

The Emergence of Creoles and Language Change

Salikoko S. Mufwene

1 Introduction

From an evolutionary perspective, creoles have typically been discussed in relation to pidgins, from which they have allegedly evolved. This position has been disputed by, especially, Chaudenson (2001, 2003), Mufwene (2001, 2005, 2008), and DeGraff (2009), for reasons I discuss below. Much earlier, Alleyne (1971) had disputed the “baby talk” hypothesis, according to which pidgins had evolved from simplified, baby-like utterances produced by the non-Europeans with whom the Europeans came in contact. Alleyne argues that fossils of variants still evident in Haitian Creole, Saramaccan, and Sranan (e.g., *broko* ‘break’, *dede* ‘died, dead’) speak otherwise. I show below that the history of the European trade and exploitation colonization of the relevant territories also disputes the “baby talk” hypothesis and its alternative, the “foreigner talk” hypothesis, according to which the Europeans spoke to non-Europeans in trade colonies in reduced utterances, imitating those produced by their interlocutors.

Since the late nineteenth century, the study of creoles has been marked by a social bias according to which non-Europeans were incapable of learning European languages adequately (Mufwene, 2001, 2005, 2008; DeGraff, 2003, 2005). Creoles have also been stipulated as separate languages from their lexifiers and not genetically related to them (Thomason, & Kaufman 1988; Thomason, 2001), although most speakers of these new vernaculars say they speak the same European language (Mühlhäusler, 1985; Mufwene, 1988). The stipulation is disputed in part by the fact that the Romance languages, which, like creoles, would not be mutually intelligible with Vulgar Latin, are also by-products of language shift. I will avoid the bias by sometimes referring to creoles as *vernaculars* or as *language varieties*, thus leaving room for them to be treated as new, colonial nonstandard dialects of the relevant European languages, produced by populations that are predominantly of non-European descent. Evolutionarily, they are on a par with, for instance, the French vernaculars of Louisiana and Québec, except that these have been produced by predominantly French colonists. Lack of mutual intelligibility with, especially, their metropolitan lexifiers, which has often been invoked to justify the disfranchising of creoles from the relevant European genetic linguistic families, also applies, as variably, to some of these other colonial vernaculars.

The term *lexifier* is used in this chapter as a label of convenience for the language from which a creole has typically inherited the overwhelming part of its vocabulary. This practice is based on the assumption that a creole has inherited its grammar from sources other than its lexifier

(Holm, 1988; Thomason, & Kaufman, 1988; Thomason, 2001). Although, however, the basiclect of a creole has a very different grammar from the standard variety of its lexifier (called *acrolect*), many of its grammatical features can be traced, at least partly, to some of the non-standard varieties of its lexifier, to which its “creators” were exposed. This is in fact one of the strongest contributions of Sylvain (1936), ironically invoked by some creolists as a forerunner of the relexification hypothesis (see below). Also, although the term *creole* has been extrapolated to various contact vernaculars, including those with a non-European lexifier (cf. Kouwenberg, & Singler, 2009), this chapter is restricted to those lexified by a European language. The reasons for this position are articulated below.

2 Historical Perspectives: What Are Creoles and Pidgins?

Strictly speaking, creoles and pidgins are new language varieties that developed out of contacts between colonial nonstandard varieties of a European language and several non-European languages around the Atlantic and in the Indian and Pacific Oceans during the 17th–19th centuries. *Pidgins* typically emerged in trade colonies, which developed around trade forts (as on the coast of West Africa) and on whaling ships (as in the South Pacific). They have reduced structures and restricted communicative functions: typically trade and whaling activities. Initially they served as non-native *lingua francas* to users who maintained their native vernaculars for their intra-ethnic interactions. Some pidgins have expanded into regular vernaculars, especially in urban settings, and are called *expanded pidgins*. Examples include Bislama and Tok Pisin (in Melanesia) and Nigerian and Cameroon Pidgin Englishes. Structurally, these are as complex as *creoles* (Féral, 1989; Jourdan, 1991, 2009), though their evolutionary trajectories are different (see below).

Creoles emerged typically in settlement colonies whose primary industry consisted of sugar cane or rice cultivation, for which non-indigenous, non-European slaves were employed, constituting the overwhelming majority of the plantation populations. Examples include Haitian, Mauritian, and Seychellois (lexified by French); Jamaican, Guyanese, and Hawaiian Creole, as well as Gullah in the United States (all lexified by English); and Saramaccan and Sranan in Surinam (lexified by English, with the former heavily influenced by Portuguese and the latter by Dutch). Creoles have also been singled out in Australia, although they are endogenous, as they were produced by Aboriginal, rather than exogenous, populations (Chaudenson 1979).

Vernaculars such as Cape Verdian Crioulo (lexified by Portuguese) and Papiamentu in the Netherlands Antilles (apparently Portuguese-based but influenced by Spanish) suggest that the plantation industry is not as significant a factor as population growth (including rate of population replacement) and population structure (related to early segregation) in the identification of a colonial vernacular as a creole. These considerations help explain why Brazil, which engaged in sugar cane cultivation a century earlier than the Caribbean colonies but had a non-segregated population structure, did not produce a creole (Mufwene, 2005, 2008). Certainly, it is also disputable whether creoles can be singled out as a typological class, let alone a genetic one (see below).

Although Melanesian expanded pidgins are associated with sugar cane plantations, they need not be considered as creoles. According to Keesing (1988), they originated in trade and whaling settings and were adopted as *lingua francas* on the plantations (but cf. Baker, 1993), before they evolved into urban vernaculars and expanded their functions and structures. However, since the complexity of their grammars makes them comparable to creoles, they raise the question of whether only one evolutionary trajectory need produce the extreme kind of structural divergence from the lexifier that has been associated with these vernaculars. It remains debatable whether, in the first place, creoles can be defined by their structural features.

Even McWhorter (1998) had to posit a small subset of “creole prototypes” (refuted by DeGraff, 2001), to dodge the question of why creoles are like each other only on the family resemblance model (Mufwene, 2001, 2005, 2008). This state of affairs is inconsistent with typological classifications, which are predicated on classical categories: all members must share the feature or combination thereof that justifies grouping them together.

According to Chaudenson (1979, 2001, 2003), creoles have evolved by basilectalization away from the closer approximations of their lexifiers spoken by the earliest slaves. This account is grounded in the particular way in which plantation settlement colonies developed, originally settled in small homesteads whose populations were integrated and eventually becoming larger, racially segregated plantations, as economic capital increased.

Linguists have also typically considered as creoles the varieties that are structurally the most divergent from the acrolects, called basilects. According to Chaudenson, these evolved later in history, through imperfect approximations of already imperfect approximations.¹ The notion of ACROLECT should not be confused with that of LEXIFIER, because the lexifiers were typically nonstandard and most likely *koinés* (i.e., compromises between different dialects) of the relevant European languages.

It appears that, evolutionarily, creoles relate to expanded pidgins in a way that a half-empty bottle relates to a half-full bottle: different histories but similar outcomes. Interesting evidence for this may be found in Solomon Islands Pidgin. Jourdan (2009) reports recent “system-internal innovation[s],” consisting of English prepositions used predicatively and transitivized according to Pidgin’s grammar, with the suffix *-im*, which make the vernacular more divergent from its lexifier and more similar to the indigenous substrate languages.

The position since the 19th century that creoles evolved from erstwhile pidgins by the acquisition of native speakers appears to have been prompted by the assumption that complex structures evolve from simpler ones. However, a diachronic examination of the morphosyntaxes of Indo-European languages such as English or French reveals a trend from more complex to simpler morphosyntax. Colonial history also disputes this traditional position. Creoles emerged in settings where contacts with Europeans and native speakers of the lexifiers could not have been as sporadic as in the trade settings that produced pidgins, certainly not during the homestead phase, when the non-European component of the settlement population was the minority and the populations were racially integrated, though not necessarily equal socially (Chaudenson, 2001; Mufwene, 1997, 2001, 2008). Geographically, our epistemological prototypes of creoles and pidgins developed in separate places, in plantation settlement colonies of the New World and the Indian Ocean for creoles and in Canton, the Pacific, and Oceania for pidgins (Mufwene, 2005, 2008). Moreover, the term *pidgin* was first used in print in 1807, in Canton (Baker, & Mühlhäusler 1990), much later than the term *creole*, which had been coined in Latin America for locally born people of non-indigenous stock in the late 16th century. It was used in reference to a “corrupted” variety of Portuguese spoken in Senegal only in the late 17th century (La Courbe’s *Premier voyage*, 1688:192, cited by Arveiller, 1963). Its later extension to other colonial nonstandard varieties spoken primarily by descendants of non-Europeans may have been initiated by locally-born White colonists, who were proud to be identified as Creoles (given some rights they could claim to administer the colonies), claimed to have maintained the European language intact, but dissociated themselves from the non-White Creoles (Stewart, 2007).

The etymology of the term *pidgin* points to *business English* in Canton, though the emergence of the term is probably also due to partial congruence between *business* and Cantonese *bei chin* ‘give money’ or ‘pay’ (Comrie et al., 1996: 146). Noteworthy is the fact that Canton was an important trade colony where no plantation industry developed and no variety has been

identified as creole. Besides, the history below also suggests that the emergence of pidgins lexified by European languages may be a peculiarity of British colonial ventures in the 19th century. Pidgins lexified by other European languages are scant and are not attested before the 20th century.

Also bearing heavily on the position that creoles evolved from antecedent pidgins is the role played by interpreters in the early contacts between Europeans and non-Europeans (Bolton, 2000, 2002; Fayer, 2003; Mufwene, 2005, 2014). This is best documented in relation to China, where the interpreters (often identified as *linguists*) were also required power brokers in trade (Van Dyke, 2005). Further evidence comes from the colonization of Hawaii (Beechert, 1985), where interpreters, from the monarchy, played an important role in the spread of English in the Pacific. Additional evidence comes from the colonization of Africa, facilitated by interpreters all the way to the early 20th century (Fortbath, 1977; Reader, 1997; Austen, 1999; Austen, & Derrick, 1999; Lawrance, et al., 2006; Kennedy, 2013). There is similar evidence about the colonization of the Americas, where interpreters were used in trade with Native Americans (Karttunen, 1994; Curtin, 1984; Gray, & Fiering, 2000; Metcalf, 2005).

It appears that in the particular territories where pidgins lexified by European languages emerged, knowledge of the European language remained the privilege of a few who benefited from the trade, then operating as in today's globalized economic networks, between indigenous rulers and the foreigners, interfaced by experts who can carry on the transactions. The slave trade, which has figured centrally in the relevant literature, did not proceed in bazaar-style open markets (Mufwene 2014). The British East India Company traded exclusively with a guild of Chinese merchants (*Co-Hong*) in tea, porcelain, and silk.

There are thus plenty of reasons to question the traditional, a-historical view that derives creoles from pidgins (*pace*, e.g., Siegel, 2008; Bakker, 2009). Although the Pacific illustrates the pidgin-to-expanded-pidgin evolutionary trajectory, this is not the one followed by creoles around the Atlantic and in the Indian Ocean, or even in Hawaii. Expanded pidgins are by-products of the replacement of trade colonization by exploitation colonization, whereas creoles emerged in territories that remained settlement colonies until independence. Barring disputable stipulations of some South and East Asian vernaculars as creoles, there is a neat ecological complementary distribution between creoles and expanded pidgins: settlement plantation colonies for creoles vs. former trade colonies for pidgins.

Also, although Bickerton (1981, 1984) presents Hawaii as typical of settings where creoles developed, it was rather exceptional compared to Atlantic and Indian Ocean settlement colonies (Mufwene, 2008). In Hawaii, Creole emerged in the city but Pidgin on the plantations (Roberts, 1998, 2004), whereas in the other territories creoles developed on the plantations. Caribbean cities produced closer approximations of the lexifier. Creoles spread to them after the abolition of slavery, when former slaves who did not want to continue working on the plantations migrated to the city.

History also suggests that even pidgins must have evolved gradually rather than abruptly. In the case of Africa, as trade intensified in the 18th century and there were fewer and fewer interpreters who had learned the European language in Europe, more and more linguistically less competent individuals assumed their function. Then the reduced structures associated with pidgins emerged, in a way similar to the basilectalization that produced creoles. Expanded pidgins of course arose by recomplexification, in response to the more diversified communicative needs of those who would use pidgins as vernaculars in the emergent multi-ethnic cities. Under indigenous substrate influence, this complexification furthered the structural divergence from the lexifier.

The often-invoked jargon or pre-pidgin stage in the emergence of creoles and pidgins has not been documented. The hypothesis is not consistent with the role of interpreters during the

trade colonization of Africa and Asia up to the 19th century. According to Drechsel (2014), the same interpreters used a Maritime Polynesian Pidgin (MPP) in communicating with the Natives on the Pacific islands, from New Zealand to Hawaii. MPP had apparently been used as a *lingua franca* by Polynesians before they traded with the Europeans.

One should not ignore the fact that no French or Dutch pidgins emerged on the African coast comparable to Nigerian and Cameroon English pidgins. “Le français tirailléur,” associated with African recruits in the French army since the 19th century, appears to be a stereotypical creation of the French colonizers themselves. The recruits hardly spoke it, though it has been kept in the French citizens’ negative representation of Africans’ inability to learn standard French competently (Vigouroux, 2013). Tai Boy in Vietnam emerged only in the 20th century, just like “l’abidjannais” in Southern Côte d’Ivoire, and was short-lived. No pidgin based on a colonial language other than English appears to have emerged in the Pacific. Unserdeutch, spoken in Papua New Guinea, and also known as Rabaul Creole German, is considered a creole. Pidgins appear to be by-products of British trade colonization, though the reason for this historical peculiarity is not yet clear. It also appears that they did not emerge before the late 18th century (based on some disputable attestations) or, more likely, the early 19th century. That is after Caribbean and Indian Ocean creoles had already emerged (Mufwene, 2014).

Supporting the above hypothesis is also the observation by Huber (1999) and Ostler (2005) that Portuguese, for which there is no evidence of pidginization in history (*pace* Whinnom, 1971), had functioned as a convenient *lingua franca* of trade and diplomacy along the African and Indian Ocean coasts, all the way to the Far East, until the 18th century, after the Dutch, the French, and the English confiscated some of the Portuguese colonies. The European slave trade with Africa appears to have been conducted in Portuguese, spoken by the *grumetes* (young sailors) and the children of the Portuguese “factors” or *lançados*, who acted both as intermediaries and as interpreters (Berlin 1998). Nigerian and Cameroon Pidgins may thus have arisen for reasons that had little to do with the slave trade.

Hall’s (1962, 1966) and Mühlhäusler’s (1997) “life-cycle” hypothesis, according to which creoles are somewhere on an evolutionary trajectory proceeding from the lexifier to a jargon, then to a pidgin, possibly to a creole, and sometimes even to a –postcreole, by decreolization (see also Schuchardt 1914; Bloomfield 1933, on the latter), appears to be inconsistent with history (Mufwene 1994). The term *jargon* was used randomly by colonizers for any language variety they did not understand, not necessarily pidgins. The term and its meaning actually have a longer usage than the European colonization, dating from the 13th century (Mufwene 1997). Neither Hall nor Mühlhäusler provide operational criteria for distinguishing their putative jargons from interlanguages, except that the latter are less stable. Even Plag’s (2008, 2009) claim that creoles evolved from interlanguages does not redeem this traditional position, because all L2 learners go through interlanguages, which are individual but not communal varieties (DeGraff 1999, 2009; Mufwene 2008, 2010a). Also noteworthy is the fact that Black Creoles of the homestead phase appear to have spoken the relevant colonial koinés instead. In addition, several Hispanic American countries identify Creole populations who speak no creole vernaculars.

3 Critical Issues

3.1 How Many Creoles Are There?

Under whatever definition, it is not clear which contact-based vernaculars count as creoles and which do not, especially outside the Caribbean and the Indian Ocean. Hawaiian English

Creole is problematic because it evolved in the city, rather than on the plantations, where a pidgin emerged. It was also produced by contract laborers rather than slaves. Besides, there was no extensive multilingualism among the laborers, who consisted of Chinese, Japanese, Filipinos, Koreans, and “Portuguese,” and lived in separate ethnic “houses.” They continued to speak their ethnic vernaculars, in which they received instructions for work, and they resorted occasionally to Pidgin Hawaiian and later on to English, which they pidginized, for inter-ethnic communication. To date, their descendants have kept their ethnic identities, although most of them speak Hawaiian English (Creole) as their vernacular.

Kreol of Queensland is identified as such because it was produced by non-Europeans, primarily from Australia, who worked on sugar cane plantations. It is structurally close to Melanesian pidgins, which Baker (1993) claims evolved from it or its antecedent in New South Wales. Important structural differences between these Pacific varieties and those of the Atlantic and Indian Ocean make it futile to attempt to define creoles structurally (*pace* McWhorter, 1998; Bakker et al. 2011).

More difficult to accept as creoles are varieties such as Afrikaans, classified as such by Valkhoff (1966) but not by Hesselting (1897). The latter found it less divergent from Dutch than Negerhollands (now dead), which had been produced by African slaves who had worked on sugar cane plantations. Hans den Besten (Wouden, 2012), however, saw “creole features” in Afrikaans, capitalizing on the fact that the Dutch settlers had been in contact with non-European people, with whom they sometimes mixed, and Cape Dutch was restructured under their influence. Afrikaners do not think their language, now stipulated as separate from European Dutch, is a creole, no more than Louisiana White Creoles think they speak Créole, although their vernacular is very similar to Louisiana French Creole (see, e.g., Klingler, 2003), associated exclusively with Black Creoles and sugar cane cultivation.

There are also varieties spoken by descendants of non-Europeans in small, former endogenous Portuguese settlement colonies, from South Asia (e.g., Korlai in India) to Southeast and East Asia (e.g., Papia Kristang in Malaysia and Mekanese in Macau), which are called creoles. Their speakers are descendants of indigenous populations that had lived with the Portuguese, sometimes formed unions with them, converted to Christianity, and adopted their colonizer’s language. The vernaculars are not associated with the plantation industry, nor do their features match those of our epistemological prototypes of creoles in the Caribbean and Indian Ocean. They just share with the latter the fact of being nonstandard vernaculars of European origins spoken by a non-European population. This brings up the issue of whether the race of the speakers is not really an important tacit reason why some “contact-based” vernaculars are called creoles (Mufwene, 2001, 2005, 2008; DeGraff, 2003, 2005).

On the other hand, some creolists have extrapolated the terms *creole* and *pidgin* to various varieties around the world that are not lexified by European languages but have been restructured in similar ways, “under contact conditions.” Thus, new African languages such as Kikongo-Kituba, Lingala, and Sango in the Central African Republic, Kinubi in South Sudan and Kenya, Fanakalo in South Africa, and Hiri Motu in Papua New Guinea have been branded as creoles if they have native speakers, otherwise as pidgins. I have avoided that extrapolation in this chapter, though I believe it is easier to operationalize the concept *PIDGIN* (by invoking reduced communicative functions and structures) than *CREOLE*.

Some linguists, such as Bailey and Maroldt (1977) and Schlieben-Lange (1977), have gone even farther back in time and claimed that Middle English, for the former, and the Romance languages, for the latter, are creoles, since they are outcomes of language contact. The issue is whether there are any modern languages that do not owe at least part of their structures to language contact (Hjelmslev, 1938). How can the boundary be drawn between the kind of contact

that produces a creole and the kind that does not? Are there any cases of language speciation that have nothing to do with language contact?

On the other hand, why did Bailey and Maroldt not go even farther back and claim that Old English was a creole? The Germanic populations that colonized England in the fifth century had spoken no English. The latter is indigenous to England. Old English appears to have emerged only in the seventh century, two centuries after the Germanic invasion. It may be argued that it was a Germanic koiné, out of the contact of the languages of the Jutes, Saxons, Angles, and perhaps Frisians. However, the names *England* 'land of the Angles' and *English* 'language of the Angles' suggest that one group prevailed, at least culturally, and their language won a Pyrrhic victory, just as in the case of creoles. An important difference is that it was not the socioeconomically subjugated people who shifted languages in the process. What seems more significant here is that language change and speciation were actuated by contacts with populations speaking different languages or dialects.

Overall, it is difficult to answer the question how many creoles are spoken today, nor how many can be documented in history, because creolists do not have a common yardstick for determining which ones count as creoles and which do not. The inventories provided by Hancock (1977), Holm (1989), and Smith (1995) provide drastically different numbers!

3.2 Are Creoles Separate Languages From Their Lexifiers?

Another contentious issue about creoles is the traditional stipulation by linguists that creoles are separate languages from their lexifiers and related varieties spoken by descendants of Europeans in the same or other former colonies. Thus, the nonstandard French varieties spoken in Quebec and Louisiana, as well as on the Caribbean islands of St Barts and St Thomas, are considered dialects of French rather than creoles. Likewise Latin American nonstandard varieties of Spanish and Portuguese are not considered creoles (with the exception of Palenquero, spoken by a population of primarily African descent!), despite structural similarities that they exhibit with creoles of the same lexifiers, such as São Tomense, Principense (both spoken in the Bight of Biafra), and Cape Verdiano Crioulo for Portuguese.

Interestingly, African American Vernacular English is not considered a creole, perhaps because it shares its origins with American (White) Southern English or because their structures remain so closely similar. In any case, Holm (2004) claims that it is a semi-creole, though there are no structural features by which creoleness can be measured (Mufwene, 1986a, 2000). Gullah, spoken by a majority-Black population has been stipulated to be a creole (though its speakers think Creole is spoken only in Louisiana). Amish English is not, however, despite the fact that it has also diverged significantly from other White American Englishes. It is spoken by descendants of German-speaking Swiss! Ignoring Hjelmslev's (1938) and Posner's (1985) position that creoles are new dialects of European languages, creolists have adopted uncritically this socially based naming tradition in former European settlement colonies, identifying as creoles modifications of European languages produced and appropriated as vernaculars by non-European majorities.

It is striking that, in the first place, grammatical divergence must weigh so heavily in these stipulations. Genetic connections have typically been based on lexical, phonetic, and morpho-syntactic correspondences. Proportionally, creoles share more lexical materials with their lexifiers (over 90% of their vocabularies) than English does with modern German or Dutch. And their grammatical features probably do not diverge more from those of their nonstandard lexifiers than those of English do from those of other Germanic languages. Besides, there is yet no yardstick for measuring global structural divergence from the lexifier or between any other languages.

Also, as noted above, contact has played as important a role in the speciation of Vulgar Latin into the Romance languages as in that of French and Portuguese into their respective creoles. Thomason and Kaufman's (1988) stipulation that the comparative method cannot be applied in the case of creoles is a foregone conclusion with no empirical basis (Mufwene, 2003, 2005, 2008). Ironically, it is invalidated indirectly by equally disputable attempts, based on the comparative method such as by Bakker et al. (2011), that connect creoles genetically in their own separate families.

Granted that the non-creole varieties are not as structurally divergent from their common lexifiers as the creole vernaculars, there is another explanation that weakens the traditional distinction. In the case of White American English varieties, for example, the majority of European immigrants, who were of non-English descent, shifted to English after the American Revolution, i.e., after its critical formative phase. This timing puts them in a situation comparable to that of more recent immigrants, with their children acquiring the extant variety natively and the immigrants themselves taking most of their xenolectal features with them to their graves. This is why continental European immigrants have exerted little influence on the grammar of American English, although their descendants are today the majority of the White American population (Mufwene, 2009a).

4 Current Contributions and Research

4.1 Creole "Genesis"

The central question here is: how did creoles emerge? The following hypotheses are the major ones competing today, although efforts have been made by some to integrate their insights: the substrate, the superstrate, and the universalist hypotheses.

Substratist positions are historically related to the *"baby talk" hypothesis*, which can be traced back to late 19th-century French creolists: Bertrand-Bocandé (1849), Baissac (1880), Adam (1883), and Vinson (1882). According to them, the languages previously spoken by the Africans enslaved on New World and Indian Ocean plantations exerted a strong influence on structures of the European languages they appropriated as their vernaculars. They also assumed African languages to be "primitive," "instinctive," in "natural" state, and simpler than the "cultivated" European languages. Creoles' systems allegedly reflected the mental inferiority of their producers.² The connection with "baby talk" is that, in order to be understood, the Europeans supposedly had to speak to the Africans like to babies (Bloomfield 1933). More or less the same idea is to be found in the "foreigner talk" hypothesis (as explained above). Unsurprisingly, Maurice Delafosse (1904) claimed that "le petit nègre" was invented by the Africans, though history suggests otherwise.

The revival of the substrate hypothesis (without its racist component) has been attributed to Sylvain (1936). Although she recognizes significant influence from nonstandard French dialects, she concludes her book, surprisingly, with the statement that Haitian Creole is Ewe spoken with a French vocabulary. Over two decades later, Turner (1949), disputing American dialectologists' claim that there was virtually no trace of African languages in "Black English," highlighted some morphosyntactic similarities between "the Gullah dialect" and some West African (especially Kwa) languages. He then concluded that "Gullah is indebted to African sources" (p. 254), which stimulated more research on African substrate influence on African-American English (e.g., Dillard, 1972) and on Caribbean English creoles (e.g., Alleyne, 1980).

There are three main schools of the substrate hypothesis today. The first, led by Alleyne (1980, 1996) and Holm (1988) is closer to Turner's approach and is marked by what is also its main weakness: invocation of influences from diverse African languages without explaining what kinds of selection principles account for this seemingly random invocation of sources.

This criticism is not *ipso facto* an invalidation of substrate influence. It is both a call for a more principled account, one that can articulate the particular ecological factors that appear to have favored various individual influences (thus legitimating what was dubbed the “Cafeteria Principle”), and a reminder that the nature of such influences must be reassessed (Mufwene, 2001, 2008).

The second school, identified by its practitioners as the *relexification hypothesis* (RH), is fully articulated by Lefebvre (1998), who argues that Haitian Creole (HC) consists largely of French lexical entries spoken with the grammar of languages of the Fongbe group. Extended to other creoles, the position has been repeated in some of the contributions to Lefebvre et al. (2006), though some others (see especially Aboh, 2006 and Siegel 2006) dispute it, and almost all contributing to Lefebvre (2011) are more cautious. Objections to RH include the following: 1) Lefebvre’s “comparative” approach has not taken into account several features that HC (also) shares with nonstandard French; 2) she downplays features that HC also shares with several other African languages that were represented in Haiti during the critical stages of its development, so it is not obvious why there is the exclusive focus on the Fongbe languages; 3) studies of naturalistic second language acquisition provide little evidence in support of RH, even if the emergence of creoles could at all be associated exclusively with adult L2-learners (Chaudenson, 2001, 2003); and 4) Lefebvre does not account convincingly for those cases where HC has selected structural options that are not consistent with those of Fongbe. Moreover, relexificationists assume, disputably, that languages of the Fongbe group are structurally identical in all respects and that no influence-related competition among them was involved. The most elaborate critique of RH is DeGraff (2002), which is complemented by various refined analyses of hybridized structures in Haitian by Aboh (2006, 2009, in press). For contrary evidence from other creole-like languages, see especially Siegel (2006).

The least disputed version of the substrate hypothesis is Keesing’s (1988), which shows that substrate languages may impose their structural features on the new, contact-induced varieties if they are typologically homogeneous, with most of them sharing the relevant features.³ Thus, Melanesian pidgins are like (most of) their substrates in having DUAL/PLURAL and INCLUSIVE/EXCLUSIVE distinctions and a transitive marker on the verb. For other common features see especially Sankoff and Brown (1976), Keesing (1988), Sankoff (1993), and Jourdan (2009). Singler (1988) invokes a “homogeneity of the substrate” (see also Mufwene, 1986b) to account generally for substrate influence.

The Melanesian pidgins have not, however, inherited all the peculiarities of the substrate languages. For instance, they do not have their VSO major constituent order, nor do they have much of a numeral classifying system in the combination of *pela* with quantifiers. For an extensive discussion of substrate influence in Atlantic and Indian Ocean creoles, see Muysken and Smith (1986) and Mufwene (1993). For similar discussions about creoles and the like in the Pacific, see Lefebvre et al. (2006) and Lefebvre (2011).

Competing with the above genetic views has been the dialectologist, or superstrate, hypothesis, according to which the primary, if not the exclusive, sources of creoles’ structural features are nonstandard varieties of their lexifiers. This position was first defended by Faine (1937), according to whom HC was essentially Norman French. It was espoused later by Hall (1958), who argues that

the ‘basic’ relationship of Creole is with seventeenth-century French, with heavy carry-overs or survivals of African linguistic structure (on a more superficial structural level) from the previous language(s) of the earliest speakers of Negro Pidgin French; its ‘lexical’ relationship is with nineteenth- and twentieth-century French.

Hall (1958:372)

Chaudenson (2001, 2003) is more accommodating to substrate influence as a factor accounting for the more extensive structural divergence of creoles from their lexifiers compared to their non-creole colonial kin. Chaudenson's allowance for substrate influence is elaborated especially by Corne (1999), who articulates the most explicitly how feature selection can be driven by congruence, even if only partial, between the languages in contact. Although, unlike Pacific pidgins, the Atlantic and Indian Ocean French creoles did not typically emerge in settings that satisfied Singler's "homogeneity of the substrate" condition, partial structural congruence between the substrates and nonstandard French favored the selection of the particular features French creoles possess, for instance in the domain of time reference. Aboh (2006, in press) has carried this approach farther with detailed analyses showing how structural traits can be hybridized in ways similar to biological gene recombination, in various aspects of the grammar. According to him, even transfers from the substrate languages were modified by the contact. One must then determine whether such substrate influence, which does not boil down to mere introduction of features from substrate languages (identified as "apports" by Allsopp, 1977), was facilitated by the numerical proportion of speakers of the relevant languages and/or by the time of the insertion of these in the feature pool. See Singler (1996, 2009) for such considerations regarding HC.

The *universalist hypotheses*, which stood as strong contenders to substrate hypotheses in the 1980s and 1990s, have forerunners in the 19th century. For instance, Adolfo Coelho (1880–1886) partly anticipated Bickerton's (1981, 1984, 1989) *language bioprogram hypothesis*, according to which creoles "owe their origin to the operation of psychological or physiological laws that are everywhere the same, and not to the influence of the former languages of the people among whom these dialects are found." Bickerton pushed things further in claiming that children, not adults, constructed creoles by fixing the parameters of these new language varieties in their default settings, as specified in Universal Grammar (UG). To account for cross-creole structural differences, Bickerton (1984:176–177) invokes a "Pidginization Index" (PI) that includes the following factors: the proportion of the native to non-native speakers during the initial stages of colonization, the duration of the early stage, the rate of increase of the slave population after that initial stage, the kind of social contacts between the native speakers of the lexifier and the learners, and whether or not the contact between the two groups continued after the formation of the new language variety. These factors, which are included in Mufwene's (2001) ecological approach, were simply not anchored in the actual history of the colonization of the different creole-speaking territories.

Some nagging questions with Bickerton's position include the following: Do structures really support the claim that they were produced primarily by children (DeGraff, 1999; Roberts, 1998)? Is his intuitively sound PI consistent with his hypothesis that creoles emerged abruptly, over one generation, from an antecedent macaronic pidgin? Is the "abrupt creolization" hypothesis consistent with the socioeconomic histories of the relevant territories? How can we explain similarities between abrupt creoles and expanded pidgins when the structural expansion and stabilization of the latter is not necessarily associated with restructuring by children (Meyerhoff, 2009)? Is there convincing evidence for assuming that adult speech is less controlled by UG than child language is? If so, how can an adult learn and speak any other language at all?

Not all universalists have invoked children as critical agents in the emergence of creoles. For instance, Sankoff (1979) and Mühlhäusler (1981) make allowance for UG to operate in adults, too. Few creolists nowadays subscribe exclusively to one genetic account, as evidenced by the contributions to Mufwene (1993) and Lefebvre (2011). The "complementary hypothesis" (Baker, & Corne 1986; Corne 1999; DeGraff 2009; Hancock 1986; Mufwene 1986b, 2001) seems to be an adequate alternative, provided we can articulate the ecological conditions under

which the competing influences (between the substrate and lexifier languages, and within each group) may converge or prevail upon each other. Aboh (in press) articulates in fine detail how competition and selection operate during the restructuring of the lexifier under the influence of some specific substrate languages. Schuchardt (1909, 1914) anticipated this language-mixing account in his discussions of the genesis of the Mediterranean Lingua Franca and of Saramaccan.

It is also noteworthy that the traditional claim that creoles emerged abruptly, within one generation, from a pidgin ancestor, has increasingly been disputed by, e.g., Chaudenson (1979, 2001, 2003), Arends (1989, 1995), Singler (1996, 2009), and Mufwene (1996–2008, 2010a). Baker (1995) argues that even pidgins developed their characteristic features gradually. Overall, the oldest documentary evidence shows more similarities between the new vernaculars and their lexifiers than do the later texts. The gradualist scenario is consistent with the gradual way in which plantation colonies evolved, having started from homestead settings settled by small integrated groups in which the slaves were in the minority and interacted regularly with the European colonists; shortage of capital made it difficult to import more slaves. The colonial populations then grew, albeit slowly, more by birth than by (forced) immigration (Mufwene, 2001, 2005, 2008).

Still, the future of research on the emergence of creoles has some issues to address. Knowledge of the nonstandard lexifiers from which they evolved remains limited, though more research is now underway and much of the scholarship on the dialectology of the relevant European languages is becoming useful. There are few comprehensive and integrated descriptions of creoles' structures, especially from a diachronic perspective, which makes it difficult to determine globally how the competing influences interacted among themselves and how the features selected from diverse sources became integrated into new systems. Other issues remain up in the air, for instance, regarding the markedness model that is the most adequate to account for the selection of features into creoles' systems. Can there really be an ecology-independent, universal scale of markedness that can account for the selection of particular features into the structures of particular creoles? If so, how can one explain why even creoles that, for all practical purposes, evolved from the same lexifier do not have identical structures, e.g., Gullah, and Guyanese and Jamaican Creoles?

4.2 Genetic Creolistics and Language Change

Creoles have typically been treated as historical anomalies, being contact-based and with mixed systems. Only exceptionally has it been claimed that they can help us better understand how languages change and can speciate into new ones. They remind us that language or dialect contact is a common actuator of change. To wit, the birth of English is a by-product of language contact primarily between the different Germanic languages that were brought to England from continental Europe, although students of Celtic Englishes argue that the Celts too contributed to the emergence of Old English on their land. In addition, various changes in the history of English in England have involved the Danelaw, the Norse rule, and the Norman Conquest. Changes in British English within the last half-millennium can also be associated with population movements within England. The emergence of varieties such as Irish and Scots Englishes also has everything to do with language contact.

Likewise, the speciation of Vulgar Latin into so many Romance languages stemmed both from variation among the Celtic languages spoken by the populations that shifted to Latin and from differences between the other languages with which the numerous emergent neo-Latin varieties came in contact, e.g., Frankish in Gaul and Arabic and Moorish in Iberia. Thus, the emergence of creoles, outside Europe, is a repetition of history in kind, especially with naturalistic language learning being the dominant mode of language appropriation.

Creoles have also been prompting us to reconsider the way changes have been discussed in historical linguistics: A→B in the environment of C. Discussions of the emergence of creoles have made us more aware of variation in the feature pool, which provides the apparently more accurate statement of how competition was resolved: B was selected over A in the environment of C. This brings up the actuation question: what led the B variant to prevail over the A variant? Indeed, the consequences of such a shift in the conceptualization of change may take us all the way back to Grimm's Law, as explained below.

No justification has been provided for assuming that Proto-Indo-European (PIE) was one single language and as monolithic as a biological organism. Rather, we can assume that like modern languages, if it were really a single language, it must have varied internally. If it were a cluster of related languages, like some language clusters today (e.g., Kikongo in central Africa and Quechua in South America), some aspects of its system are likely to have varied. Thus, instead of the typical formulation $b^h > b > p > \phi$ for part of Grimm's Law, one can argue that these consonants were variants of each other in PIE, with some dialects or languages preferring one or the other. As the Indo-Europeans dispersed to Europe and South Asia, the original competition was resolved in different ways, leaving some room for the pre-IE populations that they encountered to have contributed to differing selections from among the variants.

Alternatively, the pre-IE languages may have introduced some of the variants, which subsequently were selected over the PIE obstruents. This competition-and-selection alternative appears to be evolutionarily more plausible than the traditional account, especially because it brings us closer to addressing the question of why this specific change occurred. From the point of view of language speciation, one may argue that the dispersal led the separated groups to strengthen their respective preferences, probably under the influence of the populations with which they came to coexist.

5 Future Directions

The debate on "creole genesis" informs genetic/historical linguistics on the relevance of the varying external-ecology not only to the actuation question and to language change and speciation but also to language vitality (Mufwene, 2005, 2008). A concomitant of the emergence of creoles around the Atlantic and in the Indian Oceans was the loss of heritage languages among the (descendants of) the enslaved Africans. The cause of this is language shift, which was concurrent with the appropriation of the European language.

Language shift, which results in language loss, was also a concomitant of the emergence of the Romance languages, as of Irish and Scots Englishes, though in these cases, involving endogenous language contact, the shift was more gradual. Language shift happens when opportunities for using one's heritage vernacular decrease to zero and/or when speakers cannot remember the heritage language when an opportunity does arise. The speed at which a population experiences the shift varies from one contact setting to another, apparently faster in exogenous colonies with a high level of societal multilingualism and population-mixing than in others. The contract laborers of Hawaii maintained their heritage languages longer than the Atlantic and Indian Ocean slaves precisely because of this difference in population structure, although in both cases the laborers had been transported to an exogenous setting.

On the other hand, although European colonists and immigrants also migrated to exogenous colonies, they lost their heritage languages slower than the African slaves, simply because they remained for a long time, into the 19th century in the Americas, in segregated mini-national colonies. They shifted to the dominant languages only after they integrated the economically and politically dominant population, for instance, the Anglos in English colonies or the Portuguese in Brazil.

The language-shift factor also explains why the influence of continental European languages on American English is way below what it could have been if continental Europeans had been integrated since the 17th century and had constituted the White American majority since then (Mufwene, 2009a). Additionally, it highlights the role of children as agents of selection (DeGraff, 1999) in a contact setting. Being better learners and wanting to be integrated in the linguistically and culturally dominant population, the children of immigrants weeded out a large proportion of the features their parents could have contributed to the host country's vernacular.

Genetic creolistics makes historical linguists and historical dialectologists more aware of population movements and language contact as ecological factors that generate new feature pools, by introducing new elements, reweighting the variants, or modifying their distribution. One can also invoke periodization and population structure (viz. integration vs. segregation, notwithstanding disparities in demographic size) to explain why different subgroups have not exerted the same (extents of) influences on the languages they have appropriated. This accounts for differences between the influences of the substrate languages spoken by the African slaves and those of the languages spoken by Americans of continental European descent on American Englishes.

We must also revisit the distinction between externally and internally motivated language change. Since languages have no separate existence from their speakers/signers, they must be distinguished from the mental and anatomical infrastructures that enable them. Thus the mind and the anatomy count as the most immediate ecologies, which, combined with the personalities of speakers/signers, shape our idiolects and the ways in which we contribute to restructuring our communal languages. This relation of languages to speakers/signers suggests that there are probably few fundamental structural changes that are not externally motivated, contrary to the tradition that has acknowledged as such only contact-induced changes. The reasons for this conclusion include the following: 1) learning, which is naturally imperfect, may introduce new variants of forms or rules; 2) pressures to communicate new ideas or nuance one's statements may introduce new variants by modifying current meanings or structures; 3) dynamics of mutual accommodations between idiolects may in some cases offset the balance of power among the variants and thereby produce changes in the system; and 4) knowledge of another language can influence the speaker's/signer's performance, especially if that other language is ecologically favored, say, by how more frequently it is used, by the number or prestige of its speakers, or by the fondness that speakers of the changing language have for it.

The only changes that are internally motivated are those that are consequences of other changes that have already affected the system. For instance, while it is not clear that the construction *be going to* was coopted as an alternative for expressing the FUTURE tense/mood because of some language-internal reason, its contraction to *be gonna* in some dialects or even *gon* in African American English was internally motivated. The latter change appears to be an analogical evolution similar to the morphophonological reduction of, for instance, *will*, *will not*, and *shall not* to, respectively, PRONOUN'll, *won't*, and *shan't*. An extreme conclusion is that, since languages have no agency independent of their speakers/signers, all changes are externally motivated.

The list of insights that genetic creolistics can contribute to historical linguistics and historical dialectology remains open. The primary reason for this ignorance is the assumption of "creole exceptionalism" (DeGraff, 2003, 2005), which has deterred linguists from identifying ways in which the scholarship on creoles can inspire research on language change. Rejecting "creole exceptionalism" would entail at least questioning the ideological stipulation that creoles cannot be grouped genetically with their lexifiers, even if they are considered as separate languages. Acknowledging the role of substrate influence as a possible actuator of change in non-creole

languages can also benefit from controversies about it in the emergence of creoles, just like the latter may help refine discourse on transfers or interference in language acquisition (Schumann 1978, Andersen 1983, Lefebvre et al. 2006, Lefebvre 2011, Mufwene 2010a). No less interesting is the light that genetic creolistics can shed on speculations regarding the evolution of language (Bickerton, 1990, 1995, 2010; Botha, 2006; Mufwene, 2008, 2009b, 2010b; Hurford, 2012). Perhaps the time has finally come when creoles can influence more conspicuously the way linguists and other scholars study language.

Related Topics

18 New and Emergent Languages (Riley); **19** Language and Political Economy (McElhinny); **20** Language, Immigration, and the Nation–State (Pujolar); **21** Language and Nationalism (Haque); **22** Language in the Age of Globalization (Jacquemet).

Acknowledgments

I am grateful to Nancy Bonvillain for facing my delays in completing this essay with a lot of patience and for her very helpful feedback to my first draft. I am solely responsible for the remaining shortcomings.

Notes

- 1 Since there are no features that are particularly creole and the relevant vernaculars have been disenfranchised typically because of the particular social history of their emergence, one may ask why the whole basilect-to-acrolect continuum is not characterized as creole. After all, some structural features of the colonial acrolects have also diverged from their metropolitan counterparts, reflecting language contact or conservatism. However, the elite associated with the colonial acrolects would feel insulted, while the distinction between creole and non-creole colonial varieties would become more elusive.
- 2 This assumption would also be repeated by Delafosse (1904), who encouraged the French army officers to speak to African recruits in broken French, the ancestor of the mythical “français tirailleur.”
- 3 These expanded pidgins are brought back into the discussion here not because they should be considered as creoles but for other reasons discussed elsewhere.

References

- Aboh, Enoch. 2006. The role of the syntax–semantics interface. In Lefebvre, Claire, White, Lydia, & Jourdan, Christine (eds) *L2 acquisition and creole genesis*, pp. 221–252. Amsterdam: Benjamins.
- Aboh, Enoch, & Norval Smith. (eds) 2009. *Complex processes in new languages*. Amsterdam: Benjamins.
- Aboh, Enoch. (in press). *The emergence of hybrid grammars: Insights into language contact, language change, and language creation*. Cambridge: Cambridge University Press.
- Adam, Lucien. 1883. *Les idiomes négro-aryens et malayo-aryens: essai d'hybridologie linguistique*. Paris: Maisonneuve.
- Alleyne, Mervyn C. 1971. Acculturation and the cultural matrix of creolization. In *Pidginization and creolization of languages*, Dell Hymes (ed), 169–86. Cambridge: Cambridge University Press.
- Alleyne, Mervyn C. 1980. *Comparative Afro-American: An historical-comparative study of English-based Afro-American dialects of the New World*. Ann Arbor: Karoma.
- Alleyne, Mervyn C. 1996. *Syntaxe historique créole*. Paris: Karthala.
- Allsopp, Richard. 1977. Africanisms in the idioms of Caribbean English. In Kotey, P. F., & Der-Houssikian, H. (eds) *Language and linguistics problems in Africa*, pp. 429–441. Columbia: Hornbeam Press.
- Andersen, Roger (ed.). 1983. *Pidginization and creolization as language acquisition*. Rowley, MA: Newbury House.
- Arends, Jacques. 1989. “Syntactic developments in Sranan: Creolization as a gradual process”. Doctoral thesis, University of Nijmegen.

- Arends, Jacques (ed.) 1995. *The early stages of creolization*. Amsterdam: Benjamins.
- Arends, Jacques, Pieter Muysken, & Norval Smith (eds.) 1995. *Pidgins and creoles: An introduction*. Amsterdam: Benjamins.
- Arveiller, Raymond. 1963. *Contribution à l'étude des termes de voyage en français (1505–1722)*. Paris: D'Artrey.
- Austen, Ralph A. (ed.) 1999. *In search of Sunjata: The Mande oral epic as history, literature, and performance*. Bloomington: Indiana University Press.
- Austen, Ralph A., & Jonathan Derrick. 1999. *Middlemen of the Cameroons Rivers: The Duala and their hinterland c. 1600 – c. 1960*. Cambridge: Cambridge University Press.
- Bailey, Charles, James, N., & Maroldt, K. 1977. The French lineage of English. In *Pidgins – creoles – languages in contact*, Jürgen M. Meisel (ed.) 21–53. Tübingen: Narr.
- Baissac, Charles. 1880. *Etude sur le patois créole mauricien*. Nancy: Imprimerie Berger-Levrault.
- Baker, Phillip. 1993. Australian influence on Melanesian Pidgin English. *Te Reo* 36: 3–67.
- Baker, Phillip. 1995. Some developmental inferences from the historical studies of pidgins and creoles. In Arends, Jacques (ed.) *The early stages of creolization*, pp. 1–24. Amsterdam: Benjamins.
- Baker, Phillip, & Chris Corne, 1986. Universals, substrata and the Indian Ocean creoles. In Muysken, Pieter, & Norval Smith (eds.) *Substrata versus universals in creole genesis*, pp. 163–183. Amsterdam: Benjamins.
- Baker, Phillip, & Peter Mühlhäusler. 1990. From business to pidgin. *Journal of Asian Pacific Communication* 1: 87–115.
- Bakker, Peter. 2009. Pidgins versus creoles and pidgincreoles. In Kouwenberg, Silvia, & John V. Singler (eds) *The handbook of pidgin and creole studies*, pp. 130–157. Malden, MA: Wiley-Blackwell.
- Bakker, Peter, Aymeric Daval-Markussen, Mikael Parkvall, & Ingo Plag. 2011. Creoles are typologically distinct from non-creoles. *Journal of Pidgin and Creole Languages* 26: 5–42.
- Beechert, Edward D. 1985. *Working in Hawaii: A labor history*. Honolulu: University of Hawaii Press.
- Berlin, Ira. 1998. *Many thousands gone: The first two centuries of slavery in North America*. Cambridge, MA: Harvard University Press.
- Bertrand-Bocandé, Emmanuel. 1849. Notes sur la Guinée portugaise ou Sénégal méridionale. *Bulletin de la Société de Géographie* 12: 57–93.
- Bickerton, Derek. 1981. *Roots of language*. Ann Arbor: Karoma.
- Bickerton, Derek. 1984. The language bioprogram hypothesis. *Behavioral and Brain Sciences* 7: 173–221.
- Bickerton, Derek. 1990. *Language and species*. Chicago: University of Chicago Press.
- Bickerton, Derek. 1995. *Language and human behavior*. Seattle: University of Washington Press.
- Bickerton, Derek. 1999. How to acquire language without positive evidence: What acquisitionists can learn from creoles. In DeGraff, Michel (ed.) 1999. *Language creation and language change: Creolization, diachrony, and development*, pp. 49–74. Cambridge, MA: MIT Press.
- Bickerton, Derek. 2010. *Adam's tongue: How humans made language, how language made humans*. New York: Hill and Wang.
- Bloomfield, Leonard. 1933. *Language*. New York: Holt, Rinehart and Winston.
- Bolton, Kingsley. 2000. Language and hybridization: Pidgin tales from the China coast. *Interventions* 5:35–52.
- Bolton, Kingsley. 2002. Chinese Englishes: From Canton jargon to global English. *World Englishes* 21:181–199.
- Botha, Rudolf. 2006. Pidgin languages as a putative window on language evolution. *Language & Communication* 26: 1–14.
- Chaudenson, Robert. 1979. *Les créoles français*. Paris: Fernand Nathan.
- Chaudenson, Robert. 2001. *Creolization of language and culture*. London: Routledge.
- Chaudenson, Robert. 2003. *La créolisation: théorie, applications, implications*. Paris: L'Harmattan.
- Coelho, Adolfo. 1880–1886. Os dialectos românicos ou neolatinos na Africa, Asia, e America. *Bolletim da Sociedade de Geografia de Lisboa*.
- Comrie, Bernard, Stephen Matthews, & Maria Polinsky (eds.). 1996. *The atlas of languages: The origin and development of languages throughout the world*. New York: Facts on File.
- Corne, Chris. 1999. *From French to Creole: The development of new vernaculars in the French colonial world*. London: University of Westminster Press.
- Curtin, Phillip D. 1984. *Cross-cultural trade in world history*. Cambridge: Cambridge University Press.
- DeGraff, Michel. 1999. Creolization, language change, and language acquisition: A prolegomenon. In DeGraff, Michel (ed.) *Language creation and language change: Creolization, diachrony, and development*, pp. 1–46. Cambridge, MA: MIT Press. .
- DeGraff, Michel (ed.). 1999). *Language creation and language change: Creolization, diachrony, and development*. Cambridge, MA: MIT Press.

- DeGraff, Michel. 2001. On the origin of creoles: A Cartesian critique of neo-Darwinian linguistics. *Linguistic Typology* 5: 213–310.
- DeGraff, Michel. 2002. Relexification: A reevaluation. *Anthropological Linguistics* 44: 321–414.
- DeGraff, Michel. 2003. Against creole exceptionalism: Discussion note. *Language* 79: 391–410.
- DeGraff, Michel. 2005. Linguists' most dangerous myth: The fallacy of creole exceptionalism. *Language in Society* 34: 533–591.
- DeGraff, Michel. 2009. Language acquisition in creolization and, thus, language change: Some Cartesian-uniformitarian boundary conditions. *Language and Linguistics Compass* 3(4): 888–971.
- Delafosse, Maurice. 1904. *Vocabulaires comparatifs de plus de 60 langues ou dialectes parlés à la Côte d'Ivoire et dans les régions limitrophes: avec des notes linguistiques et ethnologiques, une bibliographie et une carte*, Paris: E. Leroux.
- Dillard, J.L. 1972. *Black English: Its history and usage in the United States*. New York: Random House.
- Drechsel, Emanuel J. 2014. *Language contact in the earlier colonial Pacific: Maritime Polynesian Pidgin before Pidgin English*. Cambridge: Cambridge University Press.
- Faine, Jules. 1937. *Philologie créole: études historiques et étymologiques sur la langue créole d'Haïti*. Port-au-Prince: Imprimerie de l'Etat.
- Fayer, Joan. 2003. African interpreters in the Atlantic slave trade. *American Anthropologist* 45: 281–295.
- Féral, Carole de. 1989. *Pidgin-English du Cameroun*. Paris: Peters/SELAF.
- Fortbath, Peter. 1977. *The River Congo: The discovery, exploration, and exploitation of the world's most dramatic river*. Boston: Houghton Mifflin Co.
- Gray, Edward G., & Norman Fiering (eds) 2000. *The language encounter in the Americas 1492–1800*. New York: Berghahn Books.
- Hall, Robert A., Jr. 1958. Creole languages and genetic relationships. *Word* 14: 367–373.
- Hall, Robert A., Jr. 1962. The life-cycle of pidgin languages. *Lingua* 11: 151–156.
- Hall, Robert A., Jr. 1966. *Pidgin and creole languages*. Ithaca, NY: Cornell University Press.
- Hancock, Ian F. 1977. Appendix: Repertory of pidgin and creole languages. In *Pidgin and creole linguistics*, Albert Valdman (ed.) 362–91. Bloomington: Indiana University Press.
- Hancock, Ian. 1986. The domestic hypothesis, diffusion and componentiality: An account of Atlantic Anglophone creole origins. In Muysken, Pieter, & Norval Smith (eds) *Substrata versus universals in creole genesis*, pp. 71–102. Amsterdam: Benjamins.
- Hesseling, Dirk Christiaan. 1897. Het Hollands in Zuid Afrika. *De Gids* 61: 148–62. Translated as “Dutch in South Africa”, in Markey, T.L., & Roberge, P. (eds). *On the origin and formation of creoles: A miscellany of articles*, pp. 1–22. Ann Arbor: Karoma.
- Hjelmslev, Louis. 1938. Etudes sur la notion de parenté linguistique. Première étude: relations de parenté de langues créoles. *Revue des Etudes Indo-Européennes* 1: 271–286.
- Holm, John. 1988. *Pidgins and creoles*. Vol. 1: *Theory and structure*. Cambridge: Cambridge University Press.
- Holm, John. 1989. *Pidgins and creoles*. Vol. 2: *Reference survey*. Cambridge: Cambridge University Press.
- Holm, John. 2004. *Languages in contact: The partial restructuring of vernaculars*. Cambridge: Cambridge University Press.
- Huber, Magnus. 1999. Atlantic creoles and the Lower Guinea Coast: A case against Afrogenesis. In Magnus Huber, & Mikael Parkvall (eds) *Spreading the word: The issue of diffusion among the Atlantic creoles*, pp. 81–110. London: University of Westminster Press.
- Hurford, James R. 2012. *The origins of grammar: Language in the light of evolution*. Cambridge: Cambridge University Press.
- Jourdan, Christine. 1991. Pidgins and creoles: The blurring of categories. *Annual Review of Anthropology* 20: 187–209.
- Jourdan, Christine. 2009. Complexification or regularization of paradigms: The case of prepositional verbs in Solomon Islands Pijin. In Aboh, Enoch, & Norval Smith (eds) *Complex processes in new languages*, pp. 159–170. Amsterdam: Benjamins.
- Karttunen, Frances. 1994. *Between worlds: Interpreters, guides, and survivors*. New Brunswick, NJ: Rutgers University Press.
- Keesing, Roger M. 1988. *Melanesian Pidgin and the Oceanic substrate*. Stanford: Stanford University Press.
- Kennedy, Dane. 2013. *The last blank spaces: Exploring Africa and Australia*. Cambridge, MA: Harvard University Press.
- Klingler, Thomas A. 2003. *If I could turn my tongue like that: The creole language of Pointe Coupée Parish, Louisiana*. Baton Rouge: Louisiana State University.
- Kouwenberg, Silvia, & John V. Singler (eds) 2009. *The handbook of pidgin and creole studies*. Malden, MA: Wiley-Blackwell.

- Lawrance, Benjamin, Osborn, Emily Lynn, & Roberts, Richard L. (eds). 2006. *Intermediaries, interpreters, and clerks: African employees in the making of colonial Africa*. Madison: University of Wisconsin Press.
- Lefebvre, Claire. 1998. *Creole genesis and the acquisition of grammar: The case of Haitian Creole*. Cambridge: Cambridge University Press.
- Lefebvre, Claire, White, Lydia, & Jourdan, Christine (eds). 2006. *L2 acquisition and creole genesis*. Amsterdam: Benjamins.
- Lefebvre, Claire (ed.). 2011. *Creoles, their substrates, and language typology*. Amsterdam: Benjamins.
- McWhorter, John H. 1998. Identifying the creole prototype: Vindicating a typological class. *Language* 74: 788–818.
- Metcalf, Alida C. 2005. *Go-betweens and the colonization of Brazil, 1500–1600*. Austin: University of Texas Press.
- Meyerhoff, Miriam. 2009. Forging Pacific pidgin and creole syntax: Substrate, discourse, and inherent variability. In Kouwenberg, Silvia, & John V. Singler (eds), *The handbook of pidgin and creole studies*, pp. 48–73. Malden, MA: Wiley-Blackwell.
- Mufwene, Salikoko S. 1986a. Les langues créoles peuvent-elles être définies sans allusion à leur histoire? *Etudes Créoles* 9: 135–50.
- Mufwene, Salikoko S. 1986b. The universalist and substrate hypotheses complement one another. In Muysken, Pieter, & Norval Smith (eds) *Substrata versus universals in creole genesis*, pp. 129–162. Amsterdam: Benjamins.
- Mufwene, Salikoko S. 1988. Why study pidgins and creoles? Column. *Journal of Pidgin and Creole Languages* 3: 265–76.
- Mufwene, Salikoko S. 1994. On decreolization: The case of Gullah. In Marcyliena Morgan (ed.) *Language, loyalty, and identity in creole situations*, pp. 63–99. Los Angeles: Center for Afro-American Studies.
- Mufwene, Salikoko S. 1996. The Founder Principle in creole genesis. *Diachronica* 13: 83–134.
- Mufwene, Salikoko S. 1997. Jargons, pidgins, creoles, and koinés: What are they? In Arthur K. Spears, & Donald Winford (eds) *Pidgins and creoles: Structure and status*, pp. 35–70. Amsterdam: Benjamins.
- Mufwene, Salikoko S. 2000. Creolization is a social, not a structural, process. In Ingrid Neumann-Holzschuh, & Edgar Schneider (eds) *Degrees of restructuring in creole languages*, pp. 65–84. Amsterdam: John Benjamins.
- Mufwene, Salikoko S. 2001. *The ecology of language evolution*. Cambridge: Cambridge University Press.
- Mufwene, Salikoko S. 2003. Genetic linguistics and genetic creolistics. *Journal of Pidgin and Creole Languages* 18: 273–288.
- Mufwene, Salikoko S. 2005. *Créoles, écologie sociale, évolution linguistique*. Paris: L'Harmattan.
- Mufwene, Salikoko S. 2008. *Language evolution: Contact, competition and change*. London: Continuum.
- Mufwene, Salikoko S. 2009a. The indigenization of English in North America. In Thomas Hoffmann, & Lucia Siebers (eds) *World Englishes: Problems, properties, prospects*, pp. 353–368. Amsterdam: Benjamins.
- Mufwene, Salikoko S. 2009b. The evolution of language: Hints from creoles. In James Minnett, & William S-Y Wang (eds) *Language, Evolution, and the Brain*, pp. 1–33. Hong Kong: City University of Hong Kong Press.
- Mufwene, Salikoko S. 2010a. SLA and the emergence of creoles. *Studies in Second Language Acquisition* 32: 359–400.
- Mufwene, Salikoko S. 2010b. 'Protolanguage' and the evolution of linguistic diversity. In Zhongwei Shen et al. (eds) *The joy of research II: A festschrift in honor of Professor William S-Y Wang on his seventy-fifth birthday*, pp. 283–310. Shanghai Jiaoyu Chubanshe (Education Press).
- Mufwene, Salikoko S. 2014. Globalisation économique mondiale des XVIIe–XVIIIe siècles, émergence des créoles, et vitalité langagière. In Arnaud Carpooran, & Yannick Bosquet-Ballah (eds) *Langues créoles, mondialisation et éducation*, Proceedings of the 13th Colloquium of the Comité International des Etudes Créoles, Mauritius 2012, pp. 23–79. St. Louis, Mauritius: Creole Speaking Unit.
- Mufwene, Salikoko S. (ed.). 1993. *Africanisms in Afro-American language varieties*. Athens: University of Georgia Press.
- Mühlhäusler, Peter. 1981. The development of the category of number in Tok Pisin. In Pieter Muysken (ed.) *Generative studies on creole languages*, 35–84. Dordrecht: Foris.
- Mühlhäusler, Peter. 1985. The number of pidgin Englishes in the Pacific. *Papers in Pidgin and Creole Linguistics*, no.1 *Pacific Linguistics* A-72: 25–51.
- Mühlhäusler, Peter. 1997. *Pidgin and creole linguistics*. London: University of Westminster Press.
- Muysken, Pieter, & Norval Smith (eds). 1986. *Substrata versus universals in creole genesis*. Amsterdam: Benjamins.

- Ostler, Nicholas. 2005. *Empires of the word: A language history of the world*. New York: Harper Collins.
- Plag, Ingo. 2008. Creoles as interlanguages: Syntactic structures. *Journal of Pidgin and Creole Languages* 23: 307–328.
- Plag, Ingo. 2009. Creoles as interlanguages: Phonology. *Journal of Pidgin and Creole Languages* 24: 119–138.
- Posner, Rebecca. 1985. Creolization as typological change: Some examples from Romance syntax. *Diachronica* 2: 167–88.
- Reader, John. 1997. *Africa: Biography of a continent*. New York: Alfred Knopf.
- Roberts, Sarah J. 1998. The role of diffusion in the genesis of Hawaiian Creole. *Language* 74: 1–39.
- Roberts, Sarah J. 2004. “The Emergence of Hawai‘i Creole English in the Early 20th century: The Sociohistorical Context of Creole Genesis”. Doctoral dissertation, Stanford University.
- Sankoff, Gillian. 1979. The genesis of a language. In Hill, Kenneth C. (ed.) *The genesis of language*, pp. 23–47. Ann Arbor: Karoma.
- Sankoff, Gillian. 1993. Focus in Tok Pisin. In Francis Byrne, & Donald Winford (eds.) *Focus and grammatical relations in creole language*, pp. 117–140.
- Sankoff, Gillian, & Penelope Brown. 1976. The origins of syntax in discourse: A case study of Tok Pisin relatives. *Language* 52: 631–666.
- Schlieben-Lange, Brigitte. 1977. L’origine des langues romanes: un cas de créolisation? In Jürgen Meisel (ed.), *Langues en contact — pidgins — créoles — Languages in contact*, 81–101. Tübingen: Gunter Narr.
- Schuchardt, Hugo. 1909. Die Lingua Franca. *Zeitschrift für Romanische Philologie* 33: 441–461.
- Schuchardt, Hugo. 1914. *Die Sprache der Saramakkaneger in Surinam*. Amsterdam: Johannes Muller.
- Schumann, John. 1978. *The pidginization process: A model for language acquisition*. Rowley, MA: Newbury House.
- Siegel, Jeff. 2006. Links between SLA and creole studies: Past and present. In Claire Lefebvre, Lydia White, & Christine Jourdan (eds), *L2 acquisition and creole genesis*, pp. 15–46. Amsterdam: Benjamins.
- Siegel, Jeff. 2008. *The emergence of pidgin and creole languages*. Oxford: Oxford University Press.
- Singler, John V. 1988. The homogeneity of the substrate as a factor in pidgin/creole genesis. *Language* 64: 27–51.
- Singler, John V. 1996. Theories of creole genesis, sociohistorical considerations, and the evaluation of evidence: The case of Haitian Creole and the relexification hypothesis. *Journal of Pidgin and Creole Languages* 11: 185–230.
- Singler, John V. 2009. The sociohistorical context of creole genesis. In Silvia Kouwenberg, & John V. Singler (eds), *The handbook of pidgin and creole studies*, pp. 332–358. Malden, MA: Wiley-Blackwell.
- Smith, Norval. 1995. An annotated list of pidgins, creoles, and mixed languages. In Jacques Arends, Pieter Muysken, & Norval Smith (eds) *Pidgins and creoles: An introduction*, pp. 331–374. Amsterdam: Benjamins.
- Stewart, Charles (ed.). 2007. *Creolization: History, ethnography, theory*. Walnut Creek, CA: Left Coast Press.
- Sylvain, Susanne. 1936. *Le créole haïtien: morphologie et syntaxe*. Wetteren, Belgium: Imprimerie De Meester.
- Thomason, Sarah G. 2001. *Language contact: An introduction*. Washington, D.C.: Georgetown University Press.
- Thomason, Sarah G., & Terrence Kaufman 1988. *Language contact, creolization, and genetic linguistics*. Berkeley: University of California Press.
- Turner, Lorenzo Dow. 1949. *Africanisms in the Gullah dialect*. Chicago: University of Chicago Press.
- Valkhoff, Marius F. 1966. *Studies in Portuguese and creole — with special reference to South Africa*. Johannesburg: Witwatersrand University Press.
- Van Dyke, Paul A. 2005. *The Canton trade: Life and Enterprise on the China coast, 1700–1845*. Hong Kong: Hong Kong University Press.
- Vigouroux, Cécile B. 2013. Francophonie. *Annual Review of Anthropology* 42: 379–397.
- Vinson, Julien. 1882. Créole. *Dictionnaire des sciences anthropologiques et ethnologiques*. Paris.
- Whinnom, Keith. 1965. The origin of the European-based pidgins and creoles. *Orbis* 14: 509–527.
- Whinnom, Keith. 1971. Linguistic hybridization and the “special case” of pidgins and creoles. In Dell Hymes (ed.) *Pidginization and creolization of languages*, pp. 91–115. Cambridge University Press.
- Wouden, Ton van der (ed.). 2012. *Roots of Afrikaans: Selected writings of Hans den Besten*. Amsterdam: John Benjamins.