond the phonology, Fattier's (1998) six-volume dissertation provides a global and detailed comparison of the Haitian Creole and French lexica in a variety of semantic domains. Her results by and large are beyond dispute, in terms of both quality and quantity. The Haitian Creole lexicon is massively derived from seventeenth- and eighteenth-century French; for the most part, Haitian Creole words approximate both the lexical semantics and the phonetic labels of French words, modulo the phonological changes noted, for instance, by Tinelli (1970) and the aforementioned cases of morphological reanalysis. If "the real test [of relexification] involves a global comparison of the lexicons of these languages" (L:48) and if "the test must be based on quantity as well as quality" (L:48), then the above global comparison and the ones in Tinelli and Fattier robustly disconfirm the prediction of the Strict Relexification Hypothesis that "[Haitian Creole] lexical entries . . . derive their phonological representation from phonetic matrices found in the superstratum language and their semantic and syntactic properties from the substratum lexical entries" (L:72).

**3.2.2. Conceptual challenges.** In addition to the empirical challenge posed by the above observations, the fact that Haitian Creole words, more often than not, have straightforward French etyma poses an acute conceptual challenge to the Strict Relexification Hypothesis. The systematicity of Haitian Creole-French

phonological and etymological correspondences suggests that the relexifiers in Lefebvre's scenario—namely, substrate speakers with “very limited access to the superstrate data” (L:386) and with no use for “abstract” (e.g., phonological, morphosyntactic and semantic) information about the superstrate language (L:16)—were somehow able to systematically segment superstrate speech samples into identifiable and useful phonetic chunks while restructuring superstrate phonology. In turn, superstrate-derived phonetic chunks were successfully used for the wholesale relabeling of entire substrate lexica, from major-category lexical items (e.g., nouns, verbs, preposition, adjectives, adverbs) to functional-category lexical items (e.g., determiners, demonstratives, complementizers, *wh*-words, tense-mood-aspect markers), even derivational affixes (see section 3.1). As Lefebvre reminds us, “affixes do not present themselves as isolated entities since they are bound morphemes” (L:333). And the same can be said of functional morphemes, many of which are morphophonologically, syntactically, or semantically dependent on some host. Furthermore, functional heads are relational, thus structure-dependent, morphemes par excellence; unlike major-category (i.e., “content”) morphemes, they do not introduce any thematic or lexical content (this is an important point, to which I return in section 3.3). The problem is actually quite general:

Whatever the style of [adult-direct] speech, words in isolation occur only rarely—nearly all utterances are multi-word. . . . Words are strongly affected by the contexts in which they occur; moreover, these contextual assimilation processes operate to obscure word boundaries, with the result that there are few reliable cues in . . . continuous speech [to] signal where one word ends and the next begins. [Cutler 1994:83]

Yet, French-derived affixes, French-derived functional words, and French-derived content words constitute the bulk of the Haitian Creole lexicon, notwithstanding the alleged “very limited access” to French during Haitian Creole's genesis.

For now, let us ask the obvious: How could the creole creators manage to successfully segment so many French lexemes—including affixes and functional items—in all semantic fields, if they could not access and could not manipulate any of the abstract (morphophonological, syntactic, and semantic) properties that underlie French phonetic strings? (But see n. 13.) As anyone knows who remembers hearing a foreign language for the first time, it is impossible for a language learner to systematically segment words in fluent foreign speech in the complete absence of abstract information about that foreign language, including information about its phonological, prosodic, distributional, and grammatical properties (see, e.g., Cutler 1994; Jusczyk 1997). Segmentation of phonetic strings is impossible without analysis; the learner must postulate abstract hypotheses with necessarily abstract representations in order to eventually relate the complex acoustic signal to meaningful linguistic units and the structure they enter.

Given Lefebvre's sociolinguistic assumptions about relexifiers' "very limited access" to the superstrate language, the word-segmentation task faced by the creators of Haitian Creole in the Strict Relexification Hypothesis scenario was not a small one, yet it was solved rather successfully, and surprisingly so. Most of Haitian Creole's French-derived "phonetic labels" can be lined up with French morpheme boundaries, including French affix boundaries, at a rate much greater than chance. At this point, the critical reader might be wondering how the creators of Haitian Creole could accomplish such a cognitive feat within the drastic limitations imposed by the Strict Relexification Hypothesis.

One could try and explain such success by claiming that the creators of Haitian Creole benefited from language lessons by French speakers who would pronounce target words in isolation while displaying their referents (this Lockean approach to word learning is not part of Lefebvre's proposal; actually she does not address the paradox sketched in the preceding paragraph). Ostension would allow the relexifier to use as relexification labels the phonetic strings associated with the target words pronounced in isolation. Ostensive definitions are one way in which superstrate words would be used in very "specific pragmatic and semantic contexts" (cf. L:36–37).

This scenario is unlikely, though; by and large, the slaves were not taught language in any formal sense, except perhaps for the brief "seasoning" sessions that more experienced slaves would administer to freshly arrived slave imports (the "bozals") (see Chaudenson 1992:87–91; Chaudenson and Mufwene 2001: 89–92; also see section 4.2 below).

Although the teaching of French words by Lockean ostension may, with some imagination, have worked for "the names of simple ideas or substances," including concrete nouns like *table* (cf. Haitian Creole *tab*) and *chaise* (cf. Haitian Creole *chèz*), such teaching would have been considerably more difficult for French nouns like *amour* 'love' (cf. Haitian Creole *lanmou*)<sup>26</sup> and *envie* (cf. Haitian Creole *anvi*), and hardly imaginable for French verbs like *penser* 'to think' (cf. Haitian Creole *panse*), *réfléchir* 'to reflect, to think' (cf. Haitian Creole *reflechi*), *connaître* 'to know' (cf. Haitian Creole *konnen*), *comprendre* 'to understand' (cf. Haitian Creole *konprann*), *espérer* 'to hope' (cf. Haitian Creole *espere*), *supposer* 'to suppose' (cf. Haitian Creole *sipoze*), *calculer* 'to calculate' (cf. Haitian Creole *kalkile*), *caresser* 'to caress' (cf. Haitian Creole *karese*), etc. (See Gleitman [1994:188] for related issues in language acquisition outside of creolization.) In the same vein, consider the case of Haitian Creole grammatical morphemes such as the aspect marker *ap* 'progressive' from French *après* (used in periphrastic progressive constructions in seventeenth- and eighteenth-century French varieties, as well as in some contemporary regional dialects). (For more extensive discussion of this and other tense-mood-aspect markers, see, e.g. Gougenheim 1929:120; Sylvain 1936:79–105, 136–39; Chaudenson 1992:162–67; Chaudenson and Mufwene 2001:177–82; Fattier 1998:863–88; DeGraff forthcoming a.)



The above French etyma go beyond “the names of simple ideas or substances” that Locke (1959:108) believed could be learned by mere ostension. As argued more generally by Gleitman (1994), for example, Lockean ostension—“word-to-world pairings”—cannot solve the word-learning problem (see Bloom [2000: chaps. 2, 11] for a recent survey of the relevant literature and the debate therein).

From the perspective of global comparison, ostensive definitions of French words in isolation could not explain the wide range of French etyma for Haitian Creole lexemes. As painstakingly documented by Fattier (1998), nearly all semantic fields in Haitian Creole display words that have systematic (phonetic and semantic) connections with French etyma. These Haitian Creole words with French etyma belong to nearly all imaginable domains of Caribbean life: numbers (see section 3.1.2), space and time, weather, home, furniture, household activities, kitchen utensils, tools, animals, food, drink, clothing, health, cognition, and illnesses, body parts, etc. Fattier’s (1998) dialect atlas provides an extensive list of etymologies, some of which go back to seventeenth- and eighteenth-century dialectal varieties of French. Such a list raises enormous (and unaddressed) difficulties for the claim that Haitian Creole was in the main created by adults with extremely reduced contact with French. This conceptual problem and the challenges it poses for our current knowledge about language acquisition will preoccupy me through much of the rest of this article.

Given the limitations postulated by the Strict Relexification Hypothesis, how did the creators of Haitian Creole solve the acute problem posed by the need to relexify its entire native lexicon, including functional morphemes, psychological predicates, and abstract nouns, all of which Lefebvre considers relexifiable even though they all lack concrete referents that can be pointed to?

The insoluble word-segmentation puzzle faced by Lefebvre’s hypothetical learner in the Strict Relexification Hypothesis scenario is compounded by another insoluble problem. Imagine the relexifier who is looking for some target phonetic string to relabel some substrate lexeme. How would such a second-language learner with overly restricted input choose a suitably “matching” string from fluent target speech, to which said learner has, by hypothesis, “very limited access”? In Lefebvre’s scenario, one crucial cue for matching a substrate lexeme to the appropriate phonetic string in superstrate speech is the perception of a potential substrate-superstrate overlap between the specific semantic and pragmatic contexts or between some semantic and distributional properties (L:17, 37, 378). Phonological similarity between substrate and superstrate phonetic labels (“phonological conflation”) serves as another cue for the relexification of functional items. Lefebvre remains vague as to which semantic, pragmatic, distributional, and phonological features are taken into account in computing the perception of overlap between substrate lexeme and superstrate phonetic string. So we are not told exactly how the substrate speaker computes the relevant abstract properties of superstrate speech that will allow him or her

to proceed with relexification. Note that deducing appropriate meanings from target utterances is no small problem, even in unproblematic run-of-the-mill cases of first-language acquisition with unrestricted access to primary linguistic data (see, e.g., Gleitman 1994; Pinker 1994; Jusczyk 1997; Bloom 2000).

Let us call this matching of abstract properties related to (the use of) substrate and superstrate elements the “matching problem.” The basic claims of the Strict Relexification Hypothesis, laid out in sections 1 and 2.2 above, entail that the matching problem is repeatedly solved while the relexifier consistently ignores or discards all morphosyntactic and semantic properties that may be associated with superstrate phonetic strings. In other words, the Strict Relexification Hypothesis entails that the building of creole lexical entries proceeds independently of superstrate-derived morphosyntax and semantics.

Here is one paradox with the above scenario—a paradox similar to the aforementioned segmentation puzzle posed by the Strict Relexification Hypothesis. As Lila Gleitman is fond of saying (and as psycholinguists and philosophers of language are well aware), “A picture is worth a thousand words, but that’s the problem!” (also see Gleitman 1994:184). Matching L1 (substrate) lexemes across the entire L1 lexicon to L2 (superstrate) phonetic strings via semantic and pragmatic overlap is nearly impossible with no prior information about L2 grammar (i.e., L2 phonology, lexicon, morphosyntax, and semantics). To solve the matching problem, some sort of grammatical bootstraps would be required, along with the semantic, pragmatic, distributional, and phonological bootstraps posited by Lefebvre. Aligning the phonetic strings of specific L2 morphemes to their “use in specific semantic and pragmatic contexts” (L:17) and evaluating potential overlap between the respective “semantic and distributional properties” (L:378) of L1 and L2 lexemes cannot happen without simultaneous access to, and simultaneous elaboration of, hypotheses about L2’s abstract (lexical, morphosyntactic, and semantic) representations. The matching problem of the Strict Relexification Hypothesis is similar to its segmentation problem, inasmuch as the solution to both problems requires abstract analysis of target speech, analysis of the sort that the Strict Relexification Hypothesis aprioristically rules out.

In this vein, consider the details of how the creole creator is claimed to relexify major-category lexemes from his native (substrate) language:

For major category lexical entries, an appropriate form in the superstratum language is a phonetic string which shares some meaning with the corresponding lexical entry in the copied lexicon. The meaning of the superstratum form is assumed to be deduced from its occurrence in semantic and pragmatic contexts. [L:37]

How can “a phonetic string . . . [share] some meaning with the corresponding lexical entry in the copied lexicon”? Phonetic strings per se do not carry meanings. What carry meanings are the mental representations (e.g., lexical entries)

labeled by particular phonetic strings. So it must be assumed that somehow the substrate speaker can construct mental (e.g., semantic) representations associated with superstrate phonetic strings. How is this done? By “deduc[ing meaning] from the [phonetic string’s] occurrence in semantic and pragmatic contexts.” So the Strict Relexification Hypothesis does assume, after all, that the substrate speaker, although with “very limited exposure to the superstratum data” (L:386) assigns certain abstract (e.g., semantic) properties to target superstrate strings that are, in turn, analyzed into linguistically relevant elements. If the substrate speaker qua language learner goes to such length to construct abstract knowledge about the superstrate language, then it seems implausible to also claim that said language learner would not use that abstract information in creating his or her interlanguage. After all, the goal of the creole creator qua language learner, like that of language learners everywhere, is to attain some competence in the target language.

What else besides semantics and pragmatic contexts would be necessary to allow the creole creator to successfully relexify the substrate lexicon? In her paper on “The Structural Sources of Verb Meanings,” Lila Gleitman argues that structural information is especially needed for the identification of psychological predicates and for discriminating among verb pairs such as *chase/flee* and *buy/sell* “whose real-world contingencies do not differ” (1994:190). In such cases, “the syntax acts [for the learner] as a kind of mental zoom lens for fixing on just the interpretation, among these possible ones, that the speaker is expressing” (p. 201) and “observed syntactic structures [can be used] as evidence for deducing the meaning” (p. 201). Subcategorization frames constitute one kind of syntactic cue that works as “a very powerful predictor of the semantic partitioning [among verbs]” (p. 201). More cautiously, Bloom considers the possibility that “syntax is an important informational source as to the meanings of words, one that works in concert with information obtain from other inferential mechanisms” (2000:212).<sup>27</sup>

With such considerations in mind, one can surmise that the perception of distributional, pragmatic, and semantic overlaps between substrate and superstrate lexemes, which is a prerequisite to relexification as hypothesized by Lefebvre, would need to be bootstrapped by some insight into, and reliance on, abstract cues about target morphosyntax and semantics. For example, how would a substrate speaker start examining the distribution of the French affixes *-ion*, *-ièm*, *-e*, *-man*, etc., without some basic understanding of French morphology and French lexical classes? (See n. 13.)<sup>28</sup> The evidence surveyed in this essay (see, e.g., sections 3.1–3.2.1 above and section 3.3 below) tells us that target abstract representations were not only accessible to the first (proto-) creole speakers, but that they actually played a key structural role in the make-up of early Haitian Creole and its descendants.

Furthermore, the etymological profile of the Haitian Creole lexicon forces us to ask pointed sociological questions about the creators of Haitian Creole and the

nature of their contact with French speakers. Besides psychological predicates, all sorts of Haitian Creole words have French etyma, even words that seem quite unlikely to be heard at all by “substrate speakers [with] very limited access to the superstratum data” (L:386). Unsurprisingly, given its massively French-derived component, the Haitian Creole lexicon, includes French-derived terms for intimate body parts, sexual practices, romantic notions, and so on. Such terms can be found in the earliest available records on creole varieties in Saint-Domingue. Could such lexemes be introduced into Haitian Creole by speakers with reduced contact with (any variety of) French?

Among Haitian Creole’s creators, there must have been speakers with rather intimate contact (pun intended!) with speakers of French varieties; and among Haitian Creole speakers in the colonial period we also find fluent and literate French speakers such as the circa-1760 author of the love poem “*Lisette quitté la plaine*,” which Moreau de Saint-Méry (1958:81) attributes to a certain Duvivier de la Mahautière. Imagine the sort of interactions in colonial Haiti in which the meanings of French words like *amour* ‘love’ and *caresser* ‘to caress’ (cf. Haitian Creole *lanmou* and *karese*) could be “deduced . . . from [their] use in specific semantic and pragmatic contexts” (L:16–17). Whoever introduced such words, and many others like them, into the Haitian Creole lexicon did have more than casual contact with speakers of French.

Once the likely social context is imagined in all its complexity and variety (see section 4.2), we may better understand the (relative) successes of those speakers of Proto-Haitian Creole who segmented so many French morphemes, including affixes, in such a way that the phonetic labels of most Haitian Creole morphemes correspond to (approximations of) French morphemes whose morphosyntax and semantics overlap substantially with that of their Haitian Creole counterparts. The sociohistorical matrix that is key to creole genesis cannot be the one imagined by Lefebvre—the one where “substrate speakers have very limited access to superstratum data” (L:386) and where “relexifiers either do not have access to [abstract] information [about the superstrate language] or, if they do, they do not use it in creating the new lexical entry” (L:17).

Given the facts sketched above, Lefebvre’s comment that “direct borrowing of [French] affixes [into early Haitian Creole] is unlikely because affixes do not present themselves as isolated entities since they are bound morphemes” (L: 333) would not apply to the speakers of (Proto-)Haitian Creole. Pace Lefebvre and other substratists (e.g., Alleyne 1980:29–30), the creators of Haitian Creole were not “borrowing” French affixes—nor were they “borrowing” French content words such as *chaise* (cf. Haitian Creole *chèz*)—into some distinctly un-French (inter)language with Kwa lexicon, Kwa syntax, Kwa semantics, etc. Like language learners everywhere else, the first speakers of (Proto-) Haitian Creole created their grammars using all the primary linguistic data they could access from their linguistic ecology (contingent on their respective sociohistorical conditions) and all the cognitive mechanisms provided by their language acquisition

device (the latter is presumably a species-uniform property of *Homo sapiens*, thus independent of sociohistorical context). Such universal cognitive mechanisms surely include the ability to recognize, and extrapolate, abstract mental representations (e.g., word boundaries, affixes, interpretive rules) from recurrent patterns in the primary linguistic data.

**3.3. Word order and functional heads: empirical and theoretical challenges.** Recall that the Strict Relexification Hypothesis applies to the entire lexicon and the entire grammar of the adult substrate speaker who, by hypothesis, tries but systematically fails to acquire any structural aspect of the superstrate language.

By definition, lexical entries produced by relexification have the semantic and syntactic properties of those in the original [substrate] lexicons; they differ from the original [substrate] entries only in their phonological representations. [L:18]

Relexification . . . should apply to all types of lexical entries. . . . Relexification may, in principle, apply to minor [i.e., functional] as well as major category lexical entries. [L:18]

In creole genesis, both minor and major category lexical entries undergo relexification. . . . [L:36]

By hypothesis, then, the parametric values and concomitant morphosyntactic properties of both major and minor lexical categories remain invariant across the substrate languages and the corresponding second-language acquisition interlanguages that emerge through relexification at the onset of creole genesis. Yet it is also hypothesized that creole word-order patterns do discriminate between major-category and minor-category lexical classes.

As regards the distribution of major lexical categories (e.g., verbs, nouns, adjectives, prepositions, adverbs), the Strict Relexification Hypothesis accepts, as a principle, that Haitian Creole has adopted French word order, thus allowing for widespread word order discrepancies between Haitian Creole and its substratum (L:39, 388). This is spelled out as follows:

Because the creators of the creole are aiming to reproduce the superstratum sequences they are exposed to and, since they are able to identify the major category lexical entries, the word order of major category lexical items and major constituents in the creole will follow that of the lexifier language. [L:388]

They acquire the directionality properties of the superstratum major category lexical items. [L:39]

And here is what the Strict Relexification Hypothesis predicts about the word order of functional categories:

Because the creolisers do not have enough exposure to the superstratum language, they cannot identify its functional category lexical items; when they relexify the functional category lexical entries of their native lexicons, they keep the original [i.e., the corresponding substrate's] directionality properties. [L:388]

The creators of the creole retain the directionality properties of the functional category lexical entries of their own [i.e., the corresponding substrate's] lexicon in relexification. [L:40]

In the Strict Relexification Hypothesis, because major categories are more easily identifiable than minor categories, their directionality properties, unlike those of minor categories, are considered to be immune to relexification. This built-in caveat creates a number of substantive and theoretical paradoxes that, in the final analysis, render the Strict Relexification Hypothesis internally inconsistent and empirically untenable.

**3.3.1. Theory-internal inconsistencies.** Lefebvre makes the following theoretical assumption about the ontology of word-order properties: "Heads in particular languages are marked for the directionality properties of their specifier, modifier(s) and complements" (L:39). This means that word-order patterns reflect abstract directionality properties that are encoded in lexical heads; word order is not strictly a phonetic phenomenon. As just defined, the properties that determine word order (be it in major-category or minor-category domains) belong to the set of abstract properties that, in principle, can be carried through relexification from the substratum into the creole, along with other grammatical features (cf. L:40). In light of Lefebvre's additional claim that creators of a creole "acquire the directionality properties of the superstratum major category lexical items" (L:39), this puts quite a twist on the Strict Relexification Hypothesis claim that the contribution of French to the development of Haitian Creole was exclusively limited to phonetic strings deprived of abstract properties. As a matter of fact, taken together the Strict Relexification Hypothesis assumptions listed in the introductory paragraphs of section 3.3 above, plus the axioms in section 2.2 (L:16–17, 35–47), this claim immediately leads to a number of contradictions. I now relate two of these to the segmentation and matching problems discussed in section 3.2.2 and to basic theoretical assumptions about the locus and the acquisition of word-order parametric values.

**3.3.1.1. First contradiction.** The Strict Relexification Hypothesis's postulate of "very limited access," whereby substrate speakers have no access or no use for abstract information about the superstrate, straightforwardly contradicts the claim that substrate speakers as language learners "identify [superstrate] major category lexical entries" and "acquire the directionality properties of the superstratum major category lexical items" (L:39). In order for the learner to be able to identify major-category lexical entries and their directionality properties in

the target language, the learner must already have quite a bit of abstract knowledge about the target language, including knowledge about the following four abstract properties: (i) lexical classes (e.g., within the spoken utterance, which are the phonetic strings that label major-category items such as verbs, nouns, adjectives, preposition, adverbs?); (ii) boundaries of words and phrases (e.g., which phonetic strings in the spoken utterance match up with major-category heads and their respective projections?); (iii) distribution of lexical items and their projections (e.g., in what structural slots are major-category constituents licensed?); (iv) syntax (e.g., what words constitute the “specifier, modifier(s) and complements” [L:39] for any given major category in the spoken utterance)?

The intricate knowledge implicated in these four abstract properties goes beyond some vague determination of substrate-vs.-superstrate distributional, semantic, pragmatic, or phonological overlap. This knowledge also goes beyond “deducing [the meaning of some target phonetic label] from its use in specific semantic and pragmatic contexts” (L:16); it is nothing less than exquisite morphosyntactic knowledge about target utterances. Therefore, in order to adopt major-category directional properties from the superstrate, creole creators must have successfully created the mental representations necessary to parse the relevant chunks of superstrate phonetic strings and identify superstrate major categories and their directionality properties. Assuming such knowledge on the part of the substrate speaker directly contradicts the central Strict Relexification Hypothesis assumption that “relexifiers either do not have access to [syntactic and semantic] information [from superstrate language] or, if they do, they do not use it in creating the [creole] lexical entry” (L:17).

The assumption of “very limited access” assumptions must, then, be given up. Instead, it must be accepted that, whoever they were, key participants in the development of creoles must have had access to whatever quantity of superstrate data is necessary to carry out the complex discovery procedures for identifying such things as major-category lexical classes in the superstrate language and their directionality properties—in addition to carrying out word and affix segmentation, morphological analysis, and so on (see sections 3.1–3.2). If so, then relexification—which “limited direct access to the superstratum language . . . makes . . . so important in the formation of [radical] creoles [like Haitian Creole]” (L:36)—loses its *raison d'être*.

Regarding major-category word-order patterns, there is also empirical evidence against the “very limited access” postulate of the Strict Relexification Hypothesis. Consider, for example, adjective placement in Haitian Creole. It is not just that “the word order of major-category lexical items in [Haitian Creole] syntactic phrases [e.g., the word order between adjective and noun] follows the pattern of the superstratum language” (L:341–42). The facts of adjective placement in Haitian Creole seem incompatible with the claim of the Strict Relexification Hypothesis that creole grammar is essentially isomorphic to substrate grammar and that the creators of Haitian Creole relied strictly on phonetic

strings (deprived of abstract features) in order to replicate the superstrate's major-category word-order patterns. (i) Haitian Creole, like French, has both prenominal and postnominal adjectives (N.B.: Fongbè only has postnominal adjectives). (ii) Certain adjectives in Haitian Creole, as in French, can appear in either prenominal or postnominal position. (iii) The (restricted) alternation between prenominal and postnominal adjective placement is correlated with subtle semantic contrasts, somewhat similar to those in French. (The semantic contrasts that hold for individual adjectives in their prenominal and postnominal positions are not identical between Haitian Creole and French, however.) (iv) There are a number of other distributional and interpretive facts that suggest that adjective placement in Haitian Creole cannot be taken to exactly parallel French adjective placement; for example, Haitian Creole adjectives fall into a number of morphosyntactic classes that seem to have no counterparts in French (see Sauveur and Lumsden [1999] for some of the empirical details).

The important observation here is that the creators of Haitian Creole did not rely exclusively on phonetic strings in adopting, and adapting, French adjective-related word-order patterns; what they did was, *inter alia*, to extrapolate the structural, thus abstract, property of French nominal projections whereby adjective placement, in various instances, is linked to interpretive nuances. Furthermore, assuming that adjective-placement alternation reflects some sort of leftward head-to-head movement to a functional head in the extended nominal projection (such as movement of the head noun past an adjectival phrase generated as a left adjunct to the nominal projection; see, e.g., Bernstein [1991]), then the Haitian Creole adjective-placement facts, which have no counterpart in Fongbè, reveal a parametric setting (see, e.g. Bernstein's "noun-movement parameter" [1991:121–23]) and morphosyntactic properties that could not have resulted from relexification.<sup>29</sup> This counterexample is all the more relevant in that adjective-placement properties have been shown to transfer from the L1 into the L2 in instances of second-language acquisition where the learners are in a much more learner-friendly situation than the "very limited access" postulated by the Strict Relexification Hypothesis (see, e.g., Schwartz 1998:144–47). Such an empirical contrast casts further doubt on the validity of that axiom and of the Strict Relexification Hypothesis scenario for the emergence of creole word order (see n. 44).

There are many other factual observations that disconfirm the claim that "the word order of major-category lexical items in [Haitian Creole] syntactic phrases follows the [superstrate] pattern" (L:342). These counterexamples include a range of productive Haitian Creole constructions, including verb placement, object-pronoun placement, double-object constructions, predicate clefting ("verb doubling"), etc. Some of these we return to below, in sections 3.3.2–3.3.3.

**3.3.1.2. Second contradiction.** The Strict Relexification Hypothesis makes two central claims about the typological profiles of creoles: (i) the parametric



values of creoles and their morphosyntactic reflexes are virtually identical to their substrate counterparts (see L:12, 47, 48, 349, 387); (ii) major-category word order of creoles approximates that in the superstrate. Conjoining these two claims entails that major-category word-order patterns, which are considered identical across creole and superstrate, are strictly phonetic effects that are outside the domain of parametric values and morphosyntactic properties; in the latter domain, the creole is considered identical to (some compromise among) its substrate languages. This entailment contradicts the Strict Relexification Hypothesis assumption that word-order patterns reflect abstract and parametric directionality properties (L:39). If Haitian Creole's major-category directionality properties—parametric values *par excellence*—coincide with the substratum, and not the substratum, then it cannot be the case that “in creating the creole, speakers of the substratum languages use the parametric values of their own grammars” (L:12).

A related problem concerns the role that functional (minor) categories play in the distribution of major-category constituents. If substrate functional heads and their projections are by and large relexified into the creole with all their morphosyntactic properties, including directionality properties, kept unchanged (L:37–38, 71–72, 378, 380, 387), then we would expect the creole to be virtually isomorphic to the substratum, modulo dialect leveling. Indeed, isomorphism between substratum and creole would hold, not only with respect to the directionality properties of functional heads, but also with respect to major-category word-order patterns that are parasitic on the morphosyntactic properties of functional heads. Furthermore, in the framework adopted by Lefebvre, it is a general property of functional projections that they play a key role in the surface placement of major-category items (see section 3.3.3). But then the claim that “the word order of major category lexical items and major constituents in the creole will follow that of the lexifier language” [L:388] is contradicted once again. (I address some of the relevant data in section 3.3.2.)

For now, it must be concluded that this claim, the claim that heads are “marked for the directionality properties of their specifier, modifiers(s), and complements” (L:39) and the basic Strict Relexification Hypothesis propositions that “lexical entries produced by relexification . . . differ from the original [substrate] entries only in their phonological representations” (L:18) and that “in creole genesis, both minor [functional] and major category lexical items undergo relexification” (L:36) cannot all be true simultaneously. This is a fatal problem; from any inconsistent set of starting assumptions, any conclusion can be made to follow, including mutually contradictory predictions. I will illustrate and discuss such inconsistent predictions below, in sections 3.3.2 and 3.3.3, after presenting Lefebvre's mutually contradictory assumptions in a sharper theoretical light.<sup>30</sup>

**3.3.2. Relexification and Haitian Creole functional heads.** Lefebvre makes the following assertion about the fate of functional categories in creole genesis:

The creators of a radical creole cannot identify the functional categories of the superstratum language because they do not have enough exposure to the language. . . . The functional category lexical entries of the copied lexicon are relabelled on the basis of *major* category lexical items [of the superstrate] (e.g. nouns, adjectives, verbs, adverbs and preposition). . . .

. . . First, . . . there must be some semantic overlap between the lexical entry copied from the substratum lexicon and the superstratum form. . . . Second, the distributional properties of the superstratum form must be similar to those of the copied lexical entry. . . . Third, relabelling of a functional category may also respond to a phonological similarity between the substratum and superstratum lexical entries. . . .

. . . If [substrate] speakers . . . do not find any appropriate [superstrate] string . . . [they] abandon the lexical entry [or] assign [it] a phonologically null form. [L:37-38]

A number of problems arise about the treatment of functional categories in this scenario, some of which are familiar from the discussion above (see, e.g., section 3.3.1).

The most familiar problem is the matching problem (see section 3.2.2): How does the substrate speaker qua sociolinguistically handicapped language learner determine semantic, distributional, or phonological overlap between substrate and superstrate forms? In the present case, the substrate forms are grammatical morphemes, whose meanings cannot be determined by ostension. In any case, the determination of the relevant substrate-superstrate overlap presupposes, at the very least, the knowledge necessary to segment the relevant superstrate forms from spoken utterances, plus a fair amount of abstract analysis. Again, this seems impossible to accomplish if the language learner has only “very limited exposure to the superstratum data” and has no access to or no use for abstract information about the superstrate. Semantic and distributional properties cannot just be read off phonetic strings in absence of abstract and structural representations about those phonetic strings. Such representations presuppose morphological, lexical, and syntactic cues about the target language. These cues, in turn, are likely to influence the makeup of the learner’s interlanguage. After all, any learner, be it in the context of creole genesis or elsewhere, is in the business of achieving competence in the target language. Besides, in the context of the Caribbean, fluency in (approximations of) the European superstrate has generally been much valued, on various sociolinguistic and economic grounds, especially by those who could gain access to these superstrate(-like) varieties.

Another problem is empirical: it concerns the Strict Relexification Hypothesis claim that “in creating a creole, [substrate] speakers . . . will adopt the

directionality of the superstratum lexical heads and retain the directionality properties of [substrate] functional heads" (L:40).

Before we reevaluate these word-order predictions against the relevant data, we first need to establish Lefebvre's assumptions about the ontology and inventory of major-category lexical items versus functional-category lexical items:

Major category items are nouns, verbs, adjectives, prepositions and adverbs. They are defined by the major categorial features [ $\alpha$ N,  $\beta$ V]. . . . Functional or minor category lexical entries are defined by minor syntactic features such as Tense, Wh, etc. . . . They include Tense markers, Wh-words, determiners, etc. [L:408 n. 7; also see L:17–18, 37]

Perhaps the most straightforward example where the creator of Haitian Creole may have "retained the directionality properties of [substrate] functional heads" is that of the definite determiner. This is postnominal in both Haitian Creole and Fongbè, as in Haitian Creole *krab la* and Fongbè *àsòn ò* 'the crab' (lit., 'crab the'), in contrast with the French definite article, which is prenominal, as in *le crabe*. Similar apparent contrasts obtain for demonstratives and the plural marker. I stress "apparent" because the word-order contrasts are not as stark once we bring in diachronic and regional varieties of French, of the sort documented, for instance, by Chaudenson (1993).<sup>31</sup>

These Fongbè-Haitian Creole similarities notwithstanding, if we move to another functional item mentioned in the above quotation, namely, *wh*-words, we already encounter a counterexample to the claim that directionality properties of creole functional heads will be those of the substrate. We also encounter a series of empirical and methodological problems pointed out by Chaudenson (1993, 1996a). The Haitian Creole *wh*-word par excellence is *ki*, as in *ki moun* 'who' (lit., 'which person'), *ki kote* 'where' (lit., 'which place'), *ki sa* 'what' (lit., 'which that'), etc. As a *wh*-word, Haitian Creole *ki* is a functional item by Lefebvre's classification. However, *ki* is phrase-initial, and thereby manifests the surface directionality of French *wh*-heads. Compare Haitian Creole *ki travay* and French *quel travail* 'which job' (where the Haitian Creole and French *wh*-words are in boldface). Both contrast with Fongbè *hân té* 'which job' (lit., 'job which') with the *wh*-word *té* (in boldface) in phrase-final position (see Anonymous 1983:6.5).

Lefebvre solves this problem by deciding by fiat that Haitian Creole *ki* is categorially an adjective, like French *quel* and unlike Fongbè *té*. This makes Haitian Creole *ki* and its posited etymon *quel* major-category lexical items (L:39, 180). Granting major-category status to the Haitian Creole *wh*-word *ki* is meant to remove its status as counterexample to Lefebvre's claims about ordering properties of functional categories.

Claiming major-category status for *ki*, a typical *wh*-word on a par with Fongbè *té*, actually introduces more problems than it solves.

First, it straightforwardly contradicts the ontology above whereby *wh*-words are functional categories. As far as I can tell, Lefebvre does not dispute that Haitian Creole *ki* and French *qui* and *quel*, as found in questions, are *wh*-words that are “defined by [a] minor syntactic feature” (L:408 n. 7). Her stipulation that Haitian Creole *ki* and French *quel* are adjectives, and thus major-category items (L:180), does not remove the fact that both have, in interrogative contexts, a *wh*-feature (i.e., a “minor syntactic feature”). So I cannot see any reason to assign major-category status to the Haitian Creole *wh*-word *ki* besides the ad hoc need to explain why *ki* follows the directionality of its French counterpart *quel*, and not that of its Fongbè postnominal counterpart *té*.<sup>32</sup>

Second, we are not told what sort of lexical-thematic content makes Haitian Creole *ki* a major-category morpheme while the absence of such content makes its Fongbè counterpart *té* a minor-category (i.e., functional) morpheme. As far as I can tell, *ki* in expressions like *ki moun* ‘which person’ only acts as a functor; its job is to create a variable that ranges over the set described by *ki*’s complement—a variable *x* such that *x* is in the set of *moun* (i.e., of human beings) and *x* satisfies the requirements imposed by the clause from which the *wh*-phrase is extracted. This suggests that Haitian Creole *ki*, like other functional morphemes, has “logical” or “relational” (i.e., permutation-invariant) meaning in the sense discussed by von Stechow: “logicality means insensitivity to specific facts about the world . . . a purely mathematical relationship . . .” (1995:179).<sup>33</sup>

Third, claiming that the class of *wh*-markers is a major category in Haitian Creole but a minor one in Fongbè undermines the prediction of the Strict Relexification Hypothesis that, modulo dialect leveling (but see n. 36), the substratum and the creole have identical inventories of functional categories with identical morphosyntactic properties (see, e.g., L:71–72). If Fongbè *té* is a functional item, then the Strict Relexification Hypothesis inevitably predicts that its relexified counterpart in Haitian Creole is also a functional item, contrary to Lefebvre’s analysis (L:39, 180). In effect, Lefebvre’s analysis produces extraordinary instances of degrammaticalization or what one might call semantic unbleaching—the diachronic development of content (i.e., major-category) morphemes from functional (i.e., minor-category) morphemes. Yet, according to a basic Strict Relexification Hypothesis axiom, relexification cannot result in degrammaticalization: substrate functional morphemes must retain their minor-category status in a creole (L:18). By hypothesis, substrate morphosyntactic properties, including lexical classes and their respective inventories, must remain invariant through relexification.

Similar concerns arise for other functional heads. For instance, consider the so-called indefinite article.<sup>34</sup> As Lefebvre correctly notes (L:88), this particular article is prenominal in both Haitian Creole and French (e.g., Haitian Creole *yon krab* and French *un crabe* ‘a crab’), but postnominal in Fongbè (e.g., *àsón d’é* ‘a crab’, lit., ‘crab a’). What Lefebvre does not note is that similar contrasts obtain for a range of functional heads within the nominal projection. For

example, the Haitian Creole and French equivalents of *one, two, three, . . . , first, second, third, . . . , each, every, no, any, etc.*, are all prenominal while their Fongbè equivalents are all postnominal. More generally, the postnominal position of all functional heads within the (extended) projection of the noun seems widespread across Gbe languages (Enoch Aboh p.c. 2002; also see Aboh forthcoming). This substrate distributional uniformity of functional heads—all in postnominal position—simply does not obtain in Haitian Creole.

To account for these discrepancies between Haitian Creole versus Fongbè, Lefebvre would have to stipulate that the prenominal items in Haitian Creole are all nonfunctional; that is, they must all have been incorporated into Haitian Creole as major-category lexical entries (cf. L:88–89, 389). This, like the case of Haitian Creole *ki* above, is yet another illicit instance of relexification cum degrammaticalization—the passage of a form, via relexification, from functional status (in the substrate) to contentful status (in the creole). And, again, we are not told exactly what properties—what sort of semantic “unbleaching” (so to speak) or type-lowering, in von Stechow’s (1995) framework—would make, say, the Haitian Creole indefinite article *yon* a major-category item while its Fongbè counterpart *dé* is a functional-category item. In both languages, the indefinite article, unlike major-category modifiers such as adjectives, does not add any thematic property to the description of the noun phrase; such indefinite articles are “functors” that, in Abney’s words, “specify the reference of a noun phrase. The noun provides a predicate, and the determiner picks out a particular member of that predicate’s extension” (1987:76–77). So here too, we evidently are dealing with a typical functor that has “logical” or “relational” meaning only (see von Stechow 1995). More generally, “functional elements lack . . . ‘descriptive content’. Their semantic contribution is second-order, regulating or contributing to the interpretation of their complement. They mark grammatical or relational features, rather than picking out a class of objects” (Abney 1987:65). Given such a criterion, one can (provisionally at least) classify *yon* as a functional element. It seems, pending further analysis, that Lefebvre makes different choices as to minor- or major-category status of the indefinite article in Haitian Creole and Fongbè precisely so as to explain away the fact that Haitian Creole *yon* is prenominal like its French etymon *un(e)* and unlike its Fongbè counterpart *dé*. In any case, this stipulation (i.e., making the indefinite article a major category in Haitian Creole but a minor one in Fongbè) contradicts her tenet (see, e.g., L:18) that relexification does not change morphosyntactic properties such as lexical classes and their inventories. Lefebvre’s categorial stipulation is also a direct violation of the corollary whereby the “subset [of functional categories] is the same in the creole and substratum language” (L:71–72).<sup>35</sup>

If relexification carries parametric values and concomitant morphosyntactic properties intact from the substratum into the creole, then lexical classes from the substratum—including the minor-category status of *wh*-words, indefinite

articles, numerals, quantifiers, etc.—must also be carried intact into the creole. This logical conclusion is contradicted by the details of Lefebvre's analysis.<sup>36</sup>

**3.3.3. The locus of word-order parameters.** Let us consider the distribution in creoles of major-category items (e.g., verbs, nouns, adjectives, prepositions, adverbs) and their projections. In the theoretical framework adopted by Lefebvre, there are at least three (by now familiar) assumptions that are intended, either explicitly or implicitly, to explain the surface distribution of creole major-category items. Taken together, however, these three assumptions allow the Strict Relexification Hypothesis to make contradictory predictions about word order. This state-of-affairs makes the Strict Relexification Hypothesis unfalsifiable, thus without any predictive value.

First, recall that Lefebvre explicitly assumes that directionality properties are encoded in the corresponding lexical head: "heads in particular languages are marked for the directionality properties of their specifier, modifier(s) and complement" (L:39). Such directionality properties should fall under the rubric of parametric values.

Second, as we have seen, Lefebvre assumes, that surface word order of major-category items in the superstrate language exerts an overriding influence on major-category word order in the creole (L:39, 388). Given the first assumption, this second assumption entails that the superstrate affects the creole's parametric values, which in turn can, in principle, differ from their substrate counterparts, contrary to the claim of the Strict Relexification Hypothesis that parametric values are invariant from substratum to creole (cf. section 3.3.1.2). Furthermore, this second assumption is incompatible with Lefebvre's third assumption.

Third, there is an assumption that is not explicitly spelled out, but is implicit in key parts of Lefebvre's argumentation. Lefebvre assumes, essentially along the lines of the Principles and Parameters framework, that certain functional heads have parametric properties (e.g., inflectional and feature-checking specifications) that are correlated with such things as the surface placement of major-category lexical heads or their projections (see, e.g., L:60–61, 77, 208–9, 351–57).

For example, in certain languages like French, finite verbs precede certain clause-internal adverbs and the sentential negation marker, as in *Mary connaît déjà le poème* 'Mary already knows the poem' and *Mary (n') aime pas Jean* 'Mary doesn't like John', where the verbs *connaît* 'knows' and *aime* 'likes' precede the adverb *déjà* 'already' and the clausal negation marker *pas* respectively. In the Pollockian approach to verb placement, which Lefebvre explicitly adopts (L:208–9, 351–55, 392, etc.), the placement of the French finite verb (a major-category item) to the left of adverbs (another major-category item) and to the left of sentential negation is correlated with verb movement into a functional head that is to the left of, and governs, VP. We may call that functional head "INFL" for short, abstracting away from the various heads (e.g., Agr and Tense) that

actually make up Pollock's "exploded INFL." The essential point for this discussion is that movement of the finite verb—a major-category item—into INFL is correlated with verb-related morphosyntactic properties of INFL—a minor-category (i.e., functional) head. Furthermore, it is a parametric property of French that its INFL forces overt verb movement. Contrast French with, say, English, where INFL does not force such movement.

Verb placement in Haitian Creole is more like English than French (see DeGraff 1997, 2000, forthcoming a). Somewhat like English, Haitian Creole is a verb-in-situ language—one where the finite verb stays relatively low in the (extended) verbal projection, to the right of adverbs and negation markers, as seen in Haitian Creole *Mari deja konnen powèm la* 'Mary already knows the poem' and *Mari pa renmen Jan* 'Mary doesn't like John'. Lefebvre tries to explain why Haitian Creole verb placement differs from that of French by claiming that Haitian Creole verb-in-situ patterns arose because the early creole speakers inherited from Fongbè the verb-in-situ parametric value (recall that, by hypothesis, all substrate parametric values and accompanying morphosyntactic properties are transmitted intact through relexification into the early creole varieties; see, e.g., the quotations at the beginning of section 3.3 [L:18, 36]).<sup>37</sup>

At this point, the logical inconsistency in the three assumptions above should be evident. Lefebvre's account of verb-placement patterns in Haitian Creole, French, and Fongbè is straightforwardly inconsistent with her other basic claim whereby the creole must strictly follow superstrate major-category word order. Since French places its finite verb (a major-category item) to the left of adverbs (another major-category item), and since the creator of Haitian Creole is, by hypothesis, striving to reproduce superstrate major-category word-order patterns, Haitian Creole is thus predicted to also place its finite verbs to the left of adverbs. In other words, Haitian Creole is predicted to have overt verb-movement. Not only is this prediction contradicted by the data, but it is also contradicted by the prediction, which follows from the claim that substrate parametric values are transmitted to the creole, that Haitian Creole must be verb-in-situ.

The crucial problem here is that the Strict Relexification Hypothesis inconsistently "predicts" that Haitian Creole is both verb-raising (by the second assumption above) and verb-in-situ (by the third assumption above, plus the assumption that Haitian Creole's most influential substrate, namely, Fongbè, is a verb-in-situ language). Therefore, the Strict Relexification Hypothesis framework is theoretically inconsistent: its claims about the locus of word-order parameterization and the emergence of creole (major-category vs. minor-category) word-order patterns are simply incompatible. From a contradictory set of assumptions, any conclusion can be made to follow, including further contradictions. Because of its contradictory theoretical assumptions, the Strict Relexification Hypothesis loses all predictive value (see n. 30 and n. 38). For example, Haitian Creole's French-like placement of adverbs to the left of the VP can be

argued to follow from French on the basis of the latter's major-category word-order (L:354), while Haitian Creole's non-French placement of adverbs to the left of the in-situ finite verb can be argued to follow from Fongbè on the basis of the latter's verb-in-situ parametric value (L:353). Yet, what must be explained in both cases is a major-category word-order pattern with a morphosyntactic parametric basis that is located in INFL-related functional heads.

This inconsistency has repercussions beyond predictions about verb placement, as it affects predictions about word order in general. Indeed, there are other cases of major-category movement within the clause that is correlated with parameterized morphosyntactic properties of functional heads. For example, certain languages have their objects move overtly outside VP to the specifier of an inflectional head higher than VP. This is the object-shift construction that is so popular in Scandinavian languages. Such phrasal movements, somewhat like Pollockian verb movement, take place to verify agreement or other feature-checking relations in the domain of specific functional heads whose properties vary crosslinguistically (cf. L:221, 296, 392). I return to a few more specific examples of such correlations below.

The feature-checking approach to head and phrasal movement is very much in the spirit of Chomsky's Principles-and-Parameters view on linguistic typology: "If substantive elements (verbs, nouns, and so on) [i.e., major lexical categories] are drawn from an invariant universal vocabulary, then only functional elements will be parameterized" (1991:419). This hypothesis, which goes back to Borer (1983), is also part of the more recent Minimalist Program: "External manifestation of inflectional features appears to be the locus of much of the variety of languages" (Chomsky 1998:34). Lefebvre actually adopts this approach to relexification and its alleged outcome: "Most parametric options set in [Haitian Creole] are the result of its creators' reproducing the properties of the functional categories of their own lexicons through relexification. . . . The parametric options of [Haitian Creole] systematically contrast with those of French and follow those of substratum languages of the type of [Fongbè]" (L:387).

At this point, the conjunction of the three assumptions at the beginning of this section leads us to yet another set of internal inconsistencies in Lefebvre's theoretical framework. If functional categories are the locus of crosslinguistic variation, affecting such things as word order, the following corollary can be drawn: given that inflectional features (i.e., functional categories) in Haitian Creole and its substratum are taken to be (virtually) identical, Haitian Creole morphosyntax, including word-order patterns (e.g., distribution of major-category items), should be (virtually) identical to Fongbè morphosyntax. Yet, given Lefebvre's assumption that the superstrate overrides the substrate as regards major-category word order, Haitian Creole morphosyntax (to the extent that major-category word order also reflects morphosyntactic properties) cannot be isomorphic to substrate morphosyntax. This means that Haitian Creole morphosyntax is predicted by the Strict Relexification Hypothesis to be both



identical and not identical to substrate morphosyntax. The Strict Relexification Hypothesis is thus proven untenable by *reductio ad absurdum*.

Let us sample some other facts that militate against one or the other, but not all, of Lefebvre's claims about word order (for crucial caveats regarding the unfalsifiability of the Strict Relexification Hypothesis see n. 30 and n. 38).

We have already seen (in section 3.3.2) that the position of functional heads in nominal and *wh*- (extended) projections in Haitian Creole differs from that in the substrate. There are also core aspects of clause structure—aspects of syntax that are presumably dependent on inflectional parametric values (i.e., properties of functional heads)—where Haitian Creole and its main substratum manifest undeniable differences (see DeGraff 2000, forthcoming b, forthcoming d; also see n. 37). These include the following. (i) Gbe languages, like many other Kwa languages (see, e.g., Déchaine and Manfredi 1997), exhibit a number of constructions that instantiate object-verb order, such as the progressive, prospective, and purposive constructions (e.g., Aboh 1999). (ii) The object-movement rule needed to account for object-verb order distinguishes full NPs (including tonic pronouns) from atonic pronouns: full NPs may undergo IP-internal object-movement to the left of the verb (“object shift”) whereas the atonic pronouns are generally enclitics hosted by the theta-marking verb. (iii) Pronouns are overtly marked for morphological case distinctions. (iv) When there is no full NP that is available for object shift in the relevant constructions, the verb undergoes reduplication (see Aboh [1999] and Ndayiragije [2000] for further details). (v) Most Fongbè tense-mood-aspect markers are preverbal, but da Cruz (1995) documents postverbal completive markers in Fongbè. (Note that all tense-mood-aspect markers in Haitian Creole are preverbal, including the completive marker.) None of these properties have parallels in Haitian Creole, contra the Strict Relexification Hypothesis claim that creole morphosyntax is virtually isomorphic to substrate morphosyntax, modulo dialect leveling (but see n. 36 and n. 38).

Interestingly, French, somewhat like Fongbè, also manifests object-movement (in this case, cliticization) to the left of the verb. Furthermore, French, also somewhat like Fongbè, discriminates between full NPs and clitics as regards the possibility of object movement. Object nouns and object pronouns in Haitian Creole, unlike nouns in Fongbè and clitic pronouns in French, are uniformly postverbal, and pronouns in Haitian Creole, unlike pronouns in French and Fongbè, do not manifest morphological case distinctions. It can thus be said that both the substratum and superstratum of Haitian Creole instantiate morphosyntax patterns that are absent in Haitian Creole (see n. 38).

Now, in order to explain certain discrepancies between Fongbè and Haitian Creole, Lefebvre proposes that “[Fongbè] constituents whose order conflicts with that of French were abandoned by the creators of the creole, as evidenced by the fact that they have no counterparts in modern Haitian” (L:388). Such substrate-superstrate word-order conflicts include the lack of Fongbè-like post-

positions in Haitian Creole and the lack of Fongbè-like object movement. Both of these cases involve surface word-order patterns of major-category items, somewhat on a par with the verb-placement facts.

But Lefebvre's reasoning here begs the question as to how Haitian Creole would ever reflect Fongbè-like parametric values whose major-category word-order reflexes have no counterparts in French. If "[Haitian Creole] is predicted not to have postpositions *because its lexifier language does not*" (L:388; italics added), then Haitian Creole should also be predicted to lack serial verbs, double-object constructions, and verb-doubling (also known as predicate-cleft) constructions, all of which involve major-category word-order patterns that its lexifier does not have (cf., e.g., L:387).

At this point, we have no clue as to the exact criteria that predict which non-French substrate properties had to be abandoned in the creole and which did not. The question is particularly acute when we look at the fate in Haitian Creole of such things as Fongbè's double-object constructions and clause-internal preverbal objects (or "object shift"). Both constructions in Fongbè involve major-category word-order patterns related to the placement of nominal or pronominal arguments that are initially merged within the VP. Both double-object constructions ( $V\ NP_{\text{RECIPIENT}}\ NP_{\text{THEME}}$ ) and object shift ( $NP_{\text{OBJECT}}\ V$ ) are widespread across the substratum languages, not only in Gbe languages, but throughout Kwa (L:291; Déchaine and Manfredi 1997; Aboh 1999) and Bantu (Mchombo 1993; Bresnan 1993; Mufwene 2001b; Mufwene p.c. 2002). As for the superstratum, French routinely exhibits clause-internal preverbal objects in the form of pronominal clitics as in *Je te tiens* 'I hold you', but French does not have double-object constructions (but see Bruyn, Muysken, and Verrips [1999] for a more nuanced picture). The unresolved question then is: Why did double-object constructions survive in Haitian Creole (see, e.g., L:283, 287, 290–91, 357), while object shift did not (see, e.g., L:122, 149)?<sup>38</sup> Strangely enough, it is "object shift"—the popular substrate construction with a superficial superstrate analogue in the guise of French preverbal object clitics—that was lost in the creole (see DeGraff [forthcoming a] for one proposal based on observable acquisition patterns).<sup>39</sup>

Lefebvre's answer to this and related problems is only a restatement of the fact, a restatement that contradicts some of her own theoretical assumptions on relexification. If creole creators did "intend to reproduce [superstrate] phonetic strings" (L:39) and to "follow the word order of lexical categories in the superstratum language" (L:39), then they would have systematically avoided verb-in-situ, serial verbs, double-object constructions, verb-doubling, and all other major-category word-order patterns that are not instantiated in French.<sup>40</sup> At this rate, what the Strict Relexification Hypothesis amounts to is a self-contradictory set of empirical and theoretical claims based on an (often biased) comparison of Haitian Creole, Fongbè, and French data; such a methodology can only yield little, if any, explanatory or predictive value.

The sample of observations above can be summarized as follows. Abstracting away both from systematic correspondences between Haitian Creole and French and from substrate influence into Haitian Creole, what we find is that (i) Haitian Creole has word-order patterns that straightforwardly contradict the claim that parametric values and their morphosyntactic reflexes should be systematically isomorphic between Haitian Creole and its substrate, and (ii) Haitian Creole has word-order patterns that straightforwardly contradict the claim that the superstrate language exerts an overriding effect on the major-category word-order patterns of a creole.

**4. Relexification vs. acquisition.** This final section will recapitulate and reevaluate the relationship (or lack thereof) between relexification and language acquisition, in light of the social history of colonial Haiti and basic issues in linguistic theory and language-acquisition research.

Recall that, in a nutshell, Lefebvre's poster example for the Strict Relexification Hypothesis is the story of how Niger-Congo adult speakers in Saint-Domingue (i.e., in colonial Haiti) systematically failed to acquire French, to which they, by hypothesis, had drastically limited access. It is claimed that, in trying to learn the various regional varieties of seventeenth- and eighteenth-century French spoken in the colony, the Niger-Congo substrate speakers carried into their interlanguages (most of) the abstract properties of their native lexica and native grammars. It is claimed additionally that no French-derived property was ever acquired by the African learners outside the following two domains: (i) the adoption and adaptation of French-derived phonetic strings as phonological labels for substrate-derived Haitian Creole morphemes; (ii) the adoption of French major-category word-order. In effect, the Strict Relexification Hypothesis posits that, in some sense, there is hardly any structural innovation in the relexification phase of creole genesis: in the minds/brains of native substrate speakers "learning" the superstrate, relexification produces creole grammars that faithfully reproduce substrate grammars minus the latter's phonetic appearance (L:395–96). Creole creation is "creation" on the surface only: outside major categories adopting superstrate-derived word-order and outside the establishment of new correspondences between substrate lexical entries and superstrate-derived phonetic strings, there is allegedly little creation *per se*. Indeed, creole genesis in the Strict Relexification Hypothesis virtually amounts to the copying of grammars (I-languages) that already existed in substrate speakers' heads prior to their exposure to superstrate data.

A number of questions must be immediately raised about this acquisition, or rather nonacquisition, scenario of the Strict Relexification Hypothesis: Is relexification as defined by Lefebvre independently documented in experimental or naturalistic studies (i.e., in observable cases) of second-language acquisition? (See section 4.1.) Is the Strict Relexification Hypothesis nonacquisition scenario supported by our current knowledge about the socioeconomic history and the

demographics of colonial Haiti? (See section 4.2.) What are the implications of the Strict Relexification Hypothesis as regards the creation of creole languages as communal sets of well-integrated, stable, and relatively homogeneous I-languages and, more generally, as regards the status of I-languages in linguistic theory? (See sections 4.3–4.5.)

In the course of answering these questions, I will sketch an alternative scenario that seems more consistent with the state of the art in acquisition research and in linguistic theory, and more in keeping with the available linguistic-comparative data about Haitian Creole and with the socioeconomic history of colonial Haiti.<sup>41</sup>

**4.1. Relexification vs. second-language acquisition.** Is relexification as defined in the Strict Relexification Hypothesis a process that can be documented in second-language acquisition studies? In other words, is the output of relexification (e.g., Haitian Creole as presented by Lefebvre) systematically commensurable with observable (early) interlanguages created in second-language acquisition? Given uniformitarian guidelines for historical linguistics (see, e.g., Osthoff and Brugmann, 1967:204; Labov 1994:21–24; cf. DeGraff 1999b: 484–85), we should expect (at least some) contemporary adult learners to manifest the sort of relexification process that Lefebvre hypothesizes for creole genesis. Indeed, she claims that “in some cases of [second-language acquisition], relexification . . . may play a role” (L:34). The only data that is invoked (L:34–35) in trying to document relexification in observable instances of second-language acquisition are in (3a)–(4b) (from Adjémian [1983], cited by Lumsden [1999: 132]; cf. standard versions of (3a)–(4b) in n. 42). Examples (3a)–(3b) are from Anglophone Canadian university students learning French, and (4a)–(4b) are from their Francophone counterparts learning English.<sup>42</sup>

(3a) *Tu assieds sur une chaise.*  
 2SG.NOMINATIVE sit on a chair  
 ‘You are sitting on a chair.’

(3b) *Je vais préparer pour la fête.*  
 1SG.NOMINATIVE go prepare for the party  
 ‘I’m going to get ready for the party.’

(4a) *At sixty-five years old they must retire themselves because . . .*

(4b) *They want to fight themselves against this (tuition increase) . . .*

Lefebvre (L:35) follows Lumsden in taking the data in (3a)–(4b) as “concrete evidence of relexification in [second-language acquisition]” (Lumsden 1999:131). The problem here (and this is also noted by Lumsden [1999:133]) is that these examples seem fundamentally different from what relexification predicts: the sentences in (3a)–(3b) do not instantiate English grammar relexified with

French-derived phonetic labels and nor do those in (4a)–(4b) instantiate French grammar relexified with English-derived phonetic labels. Apart from certain isolated French-influenced aspects of the strings given in boldface, the utterances in (4a) and (4b) conform strictly to English morphosyntax, not to French morphosyntax. So there is no sense in which the speakers who produced them can be said to have linked morphosyntactic representations of their native French to phonological representations derived from English phonetic strings deprived of abstract properties. In (4a), for example, we find the right choice of morphological agreement on the reflexive *themselves* (compare with the French counterpart *se*, which agrees in person only). Furthermore, although the use of the reflexive *themselves* in (4a) is certainly due to lexical transfer from the French L1 (cf. French *se retirer*; lit., ‘oneself to-retire’), the surface placement of the reflexive object *themselves* in postverbal position obeys English morphosyntax; in French, the reflexive *se* is a preverbal clitic.

Similar remarks apply to (3a) and (3b), where the morphosyntax—including person-and-number agreement between subject and verb, and gender-and-number agreement between determiner and noun—are straightforwardly French-like, not English-like.

All of this is a far cry from relexification. Yet, Lumsden writes: “The influence of the maternal language that is manifested in lexical transfer errors [as in (3a)–(4b)] can be explained quite simply in terms of relexification” (1999:133). This is quite simply not true. Although the data in (3a)–(4b) can be taken as evidence for what is commonly known as transfer, these data do not support the stronger claim that the corresponding interlanguages have preserved intact the morphosyntax and semantic properties of the respective native languages. The morphosyntax and semantics of the utterances in (3a)–(4b) overwhelmingly reflect abstract properties of the respective target languages.

Actually, the so-called “concrete evidence of relexification in [second-language acquisition]” in such examples suggests that, as expected, the target language’s contribution to learners’ (early) interlanguages is generally not exclusively limited to the adoption of L2-derived phonetic labels and L2’s major-category word order. The data in (3a)–(4b) suggest that lexical and grammatical transfer from the learner’s L1 into his or her approximation of the target is possible even when the interlanguage approximates substantial aspects of target morphosyntax and semantics. In fact, the examples of transfer adduced by Lumsden (1999:131–33) involve all sorts of contact situations, including university students in language classes and six-year-old bilinguals in Ontario. And, as Lumsden himself remarks, the overall morphosyntax and semantics of the interlanguages sampled in (3a)–(4b) reflect properties of the target language, not those of the learners’ native languages (1999:133). As a matter of fact, examples (3a)–(3b) remind me of the Anglicisms that I myself as a fluent French speaker sometimes lapse into. Yet my French idiolect is surely not the result of the relexification of English with French phonetics. Actually,

similar Anglicisms affect my native Haitian Creole, and neither is my Haitian Creole idiolect the result of relexification of English with Haitian Creole phonetics. Thus one is still left seeking less controversial evidence of relexification *sensu stricto* in second-language acquisition than that offered in (3a)–(4b).

Perhaps it could be argued that the evidence of transfer in second-language acquisition, as in the examples just discussed, is some sort of residue from some earlier interlanguage with L1 grammar and L2 phonetics in line with the Strict Relexification Hypothesis. This possibility is actually entertained by certain second-language acquisition researchers, most notably and most thoroughly in Schwartz and Sprouse's "Full Transfer/Full Access Model" (FT/FA): "FT/FA hypothesizes that the *initial* state of [second-language acquisition] is the final state of [first-language acquisition]" (1996:40; italics added). This hypothesis constitutes the "Full Transfer" part of the model whereby the entire L1 grammar of the language learner, including its major- and minor-category word-order properties, determines the shape of the initial interlanguage in second-language acquisition, "on *first* exposure to [target] input" (Schwartz and Sprouse 1996:41; italics added; also see Schwartz 1998:147).

One crucial difference between Full Transfer/Full Access and the Strict Relexification Hypothesis is the "Full Access" component of the former, according to which, "failure to assign a representation to [L2] input data will force some sort of restructuring . . . drawing from options of [Universal Grammar]" (Schwartz and Sprouse 1996:41; also see Schwartz 1998:147). In the Strict Relexification Hypothesis, the creole-creating learner's interlanguage, even after much exposure to target varieties (witness, say, the etymological profile of creoles), undergoes little restructuring and remains stuck in what looks like the initial stage of Full Transfer/Full Access. (See DeGraff [forthcoming d] for further empirical differences between the two models.)

There are larger conceptual issues that fundamentally dissociate the Strict Relexification Hypothesis and Full Transfer/Full Access. Given the Strict Relexification Hypothesis, initial interlanguages, with their hypothetical L1-derived grammar and L2-derived phonetics, could in principle persist long enough to give rise to a stable communal language, as allegedly happened in the development of Caribbean creoles. If so, such interlanguages should also be observable in second-language acquisition studies, perhaps those involving communities of newly arrived migrant workers with little exposure to the local target language. Some of the data from these studies are available from such sources as Klein and Perdue (1992), Perdue (1995), Véronique (1990, 2000), and from the online European Science Foundation bilingual database in the Childes System (see McWhinney 2000). These migrant-worker studies do provide evidence of L1 transfer, of the sort that is compatible with some limited kind of substrate influence in creole genesis; but nowhere in these studies do we find the interlanguages with L1 grammar and L2 phonetics that the Strict Relexification Hypothesis predicts should emerge in second-language acquisition. (See DeGraff

[forthcoming a, forthcoming d] for some additional discussion; also see n. 3 and Chaudenson and Mufwene 2001:46, 154–56.)

In a related vein, the one study I have available on the interlanguages of Gbe speakers learning French as L2, namely, Lafage's (1985) study on "the French spoken in Ewe-land (Southern Togo)," does not suggest any systematic resemblance between Haitian Creole and those Gbe (first language)–French (second language) interlanguages (see, e.g., n. 18), notwithstanding certain parallels that can be taken either as instances of (prior) L1 transfer, or as L1-independent tendencies of second-language acquisition that are also documented in non-Gbe speakers' interlanguages with French target (see the studies cited above).

By uniformitarian methodology and given the sociohistorical evidence on the time course and demographics of language contact in colonial Haiti (see section 4.2), we should expect the grammars of the first speakers of (Proto-)Haitian Creole to be very much unlike initial interlanguages in second-language acquisition. The history of language contact in colonial Haiti gives no reason whatsoever to believe that the creators of Haitian Creole would have been uniformly and systematically stuck in the initial stages of second-language acquisition, unless the Africans involved in Caribbean creolization were all cognitively deficient and unable to go beyond their initial interlanguages when trying to learn European languages (see Adam [1883] for such an improbable scenario). Besides, the systematic correspondences between French and Haitian Creole discussed in section 3 could not have obtained if all the creators of Haitian Creole were African adult learners whose interlanguages became fossilized in some beginners' interlanguage with L1 structures and L2-derived phonetics. On the contrary, the linguistic and sociohistorical evidence suggests that, whoever the first Haitian Creole speakers were, they systematically (re)analyzed various abstract properties of the superstrate, at all levels of grammar, and that they also incorporated in their idiolects certain substrate-derived properties alongside grammatical innovations that may now seem relatively independent of both substratum and superstratum.

In this light, if we were to logically follow the spirit, if not the letter, of Lefebvre's and Lumsden's comparison of creolization and second-language acquisition—the latter as illustrated in, say, (3a)–(4b) above—then uniformitarianism would lead us to the following conclusion. As language learners who were able, at the very least, to systematically segment target speech and acquire the word order of its major-category items, the creators of Haitian Creole could, in principle, be sensitive to all sorts of abstract properties in target speech patterns and restructure their evolving interlanguages accordingly. Given the link between creolization and second-language acquisition posited by relexificationists, abstract properties of the superstrate should, in principle, contribute to creole formation in the same way that abstract properties of the target contribute to the formation of the interlanguages sampled in (3a)–(4b), with L1-

influenced restructuring playing a role in both cases of language creation. If relexificationists are truly uniformitarian in their theorizing, then they should admit that any difference between the creation of interlanguages in contemporary (observable) instances of second-language acquisition and the creation of interlanguages in the (no longer observable) course of Caribbean creolization should be a matter of degree, not of quality. As it turns out, we do find recurrent structural correspondences between, say, Haitian Creole and its superstrate French, at all levels of grammar, alongside evidence for substrate influence (see section 3).<sup>43</sup>

Yet the Strict Relexification Hypothesis categorically posits that creolization, unlike typical instances of second-language acquisition, evinces no approximation of target (superstrate) properties except in what are considered two relatively superficial domains, namely, the adoption of superstrate-derived phonetic strings as labels for creole morphemes and the adoption of major-category word-order.<sup>44</sup> As far as I know, no second-language acquisition study has ever documented a stable interlanguage whose lexicon, morphology, syntax, semantics, parametric values, etc., are all derived from the native language (i.e., the L1), but whose entire lexicon has phonological representations that are derived from target (i.e., L2) phonetic strings. Recall that the interlanguages documented in the acquisition literature, including those at the early stages of second-language acquisition with relatively reduced access to the target language, do not resemble the output of relexification as described by Lefebvre. Instead, language learners, usually right from the start, incrementally restructure their interlanguages in all grammatical domains, notwithstanding variability in ultimate "success" rates (witness, e.g., the variable persistence of L1 transfer across grammatical domains; it should also be borne in mind that full competence in the second language is not necessarily the learner's goal [Siegel forthcoming]).

Phonology, for example, is one domain where L1 transfer (the perennial "foreign accent") is most apparent throughout the course of second-language acquisition, including its final and stable outcome. The all-too-familiar "foreign accent" often persists even when the adult learner's competence in the L2 (exceptionally?) approximates nativelylike mastery at the levels of morphology, syntax, and semantics. In other words, reflexes of L1 grammar (e.g., L1-influenced phonology) may characterize the learner's interlanguage up to the learner's final approximation of the L2. Under the Strict Relexification Hypothesis, the adult language learner qua creole creator never achieves competence in anything like the approximation of the superstrate that second-language acquisition achieves: the relexifier is stringently bounded by the abstract structures of the native substrate, even though exposure to the superstrate is enough to allow the creation of interlanguages with lexica whose phonetics are thoroughly superstrate-derived. The Strict Relexification Hypothesis puts all abstract structures of the superstrate outside the reach of the creole creator, in spite of evidence to the contrary (see section 3).



**4.2. Relexification vs. the sociohistory and demographics of colonial Haiti.** Why should the language-learning outcome of Africans in the colonial Caribbean be fundamentally and qualitatively different from the outcome of language learners elsewhere? Why should relexification within creole genesis be radically different from the restructuring of interlanguages in second-language acquisition outside of creole genesis? Both Lefebvre's (e.g., L:36, 65, 394) and Lumsden's (e.g., 1999:133) scenarios exclude the contribution of superstrate morphosyntax and semantics to creole formation on the ground that the social context of creolization drastically limited the learners' access to the target language.

Although not all types of transfer are related to relexification . . . the type observed in creole genesis corresponds to the definition of relexification . . . [L:34]

Because of the social contexts where creoles arise, . . . relexification appears to be a major tool used by creole creators . . . [L:35]

It is limited direct access to the superstratum language that makes relexification so important in the formation of [radical] creoles. [L:36]

But as we saw in section 3, a global comparative view of the Haitian Creole data disconfirms Lefebvre's postulated "limited direct access"; the latter is incompatible with the lexical and morphosyntactic profile of Haitian Creole.

Besides, we also have sociolinguistic, historical, and demographic evidence that the external matrix of creolization, at least in the case of Haitian Creole, was more—actually, much more!—intricate than the one hypothesized by Lefebvre (see, e.g., Chaudenson 1992:62–123; Chaudenson and Mufwene 2001: 94–129; Singler 1996; and the references cited in n. 45). Let us go over some of the relevant details and contrast them with the sociolinguistic assumptions of the Strict Relexification Hypothesis and their historical and demographic correlates.

For example, we know that the making of Saint-Domingue, from 1625 onward, into what became known in the eighteenth century as the "Pearl of the Antilles" did not occur overnight. It took at least one century and a very complex series of political, socioeconomic, and demographic events, which cannot be summarized here, for the insignificant and insecure settlement that started in the northern part of Saint-Domingue on the islet of Tortuga to become the richest colony of France, the one that accounted for one third of French foreign trade, with whites in 1791 forming less than 10 percent of a population of which at least 90 percent was labor- and wealth-producing black slaves (700,000 of them, in some estimates).

It is certainly true that most blacks in eighteenth-century Saint-Domingue, especially the field slaves on big plantations, had "limited direct access to the superstratum language," as Lefebvre claims. But this was certainly not true of all (proto-)creole speakers throughout the colonial period. For instance, the

sociodemographic profile of seventeenth-century Saint-Domingue would have made French varieties widely accessible to the African expatriates and their descendants. At that time, blacks formed only a small portion of the colonial population and often worked alongside French colonists and French indentured servants (*engagés*). Besides, throughout the seventeenth and eighteenth centuries, there existed (proto-)creole speakers (including, e.g., mixed-race children, free people of color, and so-called house slaves) with ample access to (approximations of) colonial French varieties. More generally, there are a number of key factors in Haiti's socioeconomic and demographic history that seem incompatible with the "limited access" postulate that is central to the Strict Relexification Hypothesis.

In the initial period of organized settlement in Saint-Domingue, from the 1640s until the turn of the century, nonwhites in Saint-Domingue formed a numerical minority who, in most cases, lived on small rural homesteads (the *habitations*) dedicated to the raising of livestock, cocoa, tobacco, cotton, coffee, indigo, and other crops. By and large, the nonwhite minority of slaves shared the lifestyle of the white majority of farmers, who incidentally numbered less than 2,000 up through the 1660s. Saint-Domingue's recorded population grew to a total of 6,658 in 1682, with a subcount of 2,000 slaves (Heinl and Heinl 1978:21, 25). The white settlers were speakers of various regional dialects of seventeenth-century colloquial French, certain features of which can still be found in contemporary Haitian Creole (Fattier 1998). This white majority included the *engagés*, with whom the slaves worked side by side (that much is also acknowledged by Lefebvre [L:54]; also see Singler [1996:223]).

Throughout the seventeenth century, the slaves never formed more than one-third of the colonial population and their sociolinguistic conditions were typically not that of "very limited access" to French. On the contrary, blacks in seventeenth-century Saint-Domingue generally had intensive contact with French, the target of their language-acquisition efforts. The conditions that obtained then, especially at the very beginning of settlement, were those of a "Robinsonnade" characterized by, inter alia, "total interaction [including linguistic and sexual interaction] between the two [white and black] communities" and by "the direct and constant integration of Blacks in the White milieu" (Chaudenson and Mufwene 2001:98). The "Robinsonnade" denomination is all the more adequate in that the earliest European settlers, from 1625 through much of the seventeenth century, were at first buccaneers and pirates, then small farmers and *engagés*, working alongside a small number of slaves, with both whites and nonwhites sharing more or less equally in the struggle, if not the rewards, of making the early precarious settlements livable and profitable at all costs and against all odds.<sup>45</sup>

The beginning of the eighteenth-century in Saint-Domingue witnessed a transition from a "homestead society" to a "plantation society" fueled by the increased popularity of large-scale (mainly sugar) exploitation and the con-

comitant increase in the slave trade to Saint-Domingue (see Singler [1996] and Chaudenson and Mufwene [2001:90–129] for overview and additional references). Africans' exposure to French varieties and approximations thereof would thus decrease as the size of, and the degree of, segregation on the plantations increased. Be that as it may, structural patterns in the homestead (pre-?) creole varieties of the seventeenth- and eighteenth-centuries would surely play an important role in the development of subsequent creole varieties, including their modern-day descendants, which fall under the communal- language label "Haitian Creole." Indeed, no matter what the homestead (proto-) creole varieties may have looked like—and some of them must have looked like fluent nonnative approximations of French with somewhat limited L1 transfer—these varieties ("acrolectal" creole varieties, if you will) could not have disappeared overnight.

The homesteads themselves did not disappear overnight. In fact, it is crucial to note that some of the sociolinguistic characteristics of the "homestead society" would have prevailed, in certain geographical regions and in certain social groupings, throughout the colonial period. Large-scale plantations did not drive small-scale homesteads out of existence altogether. Some small-scale farms continued to thrive (e.g., in the south) for the cultivation of coffee, indigo, and other products that could succeed commercially with less land and less labor than sugar. It is also worth noting that many of the smaller farms, including sugar plantations, were owned by free people of color. Many such people were locally born or of mixed race or both. In other words, the economy of Saint-Domingue, even after the radical "sugar boom" transformation, was never exclusively based on a sugar monoculture within monolithic big plantations; Saint-Domingue never experienced a generalized "shift to sugar monoculture," pace Singler (1996:198). As in the seventeenth century, much socioeconomic variation continued to exist in eighteenth-century Saint-Domingue, from region to region, from farm to farm, and from product to product (see, e.g., Geggus [1999] and references therein). Such variation bears notable consequences for the "very limited access" postulate of the Strict Relexification Hypothesis.

Throughout the colonial period, many regions in geographical and social space would qualify as "homestead society" to the extent that they would favor relatively close contact between superstrate and substrate speakers and their respective descendants for demographic, economic, or psychological reasons (see below). In these homestead regions of Saint-Domingue's geography and history, Africans and especially their locally born ("Creole") descendants<sup>46</sup> would have been regularly exposed to superstrate data, including the primary linguistic data necessary for the inheritance(-cum-restructuring) of a wide range of French-derived morphosyntactic properties into the developing (proto-)creole varieties, as attested in section 3. We even know from first-hand colonial reports that there were Africans in Saint-Domingue who were quite fluent in French, so fluent that they were deemed capable of teaching French to some of the French-born illiterate patois speakers who came to the colony from far-flung provinces

(see, e.g., the relevant citations in Chaudenson and Mufwene 2001:66–67, 80–81, 90–91, 111; also see n. 47 below). Possible exaggerations aside, the demographic profile of Saint-Domingue *habitations* in the seventeenth century and their sociolinguistic congeners throughout the colonial period makes them immune from the postulate that creole creators' access to French was uniformly "very limited."

Now, consider that Lefebvre, relying on demographic data from Singler (1996), explicitly locates creole genesis and its "limited access" correlate mostly outside of the homestead society and mostly within the sugar-based plantation economy with its increased slave imports and increasingly segregated social régime:

In the shift to a sugar economy, the *engagés* disappeared from the Haitian population and the enslaved population increased dramatically such that day-to-day contacts between the French speakers and the bulk of the Haitian African population were greatly reduced. This historical situation created a favourable context for a creole language to emerge. [L:54]

[Haitian Creole] is hypothesized to have been created by adult speakers between 1680 and 1740 at the beginning of the sugar economy. [L:57]

For Lefebvre, one crucial external factor for creole genesis was the sociodemographic context of the "sugar boom" transformation after which "the African people [in Saint-Domingue] could not have had much direct access to native speakers of French" (L:57; also see Singler 1996:193).

However, given the lexical and morphosyntactic correspondences between Haitian Creole and French sketched in section 3 above (such correspondences also existed at the earliest documented stages of Haitian Creole; see, e.g., Fattier 1998; Valdman 2000), it must be assumed, pace Lefebvre, that there crucially were speakers involved in the development of Haitian Creole who, throughout the colonial period, had much more than "very limited access" to French (for related comments, see, e.g., Alleyne 1971:172–75, 179–82; Baker 1982:852–56; Chaudenson and Mufwene 2001:95–129; Mufwene 2001a:63, 79–80). As noted by Mufwene (forthcoming n. 9), "at the beginning of the *société de plantation*, there were already Creole slaves who natively spoke the local [French] colonial koiné" (my translation).<sup>47</sup> In this particular case, the contribution to Haitian Creole's development of non-European speakers with relatively easy access to the superstrate militates against the "break of transmission" scenario that is so popular in creolistics. On the structural front, this contribution is evidenced most straightforwardly by Haitian Creole's massive adoption-cum-restructuring of French morphemes, down to French affixes (see section 3.1).

Besides, no study that I know of has ever documented an (early) Haitian Creole dialect that lacked systematic etymological correspondences with French (again, see, e.g., Fattier 1998; Valdman 2000). Therefore, there seems to be no

valid linguistic reason to assume a priori that the creators of Haitian Creole would, because of some hypothetical drastically limited access to French, uniformly ignore French grammar and limit French contributions to their incipient creole to “phonetic strings deprived of abstract features.” Instead, the available comparative-linguistic evidence and the sociohistorical facts warrant a quite different hypothesis. In this alternate hypothesis, crucial phases in the diachrony of Haitian Creole must include the temporal and geographical regions where some of the originators of (Proto-)Haitian Creole varieties were in learner-friendly ratios and learner-friendly social conditions with speakers of the superstrate target language.

In this vein, let us ask (again): Who among language learners in colonial Haiti were in such a sociolinguistic environment that they could access morpho-syntactic and semantic information about French and segment fluent French speech? What history tells us is that the African-born field slaves on the larger eighteenth-century sugar plantations were the ones with the *least* exposure to any form of French (see Chaudenson and Mufwene [2001:119–29] and references therein for details). These slaves would not have been in a position to solve the segmentation and matching problems discussed in section 3.2.2. Yet it is an incontrovertible fact that, at the very least, French etyma overwhelmingly characterize the diachronic origins of the Haitian Creole lexicon and its morphology.

We are thus led to the sociohistorically and linguistically plausible alternative that the diachronic course of the communal language(s) that we now call Haitian Creole started before the “sugar boom” shift to plantation society and implicated speakers whose access to French was not “very limited.” Lefebvre’s scenario totally ignores that alternative. Even though Lefebvre acknowledges the historical fact that there were homestead Africans with “day-to-day contacts [with] French speakers” and that such contact was “greatly reduced” after “the shift to a sugar economy” (L:54), she does not address the important role that homestead-society creole speakers and their locally born and native-creolophone descendants could and must have played in the development of Haitian Creole. As Hancock notes, “at least, some creole speakers have always been able to speak the related metropolitan language (where it has continued to exist in the same environment) . . .” (1980:xi). So, in a sense, there was never a “break in transmission” of the superstrate language in the Caribbean: abstract structural patterns from the superstrate language did play a determinative role in the development of Caribbean creoles, *contra* Lefebvre. (See Mufwene [2001a] for a sustained argument along the same lines.)

Be that as it may, among the original ancestors of Haitian Creole, there must have been varieties that were created with a higher degree of exposure to French (approximations) than the Strict Relexification Hypothesis admits. As Alleyne (1971:172–75, 179–82), Baker (1982:852–56), Chaudenson and Mufwene (2001a:127), Mufwene (2001a:38–39, 50–54, 91–92) and others have argued, creole continua in Africa and the Caribbean would have come into

existence at the onset of contact between Europeans and non-Europeans. In one such scenario, Caribbean creole continua would have developed in the reverse order from what is usually assumed: in the initial (e.g., the homestead-society) stages, the linguistic ecology would have been dominated by creole varieties structurally closest to the superstrate (the acrolects) whereas the most restructured creole varieties (the basilects) would have been more numerous in the later (plantation-economy) stages, as the proportion of newly arrived Africans (the “Bozals”) would have exceeded that of the long-established locals, including the locally born (the “Creoles”).<sup>48</sup>

There is an ironic sociohistorical-cum-terminological twist worth noting vis-à-vis the oft-repeated claim that African-born adults were exclusively responsible for creole genesis. It is a well-documented fact that the speech of the locally born Saint-Domingois—the very individuals known as “Creoles,” be they black, white, or mixed-race, and the very individuals who often spoke creole as their native communal language—was usually quite distinct from the speech of the “Bozals,” the African-born slaves. As Moreau de Saint-Méry puts it, in his usual dramatic style: “this [creole] language, . . . is often unintelligible when spoken by an old African; one speaks it all the more fluently if one learns it at a younger age. . . . Europeans, no matter how long they’ve practiced it and no matter how long they’ve lived on the Islands, are never fluent in all its nuances” (1958:80–81, my translation).

The “true” creole speakers would thus be the Creoles (i.e., those born in Saint-Domingue) who would have learned it at the youngest age, and this “true” creole language was a social marker to which the upwardly mobile African-born slaves often aspired to with great anxiety, since there was much stigma and economic disadvantage to not speaking it as a native (i.e., as a Creole Saint-Domingois). Indeed, Bozal slaves were often ridiculed for speaking their native languages (see n. 48), notwithstanding the latter’s symbolic and affective value (Fouchard 1972:435–36). Therefore, Haitian Creole then, unlike now, did provide much coveted, even if hard-to-access, socioeconomic capital (e.g., jobs off the fields) to the Africans and their locally born descendants that could speak it (near-)natively. It is in this vein that the slave population of Saint-Domingue was partitioned into the locally born (Creole) slaves versus the Creolized slaves (African-born, but relatively “seasoned”) versus the Bozal (African-born and recently arrived) slaves (see, e.g., Fouchard 1972:433). The Creole slaves, especially those who worked off the fields, would tend to more easily gravitate toward some ill-defined intermediate or buffer zone between slavery and freedom, from which they would hold a certain degree of relative prestige vis-à-vis the non-Creole or field slaves (see, e.g., H. Trouillot 1955; Debien 1971:85–133, 369–91; I return to the sociolinguistic roles of Creoles and nonfarming slaves below).

In addition to their prestige—and their access to the French(-like) prestigious varieties—what also gave the Creoles an important sociolinguistic role is their sheer number: on many eighteenth-century plantations (e.g., in the north)

the proportion of Creole slaves exceeded that of African-born slaves, and especially so in the upper ranks of the slave hierarchy (see, e.g., Debien 1971:63–68, 122, 450; Geggus 1999:40–42).

Yet it is not the Creoles, but the Bozals (i.e., those who were the least fluent in the creole language and the least Creolized among the non-Creoles) that Lefebvre, among others, takes to be the main agents of “creole” language genesis (also see Singler 1996:196–97; Mufwene 2001a:131).<sup>49</sup> This position is particularly troubling for the view that the question of creole genesis should, in Lefebvre’s terms, be addressed “from the point of view of I-languages” (L:7). “I-language,” as a theoretical concept in the Chomskyan framework assumed by Lefebvre, typically concerns the fluent competence of native speakers. Such fluent native competence seems far removed from the linguistic profile assumed by the Strict Relexification Hypothesis—one of adult learners with very limited access to target primary linguistic data. I return to this problem below in section 4.3.

In addition to the Creoles (i.e., the locally born), there are two other groups whose sociolinguistic role, because of their intermediate social position, must be taken into crucial account. One is the free(d) men and women of color (the “affranchis”) who, in Moreau de Saint-Méry’s (1958:111) definition, are those who are neither white nor slave; the affranchis did own slaves and land (up to one third of slaves and one fourth of land in some estimates). The other is the nonfarming slaves, a cover term for slaves working off the field (e.g., house slaves, urban slaves, slaves with specialized non-farming skills such as artisans, healers, etc.). In the eighteenth century, especially at the end of that century (before the demise of colonial rule), the majority of the affranchis and nonfarming slaves were Creoles, and the majority of affranchis were of mixed race—the so-called mulattoes (i.e., those who, in Saint-Méry’s words, are “neither Black nor White” [1959:111]; Saint-Méry adds detailed comments, including a much more intricate nomenclature [pp. 83–111]).

Throughout the history of the colony, the affranchis and the nonfarming slaves, especially the domestic slaves (“house slaves”), had, by and large, constant and ample opportunities for all sorts of interaction (including linguistic and sexual interaction) with speakers of French varieties and approximations thereof. (See, e.g., Moreau de Saint-Méry 1958:59; H. Trouillot 1955; Alleyne 1971:172–75, 179–82; Mintz 1971:486; Debien 1971:85–133; Chaudenson and Mufwene 2001:94–129; etc.) In Moreau de Saint-Méry’s words, “for all tasks, it is the Creole slaves that are preferred; their worth is always a quarter more than that of the Africans” (1958:59). And it is the Creole slaves who were often, if not always, entrusted with the task of “seasoning” (i.e., breaking in) the Bozals into their new roles within the colonial system; such training may have included attempts at “Gallicization” (see Chaudenson and Mufwene 2001:91, 123; but see n. 45 below).

As Mintz emphasizes, “the emergence of a ‘creole culture,’ borne by the colonial powerholders, would mean that newcomers and the socially subordinate groups . . . would be provided with some sort of acculturational—and, possibly, linguistic—model” (1971:481). One such group of powerholders is the mixed-race *affranchis*, who are part of “a stratum intermediate between the dominant minority and the laboring masses. . . . The linguistic significance of this social differentiation was of course considerable” (1971:486).

It is thus reasonable to consider that key cultural and linguistic models were—of course, not exclusively—among the “powerholders,” including the *affranchis* and the nonfarming slaves, with their increasing proportion of locally born. Baker (1982:852–56) and Chaudenson and Mufwene (2001:122–29) provide handy summaries of, in Baker’s terminology, “reasons likely to have contributed towards motivating locally-born slaves to adapt their speech in the direction of the [European and non-European] ruling class[es]” (1982:853). In a related vein but in a distinct theoretical framework, Bickerton observes that “the nativized language of this native minority provided a target for subsequent immigrants, who would have acquired it, to the best of their ability, as a second language. Any realistic social history of creole genesis must acknowledge that the native born in a Creole society had advantages in both prestige and access to key positions in a slave hierarchy” (1992:312; also see Bickerton 1988:281). Singler also attributes a key role to Creole children (albeit from yet another theoretical perspective that is diametrically opposed to that of Bickerton): “those who spent their childhood in the colony, particularly those who were in extensive contact with speakers of the lexifier language, introduced input from that language into the creole” (1996:196). Barthélémy (1997) is a fascinating essay on Creole-vs.-Bozal cultural and linguistic differentiation in the colonial period and its long-lasting impact on Haitian society (also see H. Trouillot 1955; 1980: 37–84).

The point here is simply that, independently of one’s theoretical agenda, no account of Haitian Creole genesis can afford to ignore the sociolinguistic role of the locally grown—the Creole—children and the latter’s contributions to the colored *élites* of Saint-Domingue. In the particular case at hand, denying that the locally born and the upper social strata of the colored and slave populations influenced the emergent creole would imply that the sociolinguistics of language contact in Saint-Domingue remained completely immune to facts of power. The latter proposition is implausible, especially given the sociological and ideological profile of Saint-Domingue—a colony whose enormous wealth-generating capacity depended on a strict regimentation of power differentials—and given the momentous events that would lead to the Haitian revolution, namely, the various alliances, dalliances, and battles among (factions of) French expatriates, white Creoles, colored Creoles, *affranchis*, and African-born slaves.

To recapitulate, the (socio)linguistic contributions to creole genesis of home-stead-society blacks, nonfarming slaves, Creoles, *affranchis*, and other speakers



with relatively unrestricted access to (varieties of) French cannot be glossed over. Such contributions must be considered alongside the substrate-influenced innovations introduced in the linguistic ecology by such groups as the so-called Bozals through their attempts at learning “approximations of approximations” of French (cf. Chaudenson and Mufwene 2001:99–129).

We now turn to the specific role in creolization of language acquisition by Creole (i.e., locally born) children.

**4.3. Relexification in second-language acquisition vs. the creation of “creole” I-languages in first-language acquisition.** What does “creole genesis” refer to in the context of the Strict Relexification Hypothesis? What is the sort of theoretical objects whose creation the Strict Relexification Hypothesis makes claims about? Lefebvre clearly states, in the Chomskyan mode, that “the account proposed in this book takes . . . up [the questions posed by creole genesis] from the point of view of I-language” (L:7). But do I-languages, in the Chomskyan framework espoused by Lefebvre, include the hypothetical interlanguages of adult African learners in the colonial Caribbean—learners frozen with a beginner’s interlanguage (see section 4.1) and, by hypothesis, with drastically reduced access to their European target languages. Recall that such learners are taken, again by hypothesis, to have failed to acquire any abstract property of their target language. At this point, we must ask: Is there a Chomskyan “I-language” notion that is compatible with the Strict Relexification Hypothesis “I-language” notion as applied to interlanguage structures that are frozen in the very beginning stages of second-language acquisition and that are radically different from target structures?

As it turns out, Chomsky’s notion of I-language relates specifically to the linguistic competence of native speakers. Consider one fundamental goal of Chomsky’s I-linguistics:

To the extent that a linguistic theory succeeds in selecting a descriptively adequate grammar on the basis of primary linguistic data, we can say that it meets the condition of EXPLANATORY ADEQUACY. That is, to this extent, it offers an explanation for the intuition of the *native* speaker on the basis of an empirical hypothesis concerning *the innate predisposition of the child* to develop a certain kind of theory to deal with the evidence presented to him. [Chomsky 1965:25–26; italics added; cf. Chomsky 1970:28–29]

This I-linguistics can be made more explicit by quoting the very monograph, namely, Chomsky (1986), that Lefebvre appeals to in her own presentation of the Strict Relexification Hypothesis “from the point of view of I-language.” In Chomsky’s own words:

How is knowledge of language acquired? . . . The answer . . . is given by a specification of [Universal Grammar] along with an account of the ways in which its principles interact with experience to yield a particular language [i.e., a

particular I-language]; [Universal Grammar] is a theory of the “initial state” of the language faculty, *prior to any linguistic experience*. [1986:4; italics added]

On the basis of observed phenomena, the *child’s* mind constructs a language (an I-language). . . . [1986:257; italics added]

If a theory of language failed to account for these judgements [i.e., the judgements of *native* speakers], it would plainly be a failure; we might, in fact, conclude that is not a theory of language, but rather of something else. [1986:37]

According to the above foundational assumption, the object of study of I-linguistics is native-speaker knowledge (i.e., the knowledge attained by children in first-language acquisition). One presupposition is that the knowledge attained in the course of first-language acquisition (i.e., learning a native language) may, at least in principle, be of a different sort than the knowledge attained by adult learners in second-language acquisition (i.e., a non-native language).

If “the [Strict Relexification Hypothesis] account . . . takes . . . up [the questions posed by creole genesis] from the point of view of [Chomsky’s notion of] I-language” (L:7) and if Chomsky’s notion of “I-language” is explicitly in terms of native-speaker knowledge, then it seems conceptually incongruous that, under the Strict Relexification Hypothesis, the central agents of creolization are adult learners (i.e., nonnative speakers) who have systematically failed to acquire some target language. In effect, the Strict Relexification Hypothesis—as a theory of “creole genesis” by nonnative speakers whose “creole” grammars are isomorphic to their native (substrate) grammars—fails to account for the judgements of native creole speakers whose idiolects emerged from an “‘initial state’ of the language faculty, prior to any linguistic experience.” Assuming Chomsky’s definition of I-language, the Strict Relexification Hypothesis fails as an hypothesis about the creation of “creole” I-languages in Saint-Domingue; the Strict Relexification Hypothesis must then be a theory of “something else.”

What is that “something else”? In the Strict Relexification Hypothesis, “nativization” is considered to play no important role in creole genesis: “the difference between pidgins [nonnative languages] and creoles [native languages] has been levelled out in view of the fact that there are some pidgins (still used as a second language) that have been shown to have expanded in the same way as languages known as creoles” (L:4). This statement seems ill-defined: since the very question at stake—an apparently most controversial question at that—concerns the way “languages known as creoles” have expanded, it is not clear to me that we have, as of yet, “shown” that pidgins and creoles have expanded “in the same way.”

In any case, there is a more general problem with Lefebvre’s claim that nativization is unimportant. The Strict Relexification Hypothesis seems to give the same ontological status to two theoretical entities that are aprioristically distinguishable within I-linguistics: (i) the adult learners’ relexification output; a drastically incomplete state of second-language acquisition, whereby few, if any, new structures are produced besides those already present in the learners’

L1; and (ii) I-languages attained in childhood via first-language acquisition, from “the ‘initial state’ of the language faculty, prior to any linguistic experience” (Chomsky 1986:7). In the latter case, the learner has no prior stable set of native parametric values to transfer into the developing I-language, so all (I-)language-specific properties are created “anew” in the mind/brain of the learner. Lefebvre’s (implicit) assumption that the theoretical objects in (i) and (ii) “have expanded in the same way” and hence have commensurable (psycho-)linguistic status is one that requires careful argumentation, especially in light of Chomsky’s fundamental axioms of I-linguistics cited above.

There is a long-running debate on whether the cognitive processes and output of second-language acquisition—especially in its early stages or with reduced access to target data—are ontologically different from their counterparts in first-language acquisition (see DeGraff 1999b:476, 478–95, 524–27). Acquisition researchers are also busy investigating possible child-vs.-adult differences in the ways certain grammatical components do or do not develop because of critical periods related to various grammatical domains (see Hyltenstam and Abrahamsson [2000] for a recent review). If such critical periods do exist, and can be shown to have neurological bases, then the ontological differences between (native) I-languages and adult interlanguages become even sharper, so that the fashion in which I-languages are created by children via first-language acquisition may not be (so easily) replicated by adults engaged in second-language acquisition (but see Epstein, Flynn, and Martohardjono [1996], and Schwartz [1998] for opposing arguments). In other words, it is quite possible that native languages and nonnative interlanguages do not “expand in the same way,” pace Lefebvre.

If we adopt Chomsky’s assumptions about I-languages, then the central agents of creole genesis as the creation of creole I-languages cannot be adult learners. In the Strict Relexification Hypothesis scenario, there is virtually no new rule to be acquired by the original relexifiers. By the very definition of relexification, the relexifiers are not engaged in language acquisition as understood by I-linguistics. Given their alleged “very limited access to superstrate speech,” these relexifiers, by hypothesis, create no new I-languages. Universal Grammar, as envisaged by Chomsky (1986:4; see above) actually plays no direct role in relexification: the Strict Relexification Hypothesis is, by definition, an account of how abstract properties of the second-language learner’s L1 are transferred in toto into some final interlanguage such that the L1 and that final interlanguage are virtually identical, modulo phonetics and major-category word order (but see the theoretical contradictions discussed in section 3.3). First-language acquisition simply does not happen this way: unlike in relexification, in first-language acquisition there are no prior parameter values to be transferred in toto into the child’s native I-languages. Therefore, relexification, as defined in the Strict Relexification Hypothesis, is not an instance of I-language creation in the first-language acquisition sense envisaged by Chom-

sky, where the learner's initial state is transformed by "experience" (i.e., by the primary linguistic data) into a distinct final state, "a particular I-language."

If we do want to take up the creole-genesis question from the I-language perspective, we are thus forced—this time, on a strictly conceptual basis—to reconsider the role of the first native speakers of (early) Haitian Creole while simultaneously keeping in mind that the nonnative (often early) interlanguages of adult learners with their respective L1s (the substrates) did contribute to the primary linguistic data available to the first generations of native creolophones.<sup>50</sup> I will thus proceed with the working assumption that "creole genesis"—in the specific mentalist sense that matters to the Strict Relexification Hypothesis and to my critique of it in this essay—falls in the scope of Chomsky's I-linguistics, and refers to the creation of new I-languages from an invariant initial state (Universal Grammar) via certain nontrivial transformations triggered by the particular experience of language learners exposed to specific kinds of primary linguistic data, as determined by contingent socio-historical circumstances. We then need to inquire about the first generations of native speakers of (early) Haitian Creole and their experience (see, e.g., DeGraff 1999a:1, 8–9, 165, 1999b:484–85).

Recall the sociohistory sketched in section 4.2. Also recall the seemingly paradoxical fact in section 3 that the lexicon, morphology, and word order of Haitian Creole are substantially, although far from exclusively, French-derived. Given what we know about the cognition of word segmentation and the (quite abstract) relationship between word order and grammar, these systematic structural and phonetic correspondences between Haitian Creole and its superstrate—Haitian Creole's French "inheritance," for lack of a better term—constitute a formidable challenge to the Strict Relexification Hypothesis and to any other account that postulates as exclusive agents of creole genesis African adult learners with extremely reduced access to target primary linguistic data. After all, Haitian Creole's French inheritance—alongside substrate influence (Haitian Creole's Niger-Congo inheritance) and "grammatical inventions" (in the terminology of Rizzi 1999)—was also (re-)created by the agents of Haitian Creole's genesis. This poses a challenge for any creole-genesis definition (e.g., Singler 1996:196; see n. 49) that makes substrate influence its exclusive explanandum as if substrate influence were the very essence of creolization, independently of the integration, in creole systems, of substrate influence with both superstrate inheritance and grammatical inventions. We can easily borrow the maxim often attributed to Meillet in order to state without reservations that a creole language, like any other natural language, "est un système où tout se tient et a un plan d'une merveilleuse rigueur"—"is a system where every part holds another, with a wonderfully rigorous design." Accounting for substrate influence is only part of the story, a part that one day must be integrated, indeed, with marvelous rigor, into the rest of the story.<sup>51</sup>

**4.4. First-language acquisition in creole genesis.** We can now return to the question of who, in colonial Haiti, were the first speakers whose native (I-)languages exhibited stable integrated systems with French inheritance, substrate influence and various sorts of innovations compatible with Universal Grammar. These locally grown varieties manifested enough innovations to appear “new” and to deserve new labels such as “creole.” At the same time, these “new” varieties also manifested enough correspondences with the lexifier to be considered related to French (see, e.g., some of the primary references cited by Chaudenson [1992:62–123] and by Chaudenson and Mufwene [2001:94–129]). The first fluent speakers of such an early Saint-Domingois/Haitian Creole could not have been those that Lefebvre considers the principal agents of creole genesis, namely, the African-born adults who were being transported en masse to work as field slaves in plantation communities at the peak of the colony’s sugar exploitation. By definition, these came in as adults and, by then, they could only have “very limited access” indeed to French(-like) and creole (-like) varieties and approximations thereof. They could not have, on their own, originated a stable full-fledged creole grammar with systematic structural correspondences with French, including an overwhelming majority of French-derived morphemes (see sections 3 and section 4.2). Besides, many of the Bozals would die within a few years of arrival; it has been estimated that as many as half the newly arrived would die within their first three years in the colony (on mortality rates in Saint-Domingue, see, e.g., Debien 1971:83–84, 343–47; H. Trouillot 1980:53, 57; Chaudenson and Mufwene 2001:92). Presumably, those slaves would die without ever achieving anything like native fluency in any local variety, be it “creole” or not.

Taken together, these facts suggest that the basic morphosyntactic profile of Haitian Creole, with the (dis)similarities noted above relative to its source languages, was established, not by field slaves on large-scale and radically segregated plantations, but in the idiolects of: (i) homestead dwellers before the eighteenth-century “sugar boom” shift to the large-scale plantation system; (ii) other Saint-Domingois who, like the homestead dwellers, often had relatively direct and intimate contact with speakers of French varieties, as well as with speakers of a continuum of (pre-)creole varieties with varying degrees and various sorts of substrate influence. The “other Saint-Domingois” in (ii) included the affranchis and the nonfarming slaves, many of whom were locally born (i.e., Creole), even though they were still exposed, in various degrees, to the African ancestral languages (contra Chaudenson and Mufwene 2001:91–93, 309; see n. 45).

In this vein, let us recall some basic points from the discussion in section 4.2. One fact of central sociolinguistic importance is that the locally born population of colonial Haiti, including the Creole affranchis and the Creole slaves, was often depicted and, perhaps more importantly, saw themselves as the Creole community par excellence. Furthermore, it is the affranchis and the nonfarming

slaves that (somewhat ambivalently and often uneasily) provided most of the leadership and organizational skills toward the successful Haitian revolution (1791–1803) that led to Haiti's independence, even though the African-born slaves provided the true revolutionary impetus and the bulk of its military might (see, e.g., H. Trouillot 1955:32, 1980:50–52; Fick 1990; Thornton 1991; M.-R. Trouillot 1998:24–25; Geggus 1999:40–42). The locally born among the *af-franchis* and the nonfarming slaves were also the ones in the best circumstances to acquire (or create) the emergent creole as their native I-language with stable parameter settings deduced directly via “[Universal Grammar] . . . interact[ing] with experience to yield a particular language,” a *bona fide* I-language as in Chomsky's definition (1986:4). In turn, the communal norms corresponding to these I-languages would constitute one important symbol of the locally born Saint-Domingois' relatively prestigious Creole identity, which would help set them apart from the stigmatized *Bozals* at the bottom of the socioeconomic ladder.

In this regard, it is rather curious that the Strict Relexification Hypothesis makes no room for the linguistic import of the homestead population and neglects the sociolinguistic significance of the relatively prestigious locally born Saint-Domingois—who, throughout the colonial period including the plantation phase, constituted an unbroken series of native creolophones with a primary role in the emergence of Saint-Domingue's Creole identity. More than curious, this is quite peculiar: as Moreau de Saint-Méry, Alleyne, Mintz, Chaudenson, H. Trouillot, M.-R. Trouillot, Bellegarde-Smith, Barthélémy, Geggus and many others have reminded us with solid evidence and historically grounded argumentation, the locally born in Saint-Domingue, at all stages of the colonial period, have had a momentous impact on the making of Creole culture and its enduring social and cultural syncretisms and divides.

With this in mind, it may be constructive to reexamine Lefebvre's theoretical stipulations about dialect leveling. This is the crucially needed social process whereby the structurally disparate nonnative creole varieties—as spoken by native speakers of distinct substrate languages—converge on a consistent set of parametric values: “the purpose of dialect levelling is to reduce variation between the various dialects produced by relexification” (L:393; see also the discussion of dialect leveling in section 2.2).

The conceptual necessity of something like dialect leveling is beyond doubt, even if Lefebvre's specific uses of it is quite problematic (see, e.g., n. 36 and n. 38). In order to appreciate the indispensability of dialect leveling, let us ask ourselves this: In the Strict Relexification Hypothesis scenario, what must proto-creole—or, perhaps more appropriately, pre-creole—varieties in Saint-Domingue have looked like before dialect leveling took place?

The Strict Relexification Hypothesis implies that there was a diachronic period during which the products of relexification would have been quite heterogeneous. Even in presence of relatively similar substrate languages (among, say,

the Kwa group), each distinct substrate language in the preleveling period would produce a nonnative early creole variety with its own distinct grammar, as determined by the parametric settings of the respective substrate qua L1 in second-language acquisition.

In the Principles-and-Parameters model in which Lefebvre's proposal is couched, slight differentials in parameter-settings can have wide-ranging observable effects (Chomsky 1986:151–52; also see Kayne's [2000] comparative "micro-parametric" work on, *inter alia*, dialects of French and Italian). In the preleveling stage defined by the Strict Relexification Hypothesis, one surely could not speak of one (creole) variety or one set of such varieties—with relatively homogeneous morphosyntactic profiles—even in presence of relatively similar substrate languages (*pace* L:391–93). According to basic Strict Relexification Hypothesis axioms (as discussed in sections 1 and 2), the makeup of early creole idiolects in colonial Haiti would reflect parametric differences between, for example, Bantu and Kwa. Compare, say, massive incorporation in Bantu and lack thereof in Kwa (see Singler [1996:224–25] and DeGraff [1999b:501–2, 505–6] for related comments). So, the Strict Relexification Hypothesis straightforwardly predicts a preleveling linguistic ecology with Bantu-substratum creoles, Kwa-substratum creoles, etc. By definition, before leveling there would have been as many early creole languages as there were substrate (I-)languages with distinct parametric profiles, as each distinct substrate grammar defines a parametrically distinct early creole grammar: "speakers of various substratum languages reproduce the idiosyncratic semantic and syntactic properties of their own lexicons in relexification and thus the product of relexification is not uniform across the creole community" (L:46).

Thus, in the Strict Relexification Hypothesis, relexification *per se* cannot play the "central role in [Haitian] Creole genesis": relexifiers in the preleveling period could not have created Haitian Creole, unless the latter is taken to refer to an array of parametrically disparate Niger-Congo grammars (derived from, e.g., Fongbè, Akan, Gã, Gur, Efik, Ibibio, Igbo, Yoruba, Malinke, Bambara, Foula, Kikongo) all with French-derived phonetics (see Singler [1996:200–216] and references therein for an inventory of substrate languages in colonial Haiti and statistics on their respective speakers at various colonial periods). The typological mix of early relexified creoles would thus be radically different from the relatively uniform grammar that is shared by speakers of contemporary Haitian Creole, across dialectal lines. Indeed, despite class-based and regional variations (see, e.g., Fattier [1998] for extensive documentation), Haitian Creole, Haiti's only national language, is a relatively stable and homogeneous entity that virtually all Haitians in Haiti speak and understand (as is noted by Fattier [1998:xxii]). This relative homogeneity contrasts with the sort of substrate-influenced variation that would have existed in the nonnative (proto-)creole varieties of Saint-Domingue's plantation society and the immediate descendants of such varieties.

It thus seems to me that, given the inevitably diverging output of relexification in an ecology with diverse substrates, proponents of the Strict Relexification Hypothesis would need to argue that homogenization through dialect leveling must play a more central role in creole diachrony than relexification. So, let us ask: Who were the agents responsible for the leveling and homogenization of (proto-)creole varieties? This brings us back to an updated version of one of our earlier questions: Who, in the colonial Caribbean, were the first learners to create (acquire) their I-languages as part of an increasingly larger (communal) set of relatively homogeneous "creole" idiolects?

Homogenization of idiolects, independently of the cognitive and social processes that would have produced the antecedent heterogeneity that is to be leveled, is one area where children are known to play an instrumental role. For instance, children's homogenizing role is observable in the case of immigrants whose locally born children rapidly converge on the local variety and systematically eschew the xenolectal (i.e., L1-influenced) features of their parents' nonnative approximations of that local variety. Nonnative adult speakers from mutually distinct L1s do try to accommodate their respective nonnative versions of the local target to one another's speech. But there is one fundamental difference between adult immigrants as L2 learners and their locally born children as L1 learners: the former, unlike the latter, inevitably introduce L1-influenced patterns (e.g., their "foreign accent") in their approximations of the local target language. Thus, locally born children of immigrants have a distinct advantage over their L2-learning parents in the creation of idiolects that converge with their peers' idiolects and that closely reflect the evolving norms of the local speech community.

Measurable instances of homogenization by children have been reported in cases of sign-language acquisition from inconsistent primary linguistic data (Newport 1999; Kegl et al. 1999). In the Newport study, the primary linguistic data produced by late-signing parents were often inconsistent in nonsystematic ways. Newport (1999:168–71, 173–74) argues that child learners whose primary linguistic data show unsystematic variability do not replicate such variability; instead the child learners pick "predominant" patterns in the input and generalize them on the basis of productive rules, making their own output fully systematic: the child learner uses markedly sparse and inconsistent input to create "a more deterministic rule system" (1999:168). Confirming Newport's result, Kegl et al. (1999) contrast the idiosyncratic and highly variable homesigns ("mimicas") of previously isolated signers and the relatively unstable pidgins they gave rise to upon contact with each other; with the stable sign language created by the children immersed at a young age in the Deaf communities originally created by former homesigners. (See DeGraff 1999b:493, 508, 512, forthcoming b, forthcoming d] for further discussion and some caveats.)

Many sociolinguistic treatments of language variation and change have similarly argued that children are essential to the homogenization of dialects



in contact (see the survey in DeGraff 1999b:506–7). In Siegel's discussion of dialect-leveling in the diachrony of Hawai'ian Creole, "it was the children who rapidly regularised these innovations [i.e., the results of transfer by substrate-speaking adults] and integrated them into the grammar of the newly emerged creole" (forthcoming). After all, locally born children in the appropriate environments would acquire the local (proto-)creole varieties without any massive transfer from an array of mutually distinct prior native languages. Such massive transfer would have been typical of second-language acquisition by those who entered the language-contact situation as adults with somewhat restricted access to the local target language. Unlike these adults, locally born child learners would all start acquisition uniformly from an "initial state of the language faculty, prior to any linguistic experience" (Chomsky 1986:4). Note, though, that such instances of first-language acquisition in the midst of language contact do not exclude the possibility that certain substrate languages, at least for some period, may also be acquired concurrently in bilingual mode by some of the locally born children. Such childhood bilingualism may have been another conduit for substrate influence. However, language transfer in child bilingualism seems much more limited in scope than language transfer in second-language acquisition by adults; in fact, the few available comparative studies suggest that children's bilingual acquisition follows a course "highly similar" to children's monolingual acquisition (de Houwer 1995:240–44, 248). Be that as it may, eventually locally born children would have relatively little use for the ancestral African languages, whose socioeconomic utility had rapidly decreased vis-à-vis the local creole, the only native language that they would all have in common and that would distinguish them from their Bozal ancestors who often were considered uncouth, linguistically and otherwise (see n. 48). The widespread and brutal stigmatization of Bozal speech would have been yet another catalyst for the suppression of xenolectal features by the locally born and whoever could try to imitate them (see section 4.2).

Now, consider the Strict Relexification Hypothesis claim that "in the early stages of the creole, substratum languages may influence the developing creole even when they are no longer spoken in the creole community" (L:45). The stage at which substratum languages are "no longer spoken in the creole community" coincides with the stage at which the creole-speaking community is made up largely of locally born and native creolophones. Yet Lefebvre remains quite silent on the specific role of children in creole genesis, notwithstanding the overly general comment that "as in other situations of linguistic change, children play an important role in the development of creoles" (L:13). That comment seems relevant to post-genesis development only, given the basic premises of the Strict Relexification Hypothesis. Indeed, "it is argued that creole languages must be created by adult speakers with a mature lexicon" (L:10; cf. 394). Furthermore, Lefebvre argues that nativization is not a crucial factor in creole genesis and that pidgins as nonnative languages and creoles as native languages

are aprioristically indistinguishable (L:4). Such arguments are incompatible with the crucial role that Saint-Domingue's Creole (i.e., locally born) children must have played in the creation of relatively homogeneous creole I-languages and the development of a relative uniform local set of communal (E-)language norms as a social marker of Creole identity.<sup>52</sup>

**4.5. An "L2A-L1A cascade" in creole genesis.** By focusing almost exclusively on adult relexifiers as the "central" agents of creole genesis, the Strict Relexification Hypothesis systematically and erroneously glosses over possible interactions and differences between (early) second-language acquisition and first-language acquisition and the implications of such interaction and differences for creole development (but see n. 52).

In my own recent work (e.g., DeGraff 1999b:476, 478–95, 524–27, forthcoming b, forthcoming d), I have revisited the interaction between second-language acquisition and first-language acquisition in creolization. Putting old wine in new bottles, I have dubbed this interaction an "L2A-L1A cascade" relationship whereby second-language acquisition and first-language acquisition play distinct and complementary roles in various stages of creole genesis, with the (substrate-influenced) output of second-language acquisition playing a key role in defining the primary linguistic data in subsequent first-language acquisition. The latter is the process whereby creole I-languages were created directly from Universal Grammar, without the learners forming hypotheses based on direct access to some already formed native (i.e., L1) idiolects (L1 learners, by definition, have no prior full-fledged native idiolects to rely on before exposure to primary linguistic data). Note that this "L2A-L1A cascade" relationship naturally allows both first- and second-language acquisition to contribute to Creole development, each in its own principled way, and is fully compatible with the possibility of substrate influence in various components of creole grammar, subject to the constraints of Universal Grammar.

Yet, by hypothesis, it is only the locally born (i.e., the so-called Creole) children that could have been responsible for creole genesis (e.g., in the Caribbean) in the well-defined and narrowly technical sense of "creole genesis" as the creation of (native) "creole" I-languages—I-languages in Chomsky's theoretically constructive sense. These creole I-languages were originally attained through Universal Grammar via exposure to primary linguistic data that were influenced in varying degrees by, *inter alia*, the output of substrate-L1/superstrate-L2 interlanguages, alongside a continuum of superstrate(-like) and creole(-like) varieties, be they native or not. Many Creole children grew up interacting with (quasi-)native speakers of the superstrate and substrate languages, as well as with nonnative speakers of substrate-influenced approximations of the superstrate. These Creole children would thus have been in the best position to "inherit" and integrate both superstrate-derived and substrate-derived structural properties into their native creole varieties. Because of their

relative prestige and power, these children, once turned adults, would have also been in the best position to subsequently spread (further approximations of) that "inheritance," along with their own grammatical innovations, in the developing Creole community (see section 4.2).

If Creole children "create" creole languages, qua I-languages in the Chomskyan theoretical sense, on the basis of primary linguistic data with a relatively high count of superstrate(-like) patterns, it is the interlanguages of substrate speakers, qua adult learners of superstrate(-like) and creole(-like) varieties, that would have been the major conduit for substrate-derived patterns into the incipient creole. There is thus a precise and narrow sense in which adult speakers of the substrate languages did "create" the basis for certain patterns in the creole, namely, via their nonnative interlanguages, which incorporated various structural patterns—so-called interferences—from their native languages. Yet it also seems incontrovertible that substrate grammars did not, and could not, have an overriding, exclusive influence in the development of the learners' nonnative interlanguages and in the development of the subsequent native creole languages, unless the African-born and the Creole learners were somehow cognitively abnormal, especially considering the exposure to superstrate data that many of them would have had in various temporal and spatial regions of Caribbean history and social geography and considering the socioeconomic advantages conferred by fluency in the creole. It must again be stressed that L1 transfer as documented in second-language acquisition studies does not resemble relexification as defined in the Strict Relexification Hypothesis (see also n. 43).

The "L2A-L1A cascade" perspective on creole development that I advocate gives a central role to first-language acquisition as the source of "new" I-languages by Creole children. This perspective also gives a central role to second-language acquisition as the source of "new" substrate-influenced interlanguages that, in turn, influenced the primary linguistic data that fed into subsequent instances of first-language acquisition. At key stages in creole diachrony, the primary linguistic data of native creole learners were partly constituted by the nonnative output of second-language acquisition in various sociodemographic and ecological circumstances (e.g., small-scale homesteads vs. large-scale plantations; the speech of native vs. nonnative models; etc.). Both the adult learners' interlanguages and the first-generation Creole children's I-languages are "new" in the sense that these interlanguages and I-languages are not, and could not be, identical to either the L2 learners' respective L1s (the substrate languages) or the L2 and L1 learners' models (i.e., the idiolects that provided the corresponding primary linguistic data). This "newness" is inevitable since language acquisition is neither relexification nor language transmission *sensu stricto*; both first- and second-language acquisition entail the creation of abstract representations (internal grammars) hypothesized on the

basis of relatively superficial and necessarily limited target utterances. Furthermore, as Siegel reminds us about second-language acquisition:

In addition to expressing a particular identity of the speaker, [the second-language learner's interlanguage] may also be used to show solidarity with a peer group or to indicate attitudes toward society in general. . . . Furthermore, the decision not to use native-like L2 forms or not to use the L2 at all may represent a form of resistance, which alongside achievement and avoidance, is another kind of communication strategy. . . . It follows, then, that in many situations [of second-language acquisition], native-like proficiency is not the target of language learning. [Siegel forthcoming]

Siegel's observations seem most relevant to the sociohistorical context of creole diachrony. These observations bring to mind Alleyne's notion of "cultural maroonage, i.e., resistance to complete . . . acculturation . . . [which] leads to the preservation of different degrees of approximation to the norm of the new language . . ." (1980:220–21).

In the model sketched here, both first-language acquisition and second-language acquisition play a recursive role in creole development: the Creole children, once they become older, will be the models in subsequent instances of first- and second-language acquisition, and so will the output of the ("fossilized") interlanguages in second-language acquisition act as input for subsequent generations of L1 and L2 learners. Any sociohistorical and demographic differences among various cases of contact-induced language change (or language creation)—whether or not the results are called "creole"—will have an effect, not on the L2A-L1A cascade per se (language-acquisition mechanisms are the same everywhere), but on the primary linguistic data (e.g., on the proportion and the fluency of nonnative utterances therein) that native learners will use in creating their new I-languages (cf., e.g., Baker 1982:852–56; Lightfoot 1999b:80, 101–8, 264–65).

In the particular case of Haitian Creole, the alternative scenario whose bare outline I sketched above seems, to me at least, preferable to the Strict Relexification Hypothesis: the above scenario better fits the sociohistorical and linguistic details of Haitian Creole and, unlike the Strict Relexification Hypothesis, it is compatible both with basic results in acquisition research and with foundational assumptions in linguistic theory.

The I-languages of the first "creole" speakers did systematically incorporate abstract patterns from the superstrate, at all levels of grammar, alongside substrate-derived properties and Universal Grammar–bounded grammatical inventions that may seem relatively independent of both substratum and superstratum. Pace exponents of the Strict Relexification Hypothesis, Africans brought as slaves in the Caribbean and their locally born descendants did approximate various abstract properties of the varieties they were targeting, with varying degrees of success and varying degrees of substrate (L1) influence depending on the details of their respective sociolinguistic situations (hence the

manifestation of continuum phenomena from the very onset of language contact onwards). This is not surprising, given uniformitarian assumptions about the minds of language learners everywhere and given the perceived advantages of the target language, the language of those higher up in echelons of power. Of course, this is not to deny the substrate-influenced structural contributions of the African-born learners: evidence of substrate influence is indeed well documented in creole grammars. But I suspect that accounts that focus exclusively on either substrate influence or superstrate influence or *ab ovo* creation have prevented creolists from looking at creole genesis as the sociolinguistically and structurally complex development of holistic and well-integrated grammatical systems (I-languages in Chomskyan terminology).

### Notes

*Acknowledgments.* This project has been supported by, *inter alia*, National Endowment for the Humanities (grant no. FA-37500-02).

For insightful and pleasurable discussion, I am eternally indebted to: Enoch Aboh, Yves Dejean (Papa Iv), Dominique Fattier, Salikoko Mufwene, and Marilene Phipps. I owe special thanks to Salikoko for a long, and most gracious, series of e-mail exchanges, which have substantially improved every aspect of this manuscript and related work.

1. Notwithstanding Sylvain's much quoted conclusion that Haitian Creole is "an Ewe tongue with a French lexicon" (1936:178), she "provides several connections between features of Haitian Creole with those of several nonstandard French dialects, aside from the much appreciated connections proposed with African languages" (Mufwene 2001a:213 n. 14).

2. As Lefebvre suggests (L:3), Lucien Adam's "hybridologie linguistique" (1883) is the nineteenth-century ancestor of the Strict Relexification Hypothesis, even though Adam's theoretical framework is quite distinct from Lefebvre's. Adam's theory is framed in an explicitly racist, Darwinian framework: because of their "inferior" cognitive make-up, African speakers (speakers of "langues naturelles," meaning primitive languages) cannot master the grammatical complexities of the "superior" European languages ("langues civilisées"). According to Adam, the best that Africans trying to learn French can do is to overlay "corrupted" French words on their childlike "primitive" African grammars; hence the "hybrid" nature of creole languages. For additional discussion of Adam's and others' racialist theories of creole genesis, see DeGraff (2001a:95–98, 2001b: 215–16, 251 n. 27, forthcoming a, forthcoming c).

3. As far as I can tell, Muysken (1981) is the first relexification-based scenario of language creation that is firmly rooted in generative grammar. It is important to note that Muysken (1981:75) insists (this will become important in sections 3 and 4) that *Media Lengua* is not the result of some incomplete form of second language acquisition; that is, relexification in the *Media Lengua* case was not used as a strategy for language acquisition or for intergroup communication. This contrasts with the Strict Relexification Hypothesis claim that "recourse to relexification is a function of very limited access to the superstratum data" (L:386). Instead, *Media Lengua* was created by Quechua-Spanish bilinguals as a means of ethnic self-identification and for intragroup communication purposes. This is quite unlike the Haitian Creole case (also see L:28–29, 395). In Muysken's analysis, access to the lexifier seems to have facilitated relexification, in contrast to what Lefebvre assumes.

Bakker and Mous (1994) present other cases of relexification by bilinguals. From

these case studies, it seems that relexification plays an even more central, and perhaps less controversial, role in cases of language creation by bilinguals (supposedly with wider access to the lexifier language) than in cases of creole genesis (supposedly with “very limited access” to the lexifier language); also see Bickerton (1988) and Thomason (1993: 282–83) for additional comments regarding fundamental differences between the Media Lengua and Haitian Creole cases.

4. Lefebvre’s concept of reanalysis is reminiscent of grammaticalization (in the sense of Meillet 1958), a process that applies in the evolution of all languages, independently of relexification and, more generally, independently of creolization (cf. L:42–43).

5. Bickerton’s flavorful, if somewhat exaggerated, critique of relexification is exemplified in such passages as this:

You can’t abstract words from the framework you meet them in and the properties that, in consequence, they trail with them. Those properties may be sharply reduced, as in early [second-language acquisition] or pidginization, but they are always there, and you cannot just peel them off like you would the rind from an orange. [1987:235]

As it turns out, Bickerton’s observation doubles as a counter-argument against his own Language Bioprogram Hypothesis. As we will see below, Caribbean creoles such as Haitian Creole usually have lexica that, to a great extent, are etymologically related to that of their respective European lexifiers. It is thus expected that many creole words have “trailed with them” some of their original grammatical “framework” from the European language, including a subset of combinatorial and semantic properties from that language. This contradicts the fundamental claim of the Language Bioprogram Hypothesis that creoles are by and large *ab ovo* creation via a radical “break in transmission.” I give additional arguments against “break in transmission” theories in DeGraff (2001a, 2001b, forthcoming a, forthcoming b, forthcoming d).

6. The merits of the work of Lefebvre and her colleagues on Haitian Creole and its genesis have often been debated before; see, e.g., Dejean (1983, 1993, 1999), Bickerton (1988), Chaudenson (1993, 1996a, 1996b), Thomason (1993), DeGraff (1994a, 1994b, 2001a), Wittmann and Fournier (1996), Singler (1996), Valdman (2000), Kouwenberg (2000), and Bruyn (2001). Here I can focus and elaborate on only a small, but fundamental, subset of problems related to relexification.

7. In DeGraff (2001a), I discussed *-syon* as if it were the only form of the suffix in question (cf. *yon* [L:311]). The situation is actually more complex, as there are a number of distinct related forms that arguably realize the relevant underlying suffix (see n. 10).

8. Since all five criteria that she lists (L:304) are sufficient, not necessary, conditions, a form may fail all five tests and still be a productive affix in Haitian Creole (see, e.g., the case of the Haitian Creole ordinal suffix *-yèm* from French *-ième* [L:310]; cf. section 3.1.2). This is not surprising. Since most Haitian Creole lexemes are phonologically and semantically derived from French, it can be expected that most derived forms in Haitian Creole will also have French analogues. But such etymological correspondence, by itself, should bear no implication for the productivity of affixes in the I-languages of (monolingual) Haitian Creole speakers who have no awareness of the etymological connections between Haitian Creole and French morphology. Take Haitian Creole *chèz* ‘chair’. That its phonology, morphosyntax, and semantics makes it identical to its French etymon *chaise* is no reason to argue that Haitian Creole *chèz* is less “native” to Haitian Creole I-languages than, say, the Haitian Creole noun *wanga* ‘fetish’, which has been inherited from Bantu. Both *chèz* with its French etymology and *wanga* with its Bantu etymology are fully native Haitian Creole nouns in the I-languages of Haitian Creole speakers, independently of their etymology, and so are Haitian Creole affixes such as the

ordinal suffix *-yèm*. Using French as a comparative basis in determining what is “native” to Haitian Creole—a language the majority of whose speakers are monolingual—seems a methodological flaw. (See DeGraff [2001a:63, 65, 67–68] for necessary distinctions between etymology and morphology in evaluating the productivity of putative Haitian Creole affixes.)

9. This claim is only valid as regards contemporary French. Of course, it is always possible that what may now look like Haitianisms are actually vestiges from the regional varieties of seventeenth- and eighteenth-century French that were once spoken in colonial Haiti. See DeGraff (2001a:69, 106 n. 6) for relevant discussion, and especially Fattier (1998) for a variety of Haitian Creole forms with seventeenth- and eighteenth-century French etyma, some of which have now disappeared from modern French.

10. I use  $\sqrt{V}$  to denote the stem on which the verb is built. This stem is not necessarily identical to the verb form. For example, compare the Haitian Creole verb *pansè* ‘think’ with its  $\sqrt{V}$ , namely, *\*pans*. The latter does not correspond to any pronounceable unbound morpheme that is morphologically related to *pansè* ‘to think’. In the cases of denominal verbs derived with the productive verbal suffix *-e*,  $\sqrt{V}$  matches the form of the pronounceable nominal stem. For example, for the verb *plante*,  $\sqrt{V}$  is *plant*, which also corresponds to the form of the Haitian Creole noun *plant* ‘plant’.

In using *-yon* to derive a noun from  $\sqrt{V}$ , there apparently exist (at least) three possibilities vis-à-vis the overt insertion of (what may be atheoretically considered) “latent” or “epenthetic” segments between  $\sqrt{V}$  and *-yon*: (i) no insertion (e.g., in *reyinyon* ‘reunion, gathering’ from *reyini* ‘to reunite, to gather’; *konfesyon* ‘confession’ from *konfese* ‘to confess’; and *pansyon* from *pansè*); (ii) insertion of *s* (e.g., in *pinisyon* from *pini*; *demolisyon* ‘demolition’ from *demoli* ‘to demolish’); (iii) insertion of *s* plus a preceding vowel (e.g., *a* or *i*) (e.g., in *plantasyon* from *plant*; *envitasyon* ‘invitation’ from *envite* ‘to invite’; *konpozisyon* ‘composition’ from *konpoze* ‘to compose’; *endispozisyon* ‘indisposition’ from *endispoze* ‘to be indisposed’).

There also exist more complicated morphophonological rules like those applying in *diskisyon* ‘discussion’ from *diskite* ‘to discuss’; *desizyon* ‘decision’ from *deside* ‘to decide’; *pèmision* ‘permission’ from *pèmèt* ‘to permit’; *dijestyon* ‘digestion’ from *dijere* ‘to digest’; *konstruksyon* ‘construction’ from *konstrui* ‘to construct’; *soustraksyon* ‘subtraction’ from *soustrè* ‘subtract’; *arestasyon* ‘arrestment’ from *arete* ‘to arrest’; *salitasyon* ‘salutation’ from *salye* ‘to salute’; *devosyon* ‘devotion’ from *devwe* ‘to devote’; etc.

Needless to say, the complex details of these morphophonological rules and lexical idiosyncrasies are beyond the scope of this article. I will only note that, unsurprisingly, most of these details have analogues in French (as described in, e.g., Zwanenburg 1983:67–126; cf. n. 12). Such structural analogues between Haitian Creole and French seem quite unexpected given the basic postulates of the Strict Relexification Hypothesis.

11. Also see section 3.1.2 for one instance where Lefebvre, without any warning, categorically contradicts the relevant data in the listings of both Valdman et al. (1981) and Freeman (1989) (see n. 14).

12. Zwanenburg (1983:125) argues that, in French, it is *-ation* (e.g., in *plantation*) that is productive, whereas other forms in *-ion* are either borrowed from Latin or constructed by analogy with previous borrowings from Latin (also see Corbin 1987:150–52). It is perhaps suggestive that most of the Haitianisms in table 1 are also constructed with *-asyon*. Yet Haitianisms like *pansyon* and *pèdisyon* suggest that *-yon* and *-syon*, like *-asyon*, do enter into Haitian Creole productive affixation. (See n. 10 for additional speculation on various forms of *-yon/-ion* suffixation in Haitian Creole and in French.)

13. Lefebvre posits a fundamental contrast between the respective fates of, on the one hand, the French nominal suffix *-ion* (in, e.g., *plantation*) and, on the other hand, the French adverbial suffix *-ment* (in, e.g., *lentement* ‘slowly’; cf. *lent* ‘slow’) and the French

verbal suffix *-er* (in, e.g., *planter* ‘to plant’). This postulated contrast ignores the robust fact that the Haitian Creole descendants of all three suffixes are productive.

Yet Lefebvre stipulates the following scenario:

Unlike [Haitian Creole] words ending with *-yon*, . . . [Haitian Creole] simplexes ending with *-e* would eventually have been reanalysed as having an internal structure: nominal base *+e*. In this view, the presence of *-e* as a productive affix of [Haitian Creole] would be the result of reanalysis from within [Haitian Creole] . . . attributable to the indirect influence of [French]. . . This proposal could also account for the existence of the adverbial suffix *-man* in the inventory of productive affixes in [Haitian Creole]. To the best of my knowledge, deriving adverbs from adjectives is not a property of West African languages. [L:333]

Elsewhere, Lefebvre writes: “on the basis of a few pairs of words, the creators of [Haitian Creole] had access to the internal structure of French words” (L:325).

Not only does this statement contradict the basic Strict Relexification Hypothesis assumption that relexifiers have no access to abstract properties of superstrate lexical entries; it also contradicts Lefebvre’s scenario for the fossilization of *-yon* and of other alleged pseudoaffixes. The general ability to use “a few pairs of words [to gain] access to the internal structure of French words” (L:325) should have facilitated the transmission of the most productive or most frequent French affixes into Haitian Creole (perhaps with restructuring), whether or not these affixes have Fongbè counterparts. This hunch is confirmed by the case studies in sections 3.1–3.2, which document a preponderance of Haitian Creole morphemes with French etyma. Besides, the acquisition of productive and frequent affixes in the target language would have been more likely for those learners with more exposure to the target data (see, e.g., Lowie 2000). (I return to related issues in sections 3.2.2 and 4.2.)

This said, one need not reject the likely possibility that structural similarity between certain substrate (L1) and superstrate (L2) affixes would have further facilitated the acquisition of the latter by substrate speakers. Related observations obtain in other instances of second-language acquisition (see, e.g., Lowie 2000).

14. It is quite possible that the forms cited as “Haitian” by Lefebvre are indeed produced in some heretofore undocumented dialect or in some learners’ intermediate grammar with a distinctly untargetlike morphophonology for the ordinal suffix (compare, say, child-English forms like *goed* and *foots* with their adult English counterparts *went* and *feet*). Nonetheless, the point of this case study is to illustrate recurrent inconsistencies in Lefebvre’s methodology as applied to Haitian Creole data: Lefebvre’s claim that *twazyèm*, *katryèm*, and *santyèm*—the very ordinal numbers documented in Valdman et al. (1981), Freeman (1989), etc.—are “not attested in Haitian” (L:311) directly contradicts her pledge, in her chapter on “research methodology,” that “variations in the data will be taken into account, whenever such data are available” (L:76). Also see DeGraff (1999c) and Dejean (1999) on related empirical and methodological issues.

15. It is thus not surprising that, “there is no French [demonstrative] form with exactly the same properties as the Haitian forms” (L:96). In any case, the Haitian Creole functional layers in the nominal phrase and elsewhere do not have “exactly the same properties” as their Fongbè counterparts either, pace Lefebvre (see section 3.3.2).

16. There apparently exist varieties of contemporary French that have *dérespecter*, as attested in an Internet search for *dérespecter* and its inflected variants. One such attestation, found on 9 October 2002, is from an e-mail message posted 18 December 2000 by Gauthier Reguin, a native French speaker (p.c. 2002): . . . *ayant totalement dérespecté la foi chrétienne* ‘. . . having totally disrespected the Christian faith’.



17. This selectional constraint of inversive *dé-* can be made to follow from its lexical semantics, wherein it is specified that inversive *dé-* prefixes to a verb *V* to derive another verb (i.e., *dé-* *V*) has the meaning 'to cancel the result of the action *V*' (see, e.g. Corbin 1987:63). Since the lexical semantics of *dé-* presupposes that its stem denotes an action, it will produce ungrammaticality when it attaches to psychological predicates like *connaître* and, presumably, *respecter*, unless the interpretation of these predicates can be coerced into some activity denotation.

18. Also note the alluring semantic similarity between Haitian Creole *pa* and Fongbè *mà*. The latter is the phonetic representation for both the nonaffixal clausal negation marker and the affixal inversive-negative marker (see, e.g. L:210–11, 318). If the homonymy in Fongbè is not accidental, then the Strict Relexification Hypothesis should predict a similar homonymy in Haitian Creole (i.e., that Haitian Creole *pa* should be the form for both periphrastic and affixal negation). Interestingly, this is exactly what we find in the second-language French variety spoken by Gbe speakers in Eweland. Lafage (1985:271) documents that these speakers use French *pas* as the counterpart of the inversive Ewe prefix *mà*, as in *soupe pas-mangeable* 'not-eatable soup'; compare with Ewe *detsi mà-dù-mà-dù* (Gbe languages use reduplication to constructive adjectives from verbs; see, e.g., L:326).

That the alleged "relexified" output of Fongbè *mà-* is Haitian Creole *de-*, and not *pa-*, begs for an explanation from proponents of the Strict Relexification Hypothesis. One such explanation might adduce the fact noted by Lefebvre that the Fongbè homonymy does not extend to all of Gbe. Ewe, for one, has distinct forms for sentence-level negation (*mé*) and word-level negation (*mà*); similarly, Gen has a clause-level negation marker *mú* and a distinct word-level negation marker *mà* (Bole-Richard 1983:190, 320). Yet, even though Ewe distinguishes between clause-level negation and word-level negation, L1-Ewe–L2-French interlanguages, unlike Haitian Creole, do use French *pas-* for their word-level prefixal negation, as in the example given above. So the puzzle persists over the Strict Relexification Hypothesis scenario for the development of Haitian Creole *de-*.

19. At this point, given the semantics of Haitian Creole *derespekte*, it may seem more appropriate to analyze it as derived from either the noun *derespè* (with the verbal suffix *-e* and the realization of the latent consonants *kt*) or from the noun *respè* (with the verbal suffix *-e* and the realization of latent *kt*, plus prefixation with privative *de-*). In the former case (the derivation from *derespè* 'disrespect'), *X derespekte Y* denotes an event where *X* manifests disrespect toward *Y*. In the latter case (the privative reading with the nominal stem *respè* 'respect'), *X derespekte X* denotes some event whose agent *X* tries to deprive *Y* of his or her due respect. Admittedly, these two interpretations seem hard to distinguish truth-conditionally, and I will not speculate on which is the right analysis. In any case, both analyses are distinct from the one assumed by Lefebvre, where Haitian Creole inversive *de-* in *de-respekte* is incorrectly taken to attach directly to, and to "invert" the meaning of, the verb *respekte* (L:316). The observations in the main text are incompatible with Lefebvre's analysis.

20. Of the three dictionaries that I consulted, Rongier (1995) provides the most explicit list of examples for privative periphrasis.

21. The 1798 edition of the *Dictionnaire de l'Académie Française* reports *démaigrir* with the inversive meaning 'to become less thin' (cf. *maigrir* 'to become thin(ner)'). There is also an active transitive usage with the meaning 'to make (e.g., a piece of wood or stone) thinner'.

22. Yves Dejean (p.c. 2002) tells me that, in certain schools, Haitian pupils have to memorize standardized prescriptive lists of gentilés. Dejean estimates that some of the items on these lists (e.g., *Anselè* from *Ansagalè* and *Ansavelè* from *Ansavo*) would sound completely "artificial" and "out of touch with reality" for most creole speakers; he himself, as a seventy five-year-old Haitian Creole speaker with considerable experience with

Haitian Creole varieties throughout the country and the Haitian diaspora, has never heard them pronounced in everyday speech.

We also find artificial gentilés in French. In other words, there are French gentilés that are outside the competence of “locuteurs naïfs” of French, in the sense of Corbin (1987:70). As noted by Corbin, such speakers may use the suffix *-ien* to produce the neologisms *Auvergnien* and *Bretagnien* (cf. *Auvergne* and *Bretagne*) instead of the conventionalized, but morphologically less predictable, attestations *Auvergnat* and *Breton*. (The Haitian Creole equivalent of French *-ien*—as default marker in the neologistic formation of gentilés—is the periphrastic construction *moun X*, where *X* is the corresponding toponym; thus, *moun Ansavo* is the neologistic gentilé corresponding to prescriptive *Ansavelè*.) In some of the conventionalized irregular cases, the attested French gentilé is formed via unpredictable suppletion. Compare, for instance, *Bar-sur-Seine/Barséquanais*, *Villedieu-La Blouère/Théopolitain* (Eggert, Maurel, and Belleil 1998:124) with *Paris/Parisien*. The French suppletive gentilés of *dérivation savante*—some of them based on Latin and Greek etymologies—can only be memorized (often by the “super-lettrés” [super-literate speakers]; Dominique Fattier p.c. 2002). As noted by Dejean, it is via a similar process of rote memorization that (some) Haitian Creole-speaking children learn synthetic gentilés like *Anselè* and *Ansavelè*.

23. Similar frequency effects can also be observed in cases of so-called gradual language change, as in the diachrony of Romance and Germanic languages (see, e.g., Sprouse and Vance [1999] and references therein).

24. Missegmentation per se is no evidence for the hypothetical “very limited access to the superstratum data” that Lefebvre posits as a sine qua non condition for creolization. Actually, many cases of missegmentation—or, more appropriately, resegmentation of the sound chain—can be assimilated to one classic type of reanalysis, of the sort that constitutes the bread-and-butter of historical linguists; see, for instance, Langacker’s discussion of “loss of morpheme boundary” in a variety of morphosyntactic contexts across (hypothetical) instances of language change (1977:60–64, 74–75, 86–90, 107, 134–35). Langacker observes that “boundary loss is extremely common . . . by far the most frequent type of reanalysis in my data, and I would be suprised if this did not prove true of language in general” (1997:67).

Here are some cases of missegmentation outside of creole diachrony. Some English speakers in certain native Anglophone communities say a *whole nother thing*, which suggests that, at some point in the history of these communities, *another* was missegmented (or rather, reanalyzed) as a *nother*. One related, and more celebrated, case of missegmentation (in this case, “boundary shift” [Langacker 1977:65]) is the one that produced English *apron* from Middle English *napron* (cf. French *napperon*). Other such cases of boundary shift include *adder* from *nædre*, *umpire* from *nompere*, *orange* from *norange*, *newt* from *eft*, *nickname* from *eke name*, etc. (Langacker 1977:65, 67; Hugles 2000:123–24).

25. Pending further investigation, it is not entirely clear to me that Haitian Creole words such as *lari* ‘street’, *larivyè* ‘river’, *latè* ‘Earth’, *listwa* ‘history’, *lakay* ‘home’, etc., are necessarily monomorphemic. Note that, alongside the nouns with so-called agglutinated article (technically, the latter is no longer an “article” after morphological reanalysis), we also find forms with no “agglutinated article,” e.g., *ri* as in *Ri Kapwa* ‘Capois Street’, *rivyè* as in *rivyè a* ‘the river’, *tè* ‘soil’ as in *tè a* ‘the soil’, *istwa* as in *istwa a* ‘the story’, and *kay* as in *kay la* ‘the house’. By no means does Haitian Creole have a productive process of prefixation with *la-* and its variants *l-* and *lan-*. At the same time, it cannot be categorically said that the Haitian Creole speaker cannot analyze *l(a(n))-* in *latè*, *listwa*, *lanmò*, etc. In many, but not all, cases, the form with *l(a(n))-* appears more general, more generic, or more abstract than the form without it, e.g., *tè* ‘soil’ vs. *latè* ‘earth’, *istwa* ‘story’ vs. *listwa* ‘history’, *kay* ‘house’ vs. *lakay* ‘home’, and *mò* ‘dead per-

son' vs. *lamò* 'death'. Pending theoretical analysis, this tentatively suggests yet another crosslinguistically common diachronic scenario of "resegmentation" via "boundary reduction" (cf. Langacker 1977:103–4), where the French determiner *la* was reanalyzed into a bona fide derivational prefix *la-* and its allomorphs, a prefix with lexically restricted distribution and somewhat idiosyncratic semantics, but a prefix nonetheless. (See Ndayiragije [1989] for some discussion of a possible Fongbè analogue for such a prefix.)

Other cases of so-called agglutination can in no way be taken as instances of truly agglutinative morphology (i.e., as the product of morpheme combination). One such case is Haitian Creole *zwazo* 'bird' where the word-initial consonant *z* is an etymological vestige of the French liaison consonant [z] in, e.g., *les oiseaux* [*lezwazo*] 'the birds'. Haitian Creole *zwazo* does not enter into any semantic contrast with \**wazo*. Another undecomposable example of "agglutination" is *dlo* 'water' (cf. \**lo* and \**o*), cited above.

26. Also note that cases of morphological reanalysis in Haitian Creole (e.g., Haitian Creole *lanmou* 'love'; cf. French *l'amour*) and other cases of so-called agglutinated articles (e.g., *dlo*, *lari*, etc.) suggest that the primary linguistic data of the creators of Haitian Creole did contain non-isolated words in fluent speech (also see n. 24 and n. 25; Alleyne [1971:172–74]; DeGraff [2001b:240–41] and references therein). A similar point is made by Lefebvre (L:64–65).

27. Gleitman and Bloom discuss the child learner, but the cognitive mechanisms they posit for vocabulary acquisition are, in principle, also relevant to adults engaged in second-language acquisition (see, e.g., Singleton 1999:272–73).

28. Similarly, while Lefebvre assumes that Haitian Creole has adopted French word order (e.g., L:39–40), the directionality properties of, say, the French verb could not be determined by the creator of Haitian Creole without the latter knowing what French phonetic strings are verb labels and what items go in the specifier, modifier, and complement positions of verbs. I return to this problem in section 3.3.

29. The Haitian Creole adjective placement facts constitute a potential challenge to Bernstein's approach to the head-movement parameter. Overt plural marking on (some) nouns is one of the "clustering phenomena" that are considered to correlate with movement of the head noun—i.e., with postnominal adjectives (see, e.g., Bernstein 1991: 105–8, 121–23). However, Haitian Creole shows no such marking, even when adjectives are postnominal.

30. Given the inconsistent nature of the assumptions of the Strict Relexification Hypothesis, the data in this article can only disconfirm individual claims of the Strict Relexification Hypothesis about such things as word order. In principle, any inconsistent set of assumptions is unfalsifiable; logically, the statement "[*p* and not *p*] implies *q*" is true no matter what the truth value of *q* is.

One thing that I will show below is that, in addition to major-category items, there also are functional category items whose directional properties distinguish Haitian Creole from its Gbe substrate, contra the Strict Relexification Hypothesis claim that functional categories retain the directionality properties of the substrate (L:40, 388; see section 3.3.2). I will also show that there are major-category word-order patterns that do not—and, per certain Strict Relexification Hypothesis assumptions, could not—parallel their superstrate counterpart (see n. 38).

31. Chaudenson (1993) provides an array of diachronic and regional patterns with postnominal determiners (e.g., *n'homme-lâ*, lit., 'man the' in Missouri French) and indicate their relevance for creole genesis (see, e.g., Haitian Creole *nonm lan* 'the man'). Also see Bernstein (2001) for theoretical arguments that many Romance languages, including French, allow postnominal functional heads via phrasal movement of a nominal projection to the left of (e.g.) possessives or of demonstratives and their "reinforcers," for focusing purposes, as in Italian *un libro mio* (lit., 'a book mine'), Spanish *el libro*

*interessante este* (lit., ‘the book interesting *this*’) and French *cette femme intelligente ci* (lit., ‘this woman intelligent *this*[reinforcer]’). Such leftward XP-movement within the nominal phrase is similar to what is found in Gbe noun phrases as analyzed by Aboh (forthcoming n. 1). From that perspective, the contrast between Fongbè and French becomes less spectacular than in Lefebvre’s presentation, and so does the contrast between Haitian Creole and French.

32. That French *quel(le(s))* shows gender and number agreement with the head noun is not enough to make it a major-category item: French determiners (e.g. *le garçon* ‘the boy’ vs. *la fille* ‘the girl’ vs. *les personnes* ‘the people’) also show agreement, yet they are generally considered functional heads.

33. Von Stechow (1995:181–82) does discuss the intermediate case of major-category items with logical meaning (e.g., adjectives like *mere*, *former*, *allege*, verbs like *believe* and *deny*, and collocations like *the majority of*). Pending further research, Haitian Creole *ki* and *yon* do not seem to belong to such intermediate categories; as far as I can tell, they do not evince major-category syntax.

34. Here “article” is used atheoretically, without taking any theoretical position as to the exact category of the corresponding head(s).

35. In addition to *ki* and *yon*, Haitian Creole has a few more functional items with etyma that are also functional items in French (see DeGraff 1999b:533 n. 36). All such cases contradict the claim that Haitian Creole functional categories were relexified by either a null form or by the label of a superstrate major-category item.

36. In order to maintain the Strict Relexification Hypothesis in its strong form, one ad hoc resolution of this contradiction would be to appeal to dialect leveling while looking for some, any, substrate language where *wh*-words, the indefinite article, the numerals, and quantifiers are prenominal. But if any substrate is eligible as a determinant of Haitian Creole word order, then the superstratum itself could have even more readily determined Haitian Creole word order, especially in light of the systematic correspondences between Haitian Creole and French in etymology and word order, which (if the discussion in the main text is right) could not have been established in the absence of a larger set of structural correspondences.

37. That Gbe languages have verb-in-situ placement on a par with Haitian Creole is not uncontroversial. For example, both Aboh (1999) and Ndayiragije (2000) argue for overt verb-movement (of distinct sorts) in Gbe languages. The data they produce in their arguments have no parallels in Haitian Creole. See DeGraff (forthcoming a) for further discussion.

38. Lefebvre appeals to dialect leveling as the reason why OV order was abandoned in Haitian Creole (L:138–39). But this is a surprising claim since OV order exists in the vast majority of Gbe languages and throughout Kwa and Bantu (Mchombo 1993; Bresnan 1993; Mufwene 2001b, forthcoming). There is a priori no reason why a word-order pattern that is present in the majority of the languages in contact should be eliminated by dialect leveling. Elsewhere, Lefebvre appeals to a conflict between Fongbè word order and French word order as the reason for the lack of object shift in Haitian Creole (L:388). But this takes us to the back to the fact that other major-category word-order patterns are routinely attested in Haitian Creole with no French equivalent (also see the caveat in n. 36).

The inconsistency in Lefebvre’s argumentation is clearly illustrated once we put the following two statements side by side: (i) “both [Haitian Creole] and Fongbè have a class of double-object verbs *in contrast to French, which does not*. This situation follows directly from the relexification hypothesis” (L:302; italics added); (ii) “[Fongbè] constituents whose order conflicts with that of French were abandoned by the creators of the creole, as evidenced by the fact that they have no counterparts in modern Haitian” (L:388; italics added). Independently of how it is analyzed, the distribution of major-

category constituents in double-object constructions does create a word-order conflict between Haitian Creole and French (see (i)), yet these constructions were not abandoned (contra (ii)).

What Lefebvre fails to appreciate throughout is that, in the framework she adopts, the surface placement of major-category items is itself a reflex of parametric values (see, e.g., Pollock 1989; Chomsky 1991). Word-order patterns (whether or not they differentiate Haitian Creole from its source languages) cannot be dissociated from abstract parametric values and their morphosyntactic correlates. In other words, the proposition that “where the parametric values of the substratum and the superstratum differ, [Haitian Creole] should have the same parametric values as the substratum languages” (L:387; also see (i) in the preceding paragraph) entails that Haitian Creole will also have major-category word-order patterns that conflict with those in French and that were not “abandoned by the creators of [Haitian Creole],” contra (ii) in preceding paragraph.

39. Bruyn, Muysken, and Verrips (1999) offer a proposal that relates the emergence of Haitian Creole double-object constructions to V Pronoun<sub>RECIPIENT</sub> NP<sub>THEME</sub> order in positive imperatives like *donne moi le livre* ‘give me the book’.

40. According to Lefebvre, “[that] the relexifiers intend to reproduce the phonetic strings of the superstratum language [is] an assumption that follows logically from the claim that creole genesis is a function of second language acquisition” (L:39). It seems to me that this assumption follows logically only in a quasi-behaviorist framework where (second-)language acquisition consists of “reproducing . . . phonetic strings.” Modern approaches to language acquisition (in both children and adults) do not assume that learners “intend to reproduce [target] phonetic strings” only. Learning is not (only) imitation in the sense of reproduction of target phonetic strings. Learning is assumed to proceed via the incremental building of successive mental grammars up to (or up through) some steady state(s). All the while, what the learner, especially the adult learner, “intends” to do—with “intend” understood very loosely—is communicate with other users of target(-like) varieties, including nonnative approximations of the target. “Reproduc[ing] phonetic strings of the superstratum language” is only part of the story. The central part of the story concerns the abstract structural hypotheses derived by the learner in linking phonetic strings to mental representations.

41. Much in this section also appears in DeGraff’s (forthcoming b, forthcoming d) discussions of uniformitarian approaches to creole genesis.

42. Standard versions of (3a’)—(4b’) are given below.

(3a’) *Tu t’ assieds sur une chaise.*  
 2SG.NOMINATIVE 2SG+ACCUSATIVE sit on a chair  
 ‘You are sitting on a chair.’

(3b’) *Je vais me préparer pour la fête.*  
 1SG.NOMINATIVE go 1.SG.ACCUSATIVE prepare for the party  
 ‘I’m going to get ready for the party’

(4a’) *At sixty-five years old they must retire because . . .*

(4b’) *They want to fight against this (tuition increase) . . .*

43. Given the ongoing discussion in the main text, arguments against the Strict Relexification Hypothesis are not to be conflated with arguments against substrate transfer in second-language acquisition during creole development. L1 transfer in second-language acquisition, unlike relexification as defined in the Strict Relexification

Hypothesis, is routinely manifested by adult learners at various levels of competence in the L2 (witness, e.g., the documented utterances by L1-Gbe–L2-French learners in Lafage's [1985] study). So the two notions "relexification" and "substrate influence" must be kept distinct. It seems likely that at least some claims of limited substrate influence are true whereas the Strict Relexification Hypothesis, which entails isomorphism between creole and substratum syntax, is false. More generally, given what we know and what is documented about the psycholinguistics of second-language acquisition, one can still reasonably argue for L1 transfer in second-language acquisition without resorting to relexification as a universal process for the development of interlanguages in second-language acquisition.

44. Interestingly, some of the initial interlanguages documented in the second-language acquisition literature incorporate L1 word-order properties, including those of major-category items such as verbs, adjectives, nouns and adverbs (see, e.g., Schwartz 1998:136, 144–47, 151, 154). This contradicts Strict Relexification Hypothesis corollaries about the nature of creole creators' interlanguages, which, even with alleged "very limited [L2] access" (L:386), incorporate "the directionality properties of the superstratum major category lexical items" (L:39; cf. discussion in section 3.3 above). The contrast is made even sharper in light of the documented transfer in second-language acquisition of some of L1's major-category word-order patterns even in sociolinguistic contexts where L2 access is not at all limited; the case studies surveyed by Schwartz and Sprouse (1998) include a four-year-old Turkish child learning English in a British nursery school and Dutch adults learning French.

45. Although Chaudenson's (1992) and Chaudenson and Mufwene's (2001) abundant documentation is crucial for a full understanding of the sociohistorical matrix of creolization and of European influence therein, there is one aspect of their discussion that I find sociohistorically and (psycho-)linguistically implausible, namely, their hypothesis that, throughout the colonial period, "deculturation" (i.e., "loss of native language and culture") and "acculturation" (i.e., "acquisition of the local language and adaptation to a new life") took place rapidly, often via a mere six-month-long "seasoning" (Chaudenson and Mufwene 2001:74, 90–93, 104, 120–29, 246, 306–10, etc.).

Could it be that, throughout the colonial period, "at the end of seasoning, the usual result was [that] the slaves' past had been annihilated and their tribal *mores* abrogated" and that they could be taught so quickly to "speak only the master's language" (Ransford 1971:104, as quoted in Chaudenson and Mufwene 2001:91)? This scenario seems incompatible with the sort of time-, space-, and class-based gradients that Chaudenson and Mufwene themselves illustrate elsewhere (e.g., 2001:94–129) with respect to Africans' differential exposure to French models and approximations thereof in colonial territories (also see Alleyne [1971:179–82] for a related discussion on "differential acculturation"). Chaudenson and Mufwene's rapid-acclimatization postulate, although plausible, say, for younger Africans on small farms ("habitations") or for house slaves in general, could not have obtained uniformly for older Africans on the larger farms (the "plantations") of the eighteenth century; the majority of such Africans would have been field slaves with little contact with the master's language and his culture (see n. 48). Besides, as Yves Dejean (p.c. 2002) remarks, substrate languages would have remained active in the inner speech of adult substrate speakers, no matter how isolated individual substrate languages may have been in the colonies due to the planters' divide-and-conquer strategies (cf. Chaudenson and Mufwene 2001:73).

A more realistic—and better documented—scenario, especially for eighteenth-century Saint-Domingue, is one of widespread bi-, or rather, multi-lingualism/culturalism where the adult Bozals would, for some protracted period, maintain their substrate languages and cultures alongside whatever creole varieties and customs they could approximate (cf. Moreau de Saint-Méry 1958:63–70; Descourtilz 1809, 3:109–234; Debien

1971:123, 220–34; Mintz 1971:495 n. 3; Fouchard 1972:433–36; H. Trouillot 1980:55, 59, 62, 64–70; Geggus 1991; also see L:57). The available documentation argues against any “rapid disappearance of slaves’ ancestral languages,” contra Chaudenson and Mufwene (2001:91–93, 309, etc.). In this respect, the decline of African languages in eighteenth-century Saint-Domingue can be compared with the gradual and slow disappearance of rural speech varieties in urban centers in contemporary Africa, as summarized by Mufwene (forthcoming n. 12).

Lastly, the deculturation-cum-acculturation hypothesis runs counter to the well-documented fact of the Haitian revolution and its sociohistorical antecedents in various forms of psychological and physical resistance. As documented in great detail, alongside considerable scholarly and ideological debate (by, e.g., Barthélémy, Bellegarde-Smith, Debien, Descourtilz, Fick, Fouchard, Geggus, Heintz and Heintz, Mintz, Moreau de Saint-Méry, E. Paul, Price-Mars, Thornton, H. Trouillot, and M.-R. Trouillot), one key factor in the slaves’ resistance to the planters’ socioeconomic and political power was reliance on African-derived knowledge and practices—religious, medical, agrarian, military, etc. The available documentation thus suggests a picture far different from the one painted by Chaudenson and Mufwene where “the *bozals*’ youth, isolation, and confusion inevitably made them the resigned victims of a formidable system of forced acculturation and deculturation” (2001:121).

46. The capitalized term “Creole” will be used here for this social category of people.

47. This local French koiné emerged via the leveling of the various patois and non-standard varieties spoken by the first French colonists in Saint-Domingue, often identified as “patoisants” by contemporary observers (Mufwene 2001:34–38, forthcoming n. 8).

48. That the Haitian Creole word *bosal* means ‘uncouth, wild, untamed, violent, brutal’ (see, e.g., Freeman and Laguerre 1998) is not accidental. This term reminds us that the recently arrived African slave—the *Bozal*—was destined to the lowest and most segregated rung of the social order and was the target of the most demeaning insults and stigma (see, e.g., Moreau de Saint-Méry 1958:55; Chaudenson and Mufwene 2001:89–91; and especially Barthélémy 1997). Other terms describing the *Bozals* include: “salt-water negroes,” “fatherless and motherless,” “horses,” “heathen slaves,” “baptized while standing,” “nouveaux.” As it turns out, the *Bozals* and their cultural and ideological descendants—now monolingual Haitian Creole speakers—have continuously been (indirectly) stigmatized even by “enlightened” scholars and policy-makers; some of this stigma persists in the twenty-first century (for recent case studies and surveys, see Bellegarde-Smith 1985, 1990; M.-R. Trouillot 1990, 1995; Barthélémy 1997).

49. Singler tentatively defines creole genesis as “the creation of a language different from the lexifier language” while stressing—along with Mufwene (2001a:131) and many others—that “the principal agents of [Caribbean Creole] genesis would have been African-born adults” (1996:196). If we push this logic further, this would seem to presuppose that only adult learners can “create” languages different from their target. However, according to the classic observations of such linguists as Paul (1970:15–16) and Meillet (1951:74), all instances of language acquisition, including first-language acquisition, entail language creation, and hence the inherent possibility of structural innovations (i.e., parametric shift) in language acquisition. These insights have been substantially confirmed by the recent first-language acquisition literature (see e.g., Crain 1999). This literature is indeed rife with cases of “grammatical invention,” in Rizzi’s (1999) terminology. Besides, creation of new language varieties via language contact among adults also happens outside of creolization, as in the history of Germanic and Romance, which are not usually thought of creole languages (see Mufwene [2001a: 139–44] for some discussion).

50. That I-languages are created by children need not imply that stable I-languages

(e.g., creole languages spoken natively by adult creolophones) must sound childlike or that “structurally, they would be systems in an arrested development stage” (Mufwene 2001a:131). Of course, children’s performance may be “childlike” (i.e., not adultlike) in various domains, but it has been argued that performance deficiencies in child language may reflect (lack of) maturation along various nongrammatical dimensions (e.g., memory, pragmatics, theory-of-mind, lexical range, etc.). Many acquisition researchers have now adopted the “Strong Continuity Hypothesis” whereby children’s (intermediate) grammars are by and large regulated by the same structural principles that regulate stable and mature adult languages (see, e.g., Crain 1999; Wexler forthcoming and references therein). In this view, stable L-languages, including those spoken natively by adults, are in the main created in childhood, as sketched by Chomsky (1965, 1986; see discussion earlier in this section) without any risk of “arrested development.”

51. My hunch is that one of the major methodological problems with creole studies is that, for far too long, creolists have focused on their favorite parts of the story only—on isolated aspects of creole languages (“substrate influence” or “superstrate inheritance” or “innovations”) without objectively looking at entire creole lexica and grammars, with all their innovative aspects and all potential correspondences with both the substrates and superstrate. A comprehensive analysis of such inheritance-cum-innovation would seem to me to militate most strongly against the Strict Relexification Hypothesis and against Bickerton’s (e.g., 1984, 1999) Language Bioprogram Hypothesis which stipulates an extraordinary “break in transmission” plus *ab ovo* creation of grammar in creole diachrony (see DeGraff [forthcoming a] for one attempt at such an integrative analysis). Also see n. 45 for sociohistorical arguments against Chaudenson’s (1992) and Chaudenson and Mufwene’s (2001) postulation of rapid and total deculturation-cum-acculturation.

52. There is at least one case study in Lefebvre that contradicts the claim that the genesis of creole morphosyntax is the exclusive province of adult speakers. In Lefebvre’s account of the alleged loss of syntactic clitics in Haitian Creole, it is the first generation of Haitian Creole native speakers that created the first creole grammars without syntactic clitics (L:156–57). Until that stage, (Proto-)Haitian Creole as spoken as a second language by adult substrate speakers did have syntactic clitics. In that particular case, it is acquisition by children, not relexification proper, that is taken as central to the creation of a particular morphosyntactic aspect of Haitian Creole syntax, namely, its pronominal system.

## References

- Abney, Steven  
1987     The English Noun Phrase in Its Sentential Aspect. Ph.D. diss., Massachusetts Institute of Technology.
- Aboh, Enoch  
1999     From the Syntax of Gungbe to the Grammar of Gbe. Sierre: Éditions à la Carte.  
forthcoming   La morphosyntaxe de la périphérie gauche nominale [dans les langues Gbe]. *Revue de Linguistique de Vincennes* 32.
- Académie Française  
1798     Dictionnaire de l’Académie Française. 5th ed. Paris: Chez J. J. Smits et Cie.
- Adam, Lucien  
1883     Les idiomes négro-aryen et maléo-aryen: essai d’hybridologie linguistique. Paris: Maisonneuve et Cie.
- Adjémian, Christian  
1983     The Transferability of Lexical Properties. *In* *Language Transfer in*



- Language Learning, edited by Susan Gass and Larry Selinker, 250–68. Rowley, Mass.: Newbury House.
- Alleyne, Mervyn C.  
 1971 Acculturation and the Cultural Matrix of Creolization. *In* *Pidginization and Creolization of Languages*, edited by Dell Hymes, 169–86. Cambridge: Cambridge University Press.  
 1980 *Comparative Afro-American: An Historical-Comparative Study of English-Based Afro-American Dialects of the New World*. Ann Arbor, Mich.: Karoma.
- Anonymous  
 1983 *Éléments de recherche sur la langue fon*. Cotonou.
- Aronoff, Mark  
 1976 *Word Formation in Generative Grammar*. Cambridge, Mass.: MIT Press.
- Baker, Philip  
 1982 *The Contribution of Non-Francophone Immigrants to the Lexicon of Mauritian Creole*. Ph.D. diss., University of London.
- Bakker, Peter, and Maarten Mous  
 1994 *Mixed Languages: Fifteen Case Studies in Language Intertwining*. Amsterdam: Institute for Functional Research into Language and Language Use.
- Barthélémy, Gérard  
 1997 *Le rôle des Bossales dans l'émergence d'une culture de marronnage en Haïti*. *Cahiers d'Études Africaines* 37(148):839–62.
- Bellegarde-Smith, Patrick  
 1990 *Haiti: The Breached Citadel*. Boulder, Colo.: Westview Press.
- Bernstein, Judy  
 1991 DPs in French and Walloon: Evidence for Parametric Variation in Nominal Head Movement. *Probus* 3(2):101–26.  
 2001 Focusing the Right Way in Romance Determiner Phrases. *Probus* 13(1): 1–29.
- Bickerton, Derek  
 1977 *Pidginization and Creolization: Language Acquisition and Language Universals*. *In* *Pidgin and Creole Linguistics*, edited by Albert Valdman, 49–69. Bloomington: Indiana University Press.  
 1984 The Language Bioprogram Hypothesis. *Behavioral and Brain Sciences* 7(2): 173–203.  
 1987 Beyond Roots: Knowing What's What. *Journal of Pidgin and Creole Languages* 2(2):229–37.  
 1988 Relexification. *Journal of Pidgin and Creole Languages* 3(2):277–82.  
 1992 The Sociohistorical Matrix of Creolization. *Journal of Pidgin and Creole Languages* 7(2):307–18.  
 1999 How to Acquire Language without Positive Evidence: What Acquisitionists Can Learn from Creoles. *In* *Language Creation and Language Change: Creolization, Diachrony, and Development*, edited by Michel Degraff, 49–74. Cambridge, Mass.: MIT Press.
- Bloom, Paul  
 2000 *How Children Learn the Meanings of Words*. Cambridge, Mass.: MIT Press.
- Bole-Richard, Rémy  
 1983 *Systématique phonologique et grammaticale d'un parler Ewe: le Gen-Mina du Sud-Togo et Sud-Bénin*. Paris: Éditions L'Harmattan.
- Borer, Hagit  
 1983 *Parametric Syntax: Case Studies in Semitic and Romance Languages*. Dordrecht: Foris.

Bresnan, Joan

- 1993 Interaction between Grammar and Discourse in Chichewa (Bantu). *In* *The Role of Theory in Language Description*, edited by William Foley, 45–60. Berlin: Mouton de Gruyter.

Bruyn, Adrienne

- 2001 Review of *Creole Genesis and the Acquisition of Grammar: The Case of Haitian Creole*, by Claire Lefebvre. *Language in Society* 30(1):135–38.

Bruyn, Adrienne, Pieter Muysken, and Maaïke Verrips

- 1999 Double Object Constructions in the Creole Languages: Development and Acquisition. *In* *Language Creation and Language Change: Creolization, Diachrony, and Development*, edited by Michel DeGraff, 329–73. Cambridge, Mass.: MIT Press.

Chaudenson, Robert

- 1992 Des îles, des hommes, des langues. Paris: L'Harmattan.  
 1993 De l'hypothèse aux exemples: un cas de créolisation: selon la formation des systèmes démonstratifs créoles. *Études Créoles* 16(1):17–38.  
 1996a Demystification de la relexification. *Études Créoles* 19(1):93–109.  
 1996b Petit sottisier glané dans les recherches sur l'origine des systèmes grammaticaux créoles. *In* *Matériaux pour l'étude des classes grammaticales dans les langues créoles*, edited by Daniel Véronique, 17–37. Aix-en-Provence: Publications de l'Université de Provence.

Chaudenson, Robert, and Salikoko Mufwene

- 2001 *Creolization of Language and Culture*. London: Routledge.

Chomsky, Noam

- 1965 *Aspects of the Theory of Syntax*. Cambridge, Mass.: MIT Press.  
 1970 *Current Issues in Linguistic Theory*. The Hague: Mouton.  
 1986 *Knowledge of Language: Its Nature, Origin and Use*. New York: Praeger.  
 1991 Some Notes on Economy of Derivation and Representation. *In* *Principles and Parameters in Comparative Grammar*, edited by Robert Freidin, 417–54. Cambridge, Mass.: MIT Press.  
 1998 *Minimalist Enquiries: The Framework*. MIT Occasional Papers in Linguistics 15. Cambridge, Mass.: Department of Linguistics and Philosophy.

Corbin, Danielle

- 1987 *Morphologie dérivationnelle et structuration du lexique*. Tübingen: Niemeyer.

Crain, Stephen

- 1999 *An Introduction to Linguistic Theory and Language Acquisition*. Malden, Mass.: Blackwell.

Cutler, Anne

- 1994 Segmentation Problems, Rhythmic Solutions. *In* *The Acquisition of the Lexicon*, edited by Lila Gleitman and Barbara Landau, 81–104. Cambridge, Mass.: MIT Press.

da Cruz, Maxime

- 1995 Aspectual verbs *fó*, *vò* 'finish' in Fongbè. *The Linguistic Review* 12(4): 361–80.

Damoiseau, Robert

- 1991 Exemples de procédures de réinterprétation d'un lexique français en créole haïtien. *Études Créoles* 14(1):1–43.

Debien, Gabriel

- 1971 *Les esclaves aux antilles françaises (XVIIe –XVIIIe siècles)*. Basse-Terre: Société d'Histoire de la Guadeloupe.

Déchaine, Rose-Marie, and Victor Manfredi, eds.

1997 Object Positions in Benue-Kwa. The Hague: Holland Academic Graphics.

DeGraff, Michel

1994a The Morphology-Syntax Interface in Creolization (and Diachrony). *Studies in the Linguistic Sciences* 24(2):115–32.

1994b Review of *The Clausal Determiners of Haitian and Fon*, edited by Claire Lefebvre. *Journal of Pidgin and Creole Languages* 9(2):370–76.

1994c Review of *Word Order and Possession in Relexification*, edited by Claire Lefebvre. *Journal of Pidgin and Creole Languages* 9(2):376–84.

1997 Verb Syntax in Creolization (and Beyond). In *The New Comparative Syntax*, edited by Liliane Haegeman, 64–94. London: Longman.

1999a Creolization, Language Change and Language Acquisition: A Prolegomenon. In *Language Creation and Language Change: Creolization, Diachrony, and Development*, edited by Michel Degraff, 1–46. Cambridge, Mass.: MIT Press.

1999b Creolization, Language Change and Language Acquisition: An Epilogue. In *Language Creation and Language Change: Creolization, Diachrony, and Development*, edited by Michel Degraff, 473–543. Cambridge, Mass.: MIT Press.

1999c Empirical Quicksand: Probing Two Recent Articles on Haitian Creole. *Journal of Pidgin and Creole Languages* 14(1):1–12.

1999d Morphology in Creole Genesis: A Twenty-Minute Prolegomenon. Paper presented at 9ème Colloque International des Études Créoles, Aix-en-Provence, June 1999. [Handout available online: <http://web.mit.edu/linguistics/www/degraff/aix99.pdf>.]

2000 A propos des pronoms objets dans le créole d'Haïti: regards croisés de la morphologie et de la diachronie. *Langages* 138:89–113.

2001a Morphology in Creole Genesis: Linguistics and Ideology. In *Ken Hale: A Life in Language*, edited by Michael Kenstowicz, 53–121. Cambridge, Mass.: MIT Press.

2001b On the Origin of Creoles: A Cartesian Critique of Neo-Darwinian Linguistics. *Linguistic Typology* 5(2–3):213–311.

forthcoming a Morphology and Word Order in “Creolization” and Beyond. In *Handbook of Comparative Syntax*, edited by Richard Kayne and Guglielmo Cinque. New York: Oxford University Press.

forthcoming b Language Acquisition in Creolization: Uniformitarian Approaches. In *Handbook of Pidgin and Creole Linguistics*, edited by Silvia Kouwenberg and John Singler. Oxford: Blackwell.

forthcoming c Postcolonial Linguistics: The Politics of Creole Studies. Oxford: Blackwell.

forthcoming d On Creole Genesis and Language Acquisition: Some Methodological and Theoretical Preliminaries. *Journal of Pidgin and Creole Languages*.

de Houwer, Annick

1995 Bilingual Language Acquisition. In *The Handbook of Child Language*, edited by Paul Fletcher and Brian MacWhinney, 219–50. Oxford: Blackwell.

Dejean, Yves

1980 Comment écrire le créole d'Haïti. Outremont, Québec: Collectif Paroles.

1983 Review of *Syntaxe de l'haïtien*, edited by Claire Lefebvre, Hélène Magloire-Holly, and Nanie Piou. *French Review* 57:1.

1993 Notre créole à nous. *Chemins Critiques* 3(1–2):263–83.

- 1999 L'archipel nous revient: créolistes et données. *Études Créoles* 22(2):85-114.
- Dell, François  
1973 *Les règles et les sons*. Paris: Hermann.
- Descourtilz, Michel Étienne  
1809 *Voyages d'un naturaliste et ses observations faites sur les trois règnes de la nature, dans plusieurs ports de mer français, en Espagne, au continent de l'Amérique Septentrionale*. . . 3 vols. Paris: Dufart.
- Eggert, Elmar, Denis Maurel, and Claude Belleil  
1998 Utilisation de règles dérivationnelles et de calculs de distance morphologique pour rapprocher une base et un dérivé: application au couple toponyme-gentilés. *Cahiers de l'Institut de Linguistique de Louvain* 24 (3-4):113-16.
- Epstein, Samuel, Suzanne Flynn, and Gita Martohardjono  
1996 *Second Language Acquisition: Theoretical and Experimental Issues in Contemporary Research*. *Behavioral and Brain Sciences* 19(4):677-758.
- Fattier, Dominique  
1998 Contribution à l'étude de la genèse d'un créole: l'atlas linguistique d'Haïti, cartes et commentaires. Ph.D. diss., Université de Provence. [*Distributed by Presses Universitaires du Septentrion, Villeneuve d'Ascq, France, 2002.*]
- Fick, Carolyn  
1990 *The Making of Haiti: The Saint Domingue Revolution*. Knoxville: University of Tennessee Press.
- Fouchard, Jean  
1972 *Les marrons de la liberté*. Paris: Éditions de l'École.
- Freeman, Bryant  
1989 *Dictionnaire inverse de la langue créole haïtienne*. Port-au-Prince: Centre de Linguistique Appliquée, Université d'État d'Haïti.
- Freeman, Bryant, and Jowel Laguerre  
1998 *Haitian-English Dictionary*. 2d ed. Lawrence: Institute of Haitian Studies, University of Kansas.
- Geggus, David  
1989 Sex, Ratio, and Ethnicity in the Atlantic Slave Trade: Data from French Shipping and Plantation Records. *Journal of African History* 30(1):23-44.  
1991 Haitian Voodoo in the Eighteenth Century: Language, Culture and Resistance. *Jahrbuch für Geschichte von Staat, Wirtschaft und Gesellschaft Lateinamerikas* 28:21-51.  
1999 Slave Society in the Sugar Plantation Zones of Saint-Domingue and the Revolution of 1791-1793. *Slavery and Abolition* 20(2):31-46.
- Gleitman, Lila  
1994 The Structural Sources of Verb Meanings. *Language Acquisition: Core Readings*, edited by Paul Bloom, 174-221. Cambridge, Mass.: MIT Press. [*Originally appeared in Language Acquisition* 1:3-55, 1990.]
- Goodman, Morris  
1993 African Substratum: Some Cautionary Words. In *Africanisms in Afro-American Language Varieties*, edited by Salikoko Mufwene, 64-73. Athens: University of Georgia Press.
- Gougenheim, Georges  
1929 *Étude sur les périphrases verbales de la langue française*. Paris: Les Belles Lettres.
- Greppin, John  
2002 *The Triumph of Slang. Social, Regional and Racial Origins of American*

- English. Review of *The Cambridge History of the English Language*, edited by John Algeo. *Times Literary Supplement*, 1 February 3–4.
- Hancock, Ian  
 1980 Introduction. In *Comparative Afro-American: An Historical-Comparative Study of English-Based Afro-American Dialects of the New World*, by Mervyn Alleyne, ix–xi. Ann Arbor, Mich.: Karoma.
- Heinl, Robert Debs, Jr., and Nancy Gordon Heinl  
 1978 *Written in Blood: The Story of the Haitian People*. Boston: Houghton Mifflin.
- Hughes, Geoffrey  
 2000 *A History of English Words*. Oxford: Blackwell.
- Hyltenstam, Kenneth, and Niclas Abrahamsson  
 2000 Who Can Become Native-like in a Second Language? All, Some, or None? On the Maturational Constraints Controversy in Second Language Acquisition. *Studia Linguistica* 54(2):150–66.
- Jusczyk, Peter  
 1997 *The Discovery of Spoken Language*. Cambridge, Mass.: MIT Press.
- Kayne, Richard  
 2000 *Parameters and Universals*. New York: Oxford University Press.
- Kegl, Judy, Ann Senghas, and Marie Coppola  
 1999 Creation through Contact: Sign Language Emergence and Sign Language Change in Nicaragua. In *Language Creation and Language Change: Creolization, Diachrony, and Development*, edited by Michel DeGraff, 179–237. Cambridge, Mass.: MIT Press.
- Klein, Wolfgang, and Clive Perdue  
 1992 *Utterance Structure: Developing Grammars Again*. Amsterdam: John Benjamins.
- Koopman, Hilda  
 1986 The Genesis of Haitian: Implications of a Comparison of the Syntax of Haitian, French, and West African Languages. In *Substrata versus Universals in Creole Genesis*, edited by Pieter Muysken and Norval Smith, 231–58. Amsterdam: John Benjamins.
- Kouwenberg, Silvia  
 2002 Review of *Creole Genesis and the Acquisition of Grammar: The Case of Haitian Creole*, by Claire Lefebvre. *Revue Québécoise de Linguistique* 28 (2):129–36.
- Labov, William  
 1994 *Principles of Linguistic Change: Internal Factors*. Oxford: Blackwell.
- Lafage, Suzanne  
 1985 *Français écrit et parlé en pays Éwé (Sud-Togo)*. Paris: Société d'Études Linguistiques et Anthropologiques de France.
- Langacker, Ronald  
 1977 Syntactic Reanalysis. In *Mechanisms of Syntactic Change*, edited by Charles Li, 57–139. Austin: University of Texas Press.
- Lefebvre, Claire  
 1998 *Creole Genesis and the Acquisition of Grammar: The Case of Haitian Creole*. Cambridge: Cambridge University Press.
- Lightfoot, David  
 1999a *Creoles and Cues*. In *Language Creation and Language Change: Creolization, Diachrony, and Development*, edited by Michel DeGraff, 431–52. Cambridge, Mass.: MIT Press.

- 1999b The Development of Language: Acquisition, Change, and Evolution. Malden, Mass.: Blackwell.
- Locke, John  
1959 An Essay Concerning Human Understanding [1690]. New York: Dover.
- Lowie, Wander  
2000 Cross-Linguistic Influence on Morphology in the Bilingual Mental Lexicon. *Studia Linguistica*, 54(2):175–85.
- Lumsden, John  
1999 Language Acquisition and Creolization. In *Language Creation and Language Change: Creolization, Diachrony, and Development*, edited by Michel DeGraff, 129–57. Cambridge, Mass.: MIT Press.
- MacWhinney, Brian  
2000 The CHILDES Project: Tools for Analyzing Talk. Mahwah, N.J.: Lawrence Erlbaum Associates.
- Mchombo, Sam, ed.  
1993 Theoretical Aspects of Bantu Grammar. Stanford, Calif.: CSLI Publications.
- Meillet, Antoine  
1958 L'Évolution des formes grammaticales [1912]. In *Linguistique historique et linguistique générale*. Vol. 1, by Antoine Meillet, 130–48. Paris: Honoré Champion. [Originally appeared in *Scientia: Revista di scienza* 12:384–400, 1912.]  
1951 Le développement des langues [1929]. In *Linguistique historique et linguistique générale*. Vol. 2, by Antoine Meillet, 71–83. Paris: Klincksieck.
- Mintz, Sidney  
1971 The Socio-historical Background to Pidginization and Creolization. In *Pidginization and Creolization of Languages*, edited by Dell Hymes, 481–96. Cambridge: Cambridge University Press.
- Moreau de Saint-Méry, M. L. E.  
1958 Description topographique, physique, civile, politique et historique de la partie française de l'isle de Saint Domingue [1797]. 3 vols. Paris: Société de l'Histoire des Colonies Françaises.
- Mufwene, Salikoko  
1990 Transfer and the Substrate Hypothesis in Creolistics. *Studies in Second Language Acquisition* 12(1):1–23.  
2001a The Ecology of Language Evolution. Cambridge: Cambridge University Press.  
2001b How Bantu Is Kiyansi? A Re-examination of Its Verbal Inflections. Paper presented at the International Symposium on Typology of African Languages, University of Cologne, Institut für Afrikanistik, 21–24 May.  
forthcoming Développement des créoles et evolution des langues. *Études Créoles*.
- Muysken, Pieter  
1981 Halfway between Quechua and Spanish: The Case for Relexification. In *Historicity and Variation in Creole Studies*, edited by Arnold Highfield and Albert Valdman, 52–78. Ann Arbor: Karoma.
- Ndayiragije, Juvénal  
1989 The Source of the Agglutinated Determinant in Haitian Creole. *Canadian Journal of Linguistics* 34(3):313–17.  
2000 Strengthening PF. *Linguistic Inquiry* 31(3):485–512.
- Newport, Elissa L.  
1999 Reduced Input in the Acquisition of Signed Languages: Contributions to the Study of Creolization. In *Language Creation and Language Change:*

- Creolization, Diachrony, and Development, edited by Michel DeGraff, 161–78. Cambridge, Mass.: MIT Press.
- Osthoff, Hermann, and Karl Brugmann  
1967 Preface to *Morphological Investigations in the Sphere of the Indo-European Languages I* [1878]. In *A Reader in Nineteenth Century Historical Linguistics*, edited and translated by Winfred P. Lehmann, 197–209. Bloomington: Indiana University Press.
- Paul, Hermann  
1970 *Principles of the History of Language* [1890]. Translated by H. A. Strong. College Park, Md.: McGrath.
- Paul, Emmanuel  
1962 *Panorama du folklore haïtien: présence africaine en Haïti*. Port-au-Prince: Imprimerie de l'État.
- Perdue, Clive  
1995 *L'acquisition du français et de l'anglais par des adultes*. Paris: CNRS Editions.
- Pinker, Steven  
1994 How Could a Child Use Verb Syntax to Learn Verb Semantics? In *The Acquisition of the Lexicon*, edited by Lila Gleitman and Barbara Landau, 377–410. Cambridge, Mass.: MIT Press.
- Pollock, Jean-Yves  
1989 Verb Movement, Universal Grammar and the Structure of IP. *Linguistic Inquiry* 20(3):365–424.
- Price-Mars, Jean  
1983 *So Spoke the Uncle* [1928]. Translated by Magdaline Shannon. Washington, D.C.: Three Continents Press.
- Ransford, Oliver  
1971 *The Slave Trade: The Story of Transatlantic Slavery*. London: J. Murray.
- Rassinoux, Jean  
1974 *Dictionnaire français-fon*. Cotonou.
- Rizzi, Luigi  
1999 Broadening the Empirical Basis of Universal Grammar Models: A Commentary. In *Language Creation and Language Change: Creolization, Diachrony, and Development*, edited by Michel Degraff, 453–72. Cambridge, Mass.: MIT Press.
- Rongier, Jacques  
1995 *Dictionnaire français-ewe*. Paris: Karthala.
- Sauveur, Joseph, and John Lumsden  
1999 On the Origin of Closed-Class Adjectives of Haitian Creole. Paper presented at the annual meeting of the Society for Pidgin and Creole Linguistics, Los Angeles, 8–9 January.
- Schwartz, Bonnie  
1998 The Second Language Instinct. *Lingua* 106:133–60.
- Schwartz, Bonnie, and Rex Sprouse  
1996 L2 Cognitive States and the Full Transfer/Full Access Model. *Second Language Research* 12(1):40–72.
- Segurolo, Basilio, and Jean Rassinoux  
2000 *Dictionnaire fon-français*. Madrid: Société des Missions Africaines.
- Siegel, Jeff  
forthcoming Substrate Influence in Creoles and the Role of Transfer in Second Language Acquisition. *Studies in Second Language Acquisition*.

Singler, John

- 1996 Theories of Creole Genesis, Sociohistorical Considerations, and the Evaluation of the Evidence: The Case of Haitian Creole and the Relexification Hypothesis. *Journal of Pidgin and Creole Languages* 11(2):185–230.

Singleton, David

- 1999 Exploring the Second Language Mental Lexicon. Cambridge: Cambridge University Press.

Sprouse, Rex, and Barbara Vance

- 1999b An Explanation for the Decline of Null Pronouns in Certain Germanic and Romance Languages. In *Language Creation and Language Change: Creolization, Diachrony, and Development*, edited by Michel Degraff, 257–84. Cambridge, Mass.: MIT Press.

Sylvain, Suzanne

- 1936 *Le créole haïtien: morphologie et syntaxe*. Wetteren, Belgium: Imprimerie de Meester.

Thomas, John Jacob

- 1869 *The Theory and Practice of Creole Grammar*. Port-of-Spain: Chronicle Publishing Office.

Thomason, Sarah

- 1993 On Identifying the Sources of Creole Structures. In *Africanisms in Afro-American Language Varieties*, edited by Salikoko Mufwene, 280–95. Athens: University of Georgia Press.

Thomason, Sarah, and Terrence Kaufman

- 1988 *Language Contact, Creolization, and Genetic Linguistics*. Berkeley and Los Angeles: University of California Press.

Thornton, John

- 1991 African Soldiers in the Haitian Revolution. *Journal of Caribbean History* 25(1–2):58–80.

Tinelli, Henri

- 1970 *Generative Phonology of Haitian Creole*. Ph.D. diss., University of Michigan.

Trouillot, Hénock

- 1955 La condition des nègres domestiques à Saint-Domingue. *Revue de la Société Haïtienne d'Histoire, de Géographie et de Géologie* 28:1–34.
- 1980 Les limites du créole dans notre enseignement. Port-au-Prince, Haïti: Imprimerie des Antilles.

Trouillot, Michel-Rolph

- 1990 *Haiti: State against Nation: The Origins and Legacy of Duvalierism*. New York: Monthly Review Press.
- 1995 *Silencing the Past: Power and the Production of History*. Boston: Beacon Press.
- 1998 Culture on the Edges: Creolization in the Plantation Context. *Plantation Society in the Americas* 5(1):8–28.

Valdman, Albert, Sarah Yoder, Craige Roberts, and Yves Joseph

- 1981 *Haitian Creole-English-French Dictionary*. 2 vols. Bloomington: Creole Institute, Indiana University.

Valdman, Albert

- 2000 L'évolution du lexique dans les créoles à base lexicale française. *L'Information Grammaticale* 85:53–60.

Véronique, Daniel

- 1990 Reference and Discourse Structure in the Learning of French by Adult Moroccans. In *Current Trends in European Second Language Acquisition*



Research, edited by Hans Dechert, 171–201. Clevedon, England: Multilingual Matters.

Véronique, Daniel

- 2000 Observations préliminaires sur li dans l'interlangue d'Abdelmalek. *In* Appropriation du français par des Marocains arabophones à Marseille, edited by Alain Giacomi, Henriette Stoffel, and Daniel Véronique, 207–323. Aix-en-Provence: Publications de l'Université de Provence.

von Fintel, Kai

- 1995 The Formal Semantics of Grammaticalization. *In* Proceedings of the Twenty-Fifth Meeting of the North-Eastern Linguistic Society. Vol. 2: Papers from the Workshops on Language Acquisition and Language Change, edited by J. N. Beckman, 175–90. Amherst: Graduate Linguistic Student Association, University of Massachusetts.

Wexler, Ken

- forthcoming Lenneberg's Dream: Learning, Normal Language Development and Specific Language Impairment. *In* Language Competence across Populations: Towards a Definition of Specific Language Impairment, edited by Jeannette Schaffer and Yonata Levy. Hillsdale, N.J.: Erlbaum.

Wittmann, Henri, and Robert Fournier

- 1996 Constraints on Relexification: Limits Imposed in the Framework of Minimalist Theory. *Revue Québécoise de Linguistique Théorique et Appliquée* 13(1–4):245–80.

Zwanenburg, Wiecher

- 1983 Productivité morphologique et emprunt. Amsterdam: John Benjamins.