

The politics of education in post-colonies: Kreyòl in Haiti as a case study of language as technology for power and liberation¹

Michel DeGraff

MIT Linguistics & Philosophy

degraff@mit.edu

@MichelDeGraff @MITHaiti

Abstract

In this contribution, I would like to share some key aspects of my theoretical and applied linguistic agenda in Haiti. This agenda promotes a social vision where linguistics is coupled with digital technology in Haitian Creole (“Kreyòl”) in order to improve research and education toward sustainable development and equal opportunity for all. This agenda also aims at a model for other communities in the Global South where linguistic discrimination has disenfranchised large segments of the population most in need of socio-economic progress.

This article will highlight the MIT-Haiti Initiative,² whose initial objectives were for improving Science, Technology, Engineering & Mathematics (STEM) education in high schools and universities in Haiti. In collaboration with a broad range of academic institutions in Haiti and beyond, this Initiative has been exploring the strategic use of digital tools in Kreyòl to improve Haitian students’ active learning of STEM, across social

¹ This title is inspired from Paulo Freire’s (1985) inspiring book *The politics of education: Culture, power and liberation*. Freyre documents how certain systems of (mis-)education participate in the oppression of students, then he analyzes local practices for revolutionary “conscientization” via critical pedagogy toward challenging these systems of hegemony (“cultures of silence”). I am most thankful to the organizers of the 2015 University of Bremen conference on *Postcolonial Knowledges* and to the editors and reviewers of the *Journal of Postcolonial Linguistics*. This work would not be possible without my friends and colleagues at the MIT-Haiti Initiative and the more than 250 educators and leaders (pioneers, really) who have supported and participated in MIT-Haiti workshops in Haiti. I give heartfelt thanks to the many organizations that have contributed to the success of the MIT-Haiti Initiative over the years: the U.S. National Science Foundation; Fondasyon Konesans ak Libète; Open Society Foundations; Lekòl Kominotè Matènwa; Université d’État d’Haïti; Université Caraïbe; Université Quisqueya; École Supérieure d’Infotronique d’Haïti; Université Notre Dame d’Haïti; NATCOM; Turbo System; U.S. Embassy in Haiti; Haiti's Prime Minister's Office and the Ministry of National Education & Vocational Training; Wade Foundation; Campus Henry Christophe, Université d’État d’Haïti, Limonade; MIT Open Learning; MIT Jameel World Education Lab (JWEL); Kean University.

² Source: <http://haiti.mit.edu/>; <http://MIT-Ayiti.NET>; <http://facebook.com/mithaiti> (17 June, 2020).

classes and beyond any linguistic barrier. More recently, the Initiative has expanded its scope to cover all disciplines at all levels via crowdsourcing, co-creating, curating and sharing of educational materials in Kreyòl. The ultimate goal is to make high-quality education accessible to the greatest numbers of students throughout Haiti, while strengthening the foundations of Haiti's linguistic and cultural identity and while promoting respect of the human rights of all Haitians.

I will consider two important implications of the MIT-Haiti Initiative: for linguistics and for policies related to education writ large, including education that can truly benefit all in Haiti, especially those who speak Kreyòl only (i.e., the vast majority of Haitians). Firstly, Kreyòl is comparable to so called “international” languages, such as English, French, Spanish, Arabic, Chinese, etc., in terms of its development, structures and expressive capacity. Indeed, the success of this Initiative to date doubles as proof of concept that Kreyòl is a full-fledged language with unlimited capacity to express any level of complex thought as in STEM. Secondly, Kreyòl is an essential tool for the education, socio-economic progress and human rights of Haitians, especially in these communities that have long been impoverished through exclusion and injustice. These processes of impoverishment, which started four centuries ago when Haiti was a French colony (then the “richest” colony in the Americas), have been unrelentless throughout Haiti's history. Language and education are two main vectors for the entrenchment of these processes of exclusion and impoverishment in Haiti.

In my view, it is through the innovative, strategic and systematic use of Kreyòl, in conjunction with interactive pedagogy and modern technology, that Haitian students can optimally develop their capacity for acquiring and building additional knowledge in STEM, in the Humanities and Social Sciences, and in second languages such as French, English, Spanish, etc. More generally, it is through Kreyòl as language of instruction and as the language of discourse in every social context that all Haitians can realize their full potential toward joyful and dignified citizenship—and leave behind the trauma of linguistic apartheid that has characterized the history of Haiti since its creation in 1804.

Keywords: Haiti, MIT-Haiti Initiative, Haitian Creole (“Kreyòl”), decolonization of education.

1. Introduction

Haiti may well be the only country in the world to which the media has given what sounds like a long last name: “the poorest country in the Western hemisphere.” Yet such extreme “poverty” is more accurately analyzed as extreme *impoverishment*. Language and education have played key roles in this impoverishment, even though Haiti's linguistic profile, with one language (“Kreyòl”) spoken by virtually everyone there, is one extraordinary asset in Haiti—with a potential that has yet to be optimally exploited in light of robust findings from research in linguistics, pedagogy, and development.

This paper describes the MIT-Haiti Initiative, a project that aims to create wealth from within, through language, education, and technology—in spite of the political and geopolitical forces that work against Haiti and keep impoverishing it. The paper focuses on the language- and education-related power struggles in which Haitian Creole

(“Kreyòl”) speakers have been involved throughout Haitian history. These struggles have created opportunities for us academics to constructively engage in concrete efforts at decolonizing our disciplines, in words *and* in deeds, toward global justice—as we both “read the word and the world,” as advised by Freire and Macedo (1987).

“Education for all” is a trending topic in international discourses on development. In order to teach all children, it is most important to consider and include, at the very core of these development projects, the languages spoken by these children. Yet, too often, this linguistic dimension is not even considered. The MIT-Haiti Initiative showcases an integrated model of language, pedagogy, and technology as key tools to improve education in postcolonial contexts.

The MIT-Haiti Initiative is based on the spirit conveyed in the Haitian proverb *Men anpil, chay pa lou* ‘Many hands make light work.’ A central part of the initiative rests on interdisciplinary collaboration across various departments at MIT and among a diverse range of colleagues and institutions in the U.S. and in Haiti. Close collaboration with universities in Haiti aims at the co-creation of knowledge as part of a new type of North-South collaboration, with mutual respect and mutual benefits for each party. This project evokes theoretical dimensions related to analyses of power/knowledge in history (cf. Foucault 1980), but it also concerns the practical aspects, on the ground level, of the relationship between linguistics, education, human rights, social justice, and development (DeGraff & Ruggles 2014; DeGraff & Stump 2018a, 2018b; Miller 2016, 2019; DeGraff 2016a, 2016b, 2016c, 2017b, 2017c, 2019, 2020).

To understand the details of the MIT-Haiti Initiatives rationale and objectives, we first need to look at history and geopolitics. To this end, section 2 provides the background necessary to understand the origins of the most blatant contradiction in language praxis in Haitian schools and in Haitian society at large: the use of French as the primary language of formal instruction, government, justice, the written media, and the formal economy. In Haiti, only three percent of Haitians speak French fluently—that is, only three percent of the population speak French at home, can dream in French, talk about soccer games in French, make jokes in French, etc. In everyday contexts and in order to function in ordinary circumstances, most Haitians use Kreyòl instead. Only a tiny minority of Haitians actually speaks French at home and in everyday life, while all Haitians in Haiti speak Kreyòl (see review of the relevant statistics in Saint Germain 1997).

In section 3, I connect this contradiction in Haitian education and in the broader society to a series of claims in linguistics that consider Creole languages to be “lesser languages.” In my analysis (see, e.g., DeGraff 2014, 2015a, 2016c, 2017b, 2019), these claims reflect hierarchies of wealth and power, with language and education enlisted as tools (“technologies”) for creating and maintaining these hierarchies.

Section 4 gives an overview of the negative impact of pro-French and anti-Kreyòl preferences on education, mental health, human rights, and social justice in Haiti. Two major foci of the discussion will be the implications of teaching IN French vs. teaching

IN Kreyòl in Haiti and the often-neglected importance of home and vernacular languages, such as Kreyòl, in education in post-colonial communities of the Global South. Given my own biography as a multilingual linguist who views languages (*all* languages) as potential sources of knowledge and power, it is crucial to stress the “in” in “teaching IN French” because my argument here is not against teaching French; it is, rather, against teaching *in* French to Haitians who do not speak French (i.e., to the vast majority in Haiti). Such Haitians stand a better chance of eventually *learning* French, alongside all other academic materials, when they are taught *in* their native Kreyòl, with French taught as a *second* language.

Section 5 engages the reader in an effort toward “*contra*-dictions” as discourse *against* this neo-colonial order of things where European languages are prioritized over the vernacular languages of long oppressed communities such as monolingual speakers of Kreyòl in Haiti, alongside speakers of other minoritized languages in the Global South. I will present two case studies from Haiti: the first is about language and literacy in a rural elementary school in Haiti; the second focuses on Science, Technology, Engineering, and Math (“STEM”) at the high school and university level.

The conclusions follow in section 6, reflecting on Haiti as a source of lessons for social justice with a global impact, with local languages serving as powerful technologies toward mental decolonization and liberation through quality education for all.

2. Language, Knowledge, Ideology, and Power in Haitian History

2.1. From Colonial Saint-Domingue to Neo-Colonial Haiti

The MIT-Haiti Initiative finds itself along a long path of anti-colonial resistance that already started soon after Columbus’s arrival in the New World and the subsequent genocide of the Arawaks and the Taínos who gave us the name “Ayiti” (‘land of mountains’). In the 17th century, the French occupied the Western third of the island and used the labor of enslaved Africans to turn Saint-Domingue into the richest colony in the world. At the height of its colonial wealth as the so called “pearl of the Caribbean,” Saint-Domingue was producing between one half and three quarters of the world’s sugar and 40% of France’s foreign trade (James 1938; Hector & Moïse 1990; Chomsky 1993; Bellegarde-Smith 2004). The Haitian Revolution was launched in 1791 and it eventually led to the emancipation of the enslaved population and to independence in 1804. In what may well be an unparalleled victory for universal human rights in world history, our heroic ancestors defeated the most powerful European army of that time, that of Napoleon, after defeating the Spanish and British armies. But the French, though defeated militarily, have continued, with the help of the Haitian Francophone and Francophile élite, to dominate Haiti through political, financial, and cultural means. This post-colonial power struggle includes, at its core, language-related practices in Haiti’s education system and other formal domains in Haitian society, especially those that are regulated by the State (Arthus 2012, 2014).

Jean-Jacques Dessalines was one of Haiti’s founding fathers, and he was Haiti’s first president at independence in 1804. He can also be considered the first sociolinguist in Haiti—*avant la lettre*. We know from historical sources that Dessalines understood the

importance of Kreyòl for the new nation's identity and sovereignty. He explicitly despised the use of French, as reported by a French observer in colonial Haiti (Descourtilz 1809). The latter recounts a story where the "Creole"³ son of a land-owner spoke to Dessalines in French, and Dessalines looked at him with disdain, then responded in Kreyòl: "*Tiembé langue à vous, pourquoi chercher tienn' les autr'?*" 'You have your own language, why do you have to use someone else's?' (Descourtilz 1809 v3: 245–246, 251). The report of this encounter suggests that Dessalines understood the power of the local vernacular language as a means of resistance against the imperial power of France. It is also reported (in Saint-Rémy 1857 v5: 2) that one well-known contemporary of Dessalines, Senator Étienne-Élie Gérin, in 1807 already, advocated against the use of the "technology" of the French language in Haitian schools; Gérin's objective was to introduce Kreyòl as the language of instruction in Haitian schools, with the objective to strengthen Haiti's newly acquired political independence from France.

As a military leader in colonial Haiti, Dessalines, born in Africa and formerly enslaved, created a revolutionary army that won victories over Spanish, British, and French armies. In terms of the world order back then, these military feats were, in Michel-Rolph Trouillot's (1995) words, "unthinkable" (à la Foucault 1980) or, at the very least, "unacceptable" (Ghachem 2012). During the very period when the Haitian Revolution was happening, European scholars writing *their* versions of Caribbean colonial history could not imagine that enslaved Africans and their progeny would ever win that revolutionary war in Haiti.

It is important to highlight the "unthinkable" aspect of this liberation narrative. In Trouillot's analysis, this liberation was "unthinkable" due to then prevalent ideas about the enslaved Africans' humanity and human rights, including their linguistic rights—or, rather, their lack of humanity and, thus, their lack of human rights. Indeed, many of the contemporary issues about language in Haiti can be connected to the colonial notion that the enslaved Africans could not be thought of as having the same degree of humanity as the Europeans. Although these Africans affirmed themselves as being fully human, and although they won an unprecedented war against those very Europeans who had tried to strip them of their humanity, this historic victory went against all the "normal science" ("normal" in Kuhn's sense) of the world order of the time with its brutal racialized hierarchies. This "unthinkable" is, at least conceptually, a key point of historical background for our understanding of why it's still "unthinkable" to consider Kreyòl as a valid language of education or as a "normal"/"regular" language in terms of its development and typology. Below I revisit these "Creole Exceptionalism" notions in greater detail.

³ A person born locally in the Americas (in this case, in Haiti) of non-indigenous descent (i.e., with ancestors from Europe or Africa).

2.2. The Language-Power-Knowledge Nexus

Bourdieu ([1982] 1991) and Bourdieu and Wacquant (1992) have suggested that if we aim at progress in particular areas of knowledge—in this case, linguistics and education—we should understand the conditions that have created the corresponding systems of knowledge. From the very foundation of colonial Haiti and the larger colonial world created by European imperialism in Africa and the Americas, language and education have been enlisted for both exclusion and domination (DeGraff 2001a, 2001b, 2003, 2004, 2005a, 2014, 2016a, 2016b, 2016c, 2017b, 2017c). In her study of language and education in Africa, Myers-Scotton (1993) coined the term “*élite closure*” in reference to neo-colonial exclusionary language choices as part of a “strategy” that protects the socio-economic and political interests of a small but powerful class whose members speak a European language that the rest of the population keeps striving to learn, but unsuccessfully so. Given the lack of access to that European language—a language that most Haitians have been forced to consider as indispensable for their education—this hegemonic strategy helps to successfully erect and maintain both institutional and ideological barriers that effectively “close” the general population’s access to education and to other means of socio-economic progress.

As Biko (2002) so eloquently said about this sort of hegemony, “the most powerful weapon of the oppressor is the mind of the oppressed.” I would add that the most powerful weapon of liberation is *also* the mind of the oppressed.

The history of the world is replete with examples of language being used both for geopolitical domination and for “*élite closure*.” Lord Macaulay’s “Minute on Indian Education” illustrates both uses:

“... all the information which has been collected from all the books written in Sanskrit is less valuable than what may be found in the most paltry abridgements used at preparatory schools in England. *We [the British] have to educate a people [in India] who cannot at present be educated by means of their mother-tongue. ... [English] stands preeminent even among the languages of the West. ... We must at present do our best to form a class who may be interpreters between us and the millions whom we govern—a class of persons, Indian in blood and colour, but English in taste, in opinions, in morals, and in intellect.*” (Macaulay [1835] 1979; emphases added)

Here Macaulay spells out the importance of language and culture in creating a new class structure in India in order to shore up England’s imperial power. Macaulay’s plan consists of convincing the Indian subjects that the English language is the best language for education—superior to Sanskrit and to the local languages spoken by the “natives.”

If a *bona fide* linguist were to compare Sanskrit to English in order to try and support Macaulay’s claims about the superiority of English, she would be at pains to convincingly argue that English is more “sophisticated” or more “complex” than Sanskrit, and she would have to abstract away from the fact that English, like other *Indo-European* languages historically descend from Indian languages like Sanskrit (thus the “Indo” in “Indo-European”). Yet this made-up hegemonic hierarchy placing English above Sanskrit is exactly what Macaulay and his colleagues achieved in India: they convinced many

Indians that English is the language necessary to educate the people there. This pattern of using language both for empire and for élite closure has been implemented by other colonial powers as well, including France, as in the case of Haiti that concerns us here.

2.3. The Geo-Politics and the Social-Class Dimensions of Francophonie in Haiti: French as a Tool for Global Hegemony and Local “Élite Closure”

Francophonie in Haiti offers one illuminating backdrop for understanding the geopolitical context of the importance of vernacular languages as powerful technologies for liberation against oppression, especially the sort of oppression that exerts itself through language and education, and that Dessalines and Gérin understood so well and tried so hard to combat, in the 1800s already.

Giscard d’Estaing, who was president of France from 1974 to 1982, explained the hegemonic function of Francophonie as follows:

“There is an interdependence between the economic power of a nation and the radiation of its culture. I mean, interdependence, advisedly. This means not only that the material presence of a nation opens the way to its intellectual presence, but also that this, in turn, thanks especially to *the vehicle of language, contributes to economic dynamism on world markets*. This is why the radiation of French culture in the world must be ceaselessly reinforced and extended. *This is why this linguistic and intellectual community one calls Francophonie must be considered an essential element in our political policy.*” (Gordon 1978: 56, emphasis added)

D’Estaing makes it clear that Francophonie is not a gift to, or a movement for helping, the Francophone or Francophile world. Instead, Francophonie is a powerful tool for France’s own economic and political supremacy even when it presents itself as a tool for development in the Global South.

Such domination through language plays out in Haiti in many ways—subtle and not so subtle. The idea of Haiti as a “dominated” country may sound surprising to some, especially when we remember that Haiti has been officially independent since 1804 after a glorious war of independence, not only from France, but also against Spain and Britain. Yet, as recently as October 31, 2014, we can hear President François Hollande of France and President Michel Martelly of Haiti make speeches that encapsulate the role of language and education as tools for France’s geo-political ambitions in Haiti. Martelly’s response to Hollande also illustrates the role often played by Haiti’s political leaders as well as its upper and middle classes as a neo-colonial *Comprador Bourgeoisie* whose interests and allegiances are, by and large, aligned with those of the former colonial power—for their mutual benefit and to the detriment of Haiti’s general population.

Let us analyze a key passage from Hollande’s speech on behalf of France’s “economic dynamism on world markets” through “the radiation of French culture in the world” (AFP 2014; translation and emphasis by the author):

“Francophonie [...] [is] a major link that the French language gives us with Haiti. We’re making sure that the high schools that are being built today in Haiti offers *the most teaching in French, by French teachers* when possible, otherwise by *Francophones*, because *we do not want the disappearance of the French language, which makes Haiti’s identity...*”

Not only is President Hollande asking that there be more teaching *in French* in Haiti, but he is also mandating, quite categorically, that teaching in French be best left in the hands of teachers *from France* or, if that is not possible, in the hands of “Francophones,” that is, non-French teachers who speak French. Given that there are Haitians and other non-French people throughout the world, including Canada and West Africa, who speak French fluently, it is clear that Hollande’s prioritizing teachers *from France* is, first and foremost, for France’s own economic and political benefits, with education being peddled as a precious export commodity to be sold and force-fed to Haitians for the benefit of France’s own “economic dynamism.”

France’s strategy to maintain a Francophile élite in Haiti is similar, though not identical, to Macaulay’s objective for the British in India to create “a class of persons, Indian in blood and colour, but English in taste, in opinions, in morals, and in intellect.” In Haiti, both Hollande and Martelly seem to value and promote a (mis)educated and alienated local élite, Haitian “in blood and colour,” but French “in taste, in opinions, in morals, and in intellect.” Such an élite would slavishly serve France’s and their own interests in Haiti while *pretending* to work for Haiti’s development. One other spectacular example of Francophilia in Haiti is late historian and president Leslie F. Manigat who believed that Kreyòl is a “limitation” and an “infirmity” and that it’s French culture that makes Haitians truly human—that is, “French in taste, feelings, lifestyle and basic personal preferences...” (see DeGraff & Stump 2018a: 122, n. 9).

Another curious claim by Hollande is that, though *it makes the “identity” of Haitians*, the French language is disappearing in Haiti. Anyone who is familiar with Haiti knows that most Haitians do not speak French whereas all Haitians speak Kreyòl. That much is recognized by France’s own ambassador to Haiti, Elizabeth Béton-Delègue, who correctly considers Kreyòl, not French, to be a “linguistic asset” for Haiti—though Béton-Delègue, like Hollande, still considers French to be indispensable as the primary language of instruction in Haiti (see my critique in DeGraff 2015a, 2015b). More generally, Hollande’s statement that it’s the French language that “makes Haiti’s identity” shows an utter disregard for Haiti’s history, culture, society and demographics. Hollande excludes from his considerations about Haitian “identity” the more than 9 million Haitians who speak Kreyòl only. In effect, one can interpret Hollande’s analysis as a claim that the vast majority of Haitians (i.e., those who speak Kreyòl only) have no identity of their own. Hollande thus makes explicit the brutally exclusive hegemonic force of Francophonie, which goes contrary to Haiti’s linguistic profile and its educational and socio-economic needs.

In a later speech (dated May 2015, this time in Haiti; see DeGraff 2015a) Hollande considers his plan for Haitian education as some sort of Marshall Plan to be used as France’s repayment of its “moral debt” to the Haitian people. Recall that, in 1825, France

imposed on Haiti, through gunboat diplomacy, a forced payment of 150 million gold francs for loss of “property” after Haiti became independent through military defeat of France’s Napoleonic army. This alleged “indemnity,” which even included the estimated monetary value of the enslaved people who had liberated themselves through war, has crippled Haiti’s economy. In order to pay this “indemnity” to France, the Haitian state had to take a series of high-interest loans, which it then had to repay through 1947 (Heinl, Heinl, & Heinl 1996; Farmer 2003; Dubois 2012; Alcenat 2017). Eventually, France took control of much of Haiti’s banking system in order to guarantee payment of this debt—a further blow to Haiti’s political and economic sovereignty (Dubois 2012; also see Piketty & Goldhammer 2020 who show that, with the imposition of such a hefty financial burden on Haiti’s finances so early in the country’s history, France condemned the young republic to long-term impoverishment and dependence from the get-go).

With these historical and socio-economic facts in mind, it is adding insult to injury when Haiti’s own President Martelly agreed with Hollande’s 2014 neo-colonial proposal of exporting French teachers to Haiti. Martelly exhorts such teachers to help educate the “new Haitian man that Haiti needs.” Worse yet, the teachers whom Hollande is offering to build Haiti’s future are ... *retired* teachers from France. This is education-as-export-commodity at its worst, to the extent that the commodity being exported is one with an expired shelf life. In this digital world, *French-speaking retired* teachers would certainly do little good to young *Kreyòl-speaking* Haitians wanting to enter a global economy that is so dependent on digital technology for information and communication. Such plan for France to repay its “moral debt” to Haiti is deeply amoral and grossly unfit (DeGraff 2015a).

In a way similar to Macaulay’s Eurocentric colonial plan for Indian education, Hollande’s neo-colonial strategy in Haiti appeals to the allegiances of Francophile Haitian intellectuals such as the then General Secretary of the Francophonie, Michaëlle Jean, who used to be Governor of Canada, and Dany Laferrière, who is now a member of the Académie Française. Such highly visible positions for Haitians in the Francophonie movement thus double as carrots both to the Haitian élite in search of recognition and prestige, and to the general population in search of education as a way out of poverty. In the geo-politics of Francophonie, prizes are given to a small subset of these relatively few Haitians who speak and write French beautifully; these prizes are strategically decided in order to ensure that “the radiation of French culture in the world [...] be ceaselessly reinforced and extended” (D’Estaing as cited in Gordon 1978).

With these divide-and-conquer methods, the Francophonie movement creates an illusion that the French language is indeed within reach of all Haitians—including those who will never be immersed in enough French language input to speak it with any amount of fluency. In January 2017, French universities started offering to Haitian students scholarships as repayment of France’s “moral debt” to Haiti—again with the collaboration of well-chosen Haitian politicians eager to help France’s fulfill its geo-political agenda while using the latter for their own political gains. It is ironic that French

deputy Mathieu Hanotin would claim to a broadly smiling Haitian politician (Député Jerry Tardieu) that scholarships in France, partly financed by the Haitian government, would work better for repaying France's debt to Haiti than giving a check to Haiti (Daudier 2016). Perhaps neither Hanotin nor Tardieu (nor Hollande, nor Martelly) remember that France illegally collected such checks from Haiti for decades in the 19th and 20th centuries. Given that France's extortion crippled Haiti's economy from the get go, it is hard to imagine how scholarships partly financed by Haiti's Central Bank could ever make up for this fatal blow that France inflicted on Haiti's development prospects.

As a Haitian imbued with, and proud of, my country's heroic history, I cannot help but wonder how such convenient forgetfulness (or, rather, *erasures* of history) would be interpreted by those ancestors of ours who spilled their blood fighting for Haiti's independence from France. In 1804, Jean-Jacques Dessalines, for one, did ask the new nation of Haiti to “swear to posterity, and to the entire universe, to renounce France forever, and to die rather to live free under its domination” (Dubois 2005). Dessalines, in his proclamation of independence, also warned us against France's well-tried divide-and-conquer strategies exploiting class- and race-based fault lines. These strategies were designed to weaken Haiti's defense against France's colonial ambitions. Recall that Dessalines considered Kreyòl our *lang a nou* (“our own language”) and that he preferred Kreyòl over French, except when communicating with the outside world. He was prescient in his concern that France would use the French language as an effective neo-colonial tool to dehumanize Kreyòl-speaking Haitians (Descourtiz 1809; Daut 2009; Jenson 2011), with Haitians being indoctrinated to consider French as the only valid marker of Haiti's identity (DeGraff 2015a). Dessalines also believed that political coalitions across social classes and racialized groups were necessary in order to make Haiti truly independent. In a Proclamation soon after Independence in 1804, he called such coalitions “*le secret d'être invincibles*” (‘the secret of invincibility’) (Dessalines [1804–1806] 2006).

Yet divide-and-conquer strategies in Haiti, accompanied with local élites' cultural and linguistic allegiances to France, still function as most powerful weapons of neo-colonial domination, maintaining intellectual chains in the mind of the oppressed, with the complicity of a *Comprador Bourgeoise* advancing their own political and socio-economic gains—to the seemingly eternal detriment of the oppressed majority. Indeed, even those Haitians who do not speak French and who need access to education in Kreyòl often internalize the belief that they deserve their low socio-economic status—a belief based on their (mistaken) conviction that it's their own fault that they have failed to learn French. French is thus perceived as superior to Haiti's national language and as an indispensable key to knowledge, riches, elegance, and happiness.

In a recent publicity on behalf of Francophonie, Dany Laferrière explains how he himself feels “elegant” when speaking French.⁴ In his letter of application to the Académie Française, Dany Laferrière falsely claimed that he created a bridge between French speakers in Haiti and Québec—10 million in Haiti and 10 million in Québec! In reality, there might not even be one million of French speakers in Haiti. Yet an article

⁴ <https://youtu.be/Rx2tW15i1Wk> (17 June, 2020).

dated December 13, 2013, in the French journal *Le Monde* lauds Laferrière’s factually problematic claim about French in Haiti as an “unassailable argument” for his entry in the Académie Française.⁵

Laferrière’s self-serving rewriting of Haiti’s history and society does not stop here. In his inaugural speech at the Académie Française on May 28, 2015, Laferrière made not one single reference to Haiti’s national language of Kreyòl while claiming, falsely, that our ancestors who fought for Haiti’s independence in the 18th century had nothing against the French language which they saw as the language that “often spoke of liberty” and which they kept for their new country (DeGraff 2015c). Though French was indeed used *de facto* as official language, one must recall that Dessalines, for one, was clearly in favor of Kreyòl as *lang a nou* “our own language” (Descourtilz 1809 v3: 245–246, 251). Dessalines did warn us against “the deceitful eloquence of [French] agents,” and he reminded us that “the French name still hangs [Haiti] in mourning” even when French was used as *lingua franca* for reaching out beyond Haiti’s borders (Jenson 2011). But Laferrière, like Martelly and Hollande, seems to have selective amnesia when it comes to key facts about Haiti’s history and language (DeGraff 2015c).

Dessalines’ warning was so right on target! It is through such “deceitful eloquence” that French hegemony still rules the day in Haiti. French has become Haiti’s linguistic “bluest eye” as in the title of Morrison 1979: children are trained, from kindergarten onward, to internalize the self-hating belief that their mother tongue and their local culture are lesser as compared to the French language and culture. This leads them to believe that, since they do not speak French, they themselves are not worthy of being treated as human beings. Shocking evidence of these mental chains are comments such as this one, once uttered by a monolingual Kreyòl speaker in Matènwa, La Gonâve, Haiti, asking me to accompany her and her child to hospital in Port-au-Prince so they would receive better care: “*Michel, ou byen konnen mwen pa pale franse. Ki fè mwen pa moun, non*” ... ‘Michel, you know I don’t speak French. So I am not human.’ In a related vein, high-level Haitian officials whose French is influenced by their native Kreyòl (a natural state of affairs for any second-language learner) are routinely derided by reporters and other observers who feel that these authorities should resign from their position since they do not speak perfect French.⁶

⁵ https://www.lemonde.fr/livres/article/2013/12/13/dany-laferriere-a-l-academie-francaise_4333745_3260.html (17 June, 2020).

<https://www.facebook.com/michel.degraff/posts/10157316771178872> (17 June, 2020).

⁶ One such example is Jacqueline Charles of the *Miami Herald* who in May 2016 called for the resignation of the then Minister of Education because the latter speaks the kind of French that is quite typical in Haiti—that is, with syntactic and phonological influence from the native Kreyòl. <https://twitter.com/MichelDeGraff/status/732724940496089089> (17 June, 2020).

As analyzed by Frantz Fanon (1952), this sort of hegemonic belief, whereby fluency in French is a measure of one's humanity and professional competence in a country where everyone speaks Kreyòl and where almost everyone speaks Kreyòl *only*, functions as a deeply embedded ideological component of "élite closure" (in the sense of Myers-Scotton 1993). The élite benefits from this hegemony because most of them speak French at home, which gives them a substantial head start, a "home advantage" in the academic and professional spheres. This "French privilege" in Haiti works, in many ways, like "white privilege" in a country like the U.S. In Haiti, French is used as the primary language of instruction, and students who are immersed in French at an early age, some as early as in their mothers' womb, are much more likely to succeed than children who are born and grow up in Kreyòl-only communities where there's no opportunity for any immersion in French. As it turns out, only 10% of students entering primary school complete high school (GTEF 2010). In some estimates, 10% is also the percentage of Haitians who speak (some) degree of French (Saint-Germain 1997). These similar percentages, with the likelihood of overlap between those who finish school and those who speak French, suggest that, through the preference for French as primary language of instruction and examination, the school system plays a major role in maintaining socio-economic inequalities (see Bourdieu [1980] 1990 for a comprehensive treatment of this structuring function of school systems).

From such a perspective, francophilia participate in anti-Cartesian "élite closure" and in the massive failure of the Haitian education system. This francophilia is "anti-Cartesian" because it contradicts one basic principle in education that has been well understood for centuries and that was so eloquently articulated by French philosopher René Descartes. Indeed, already in the 17th century, Descartes made it clear that "education for all" requires the systematic use of vernacular languages in lieu of languages spoken by small intellectual élites (Descartes [1637] 1966):

"... if I write in French, which is the language of my country, rather than Latin, which is that of my teachers, it is because I hope that those who use only their unalloyed natural reason will be better judges of my opinions than those who swear only by the books of the ancients. And as for those who combine good sense with application, whom alone I wish to have as my judges, I am sure they will not be so partial to Latin that they will refuse to grasp my arguments because I express them in the vernacular." (Descartes [1637] 1966)

In the modern era, Descartes's idea has become a truism among linguists, educators, and international organizations promoting education for all on a global scale (see e.g. publications ranging from UNESCO 1953 to UNESCO 2016). Yet speakers of vernacular languages all over the world are still falling behind, academically and socio-economically, due in large part to the fact that their native languages are still excluded in schools, with 40% of the world's population having to learn in a language that they do not speak at home (UNESCO 2016).

The Francophonie movement's promotion of French in Haiti goes against best practices in education, to the detriment of Kreyòl-only speakers. It goes against science, as it negates the importance of the native language as a tool for learning second languages

as well as other academic content. Instead, it advocates teaching in a language that impedes monolingual Kreyòl speakers' access to quality education at all levels. Such a practice inevitably induces massive and daily human-rights violations throughout the population, and it increases the gap between the élites and the poor in Haiti—a country that already suffers from one of the highest rates of inequity worldwide (DeGraff 2010, 2016a, 2016b, 2016c, 2017b, 2017c).

3. Linguistics: A “Hypocritical Nation?”

3.1. A Primer on “Creole Exceptionalism” as (Neo-)Colonial Linguistics

The marginalization of Creole languages has infected various levels of social organization and knowledge production, including academia. Félix Lambert-Prudent (1980) has called this practice the “*minoration linguistique*” (i.e., the linguistic ‘minoritization’ or lessening) of Creole languages. There is a certain convergence between, on the one hand, academic discourse by linguists, anthropologists, ethnographers, etc. about Creole speakers and their languages and, on the other hand, non-academic discourse by Creole speakers and their intellectual and political leaders about their *own* languages, especially about the role vs. the non-role of these languages in education and other venues where power is created and transmitted (e.g., government, courts, formal economy, written media). These types of discourses and the corresponding régimes of truth (in the sense of Foucault 1980) have entrenched deeply negative attitudes toward Creole languages. My writings (DeGraff 2001a, 2001b, 2003, 2004, 2005a, 2005b, 2014) have sketched an archaeology of knowledge about Creole languages, whereby these régimes of truth take their *raison d’être* from the European colonizers’ *mission civilisatrice*. The latter was designed to assert hegemonic control over enslaved populations and colonized territories while providing the European colonizers both with the labor needed for profit and with the much needed illusion that the Africans’ enslavement and other types of dehumanization projects could be made compatible with “universal” enlightenment values.

3.1.1. The Language-Race-Power Nexus

To summarize this nexus, one could use this famous quip from an American electoral campaign: “It’s the economy, stupid!” In effect, Creole Exceptionalism is rooted in the same socio-economic and psychological factors at the heart of the colonial slave-based plantation society that gave us the phrase “Rich as a Creole” to describe the wealth of the *European* Creoles who made so much money from slave labor in the Caribbean. These claims were essentially formulated to reinforce the prevailing belief that Creoles are lesser languages that have emerged for the expression of thoughts by lesser people with lesser intelligence and at a lesser degree of humanity—people who, in such tendentious analysis, *deserved* to be enslaved and whose sort could, then, be improved by contact with an intellectually higher race through colonization and slavery. This is indeed the self-serving

logic of Europe's *mission civilisatrice* in Africa and the Americas—for Europe's *economic* enrichment.

This hegemonic logic is, arguably, the basic impetus for Humboldt's ([1836] 1988) and many other philosophers' and linguists' belief that languages can be used to measure the "genius" of nations. In the colonial era of the 18th and 19th century, in order to reconcile his enlightened humanism with the practice of slavery in Europe's colonies, a philosopher would have had to convince himself and others that those enslaved Africans, whose labor Europe's wealth and prestige depended upon, were lesser humans who also spoke lesser languages. Whatever interlanguages these enslaved Africans would produce in the course of learning European languages, these new speech varieties, in the logic of European hegemony, would have to count as "imperfect" or "lesser" or "bastardized" or "corrupted" or "broken," etc., when compared to the corresponding "normal" European languages.

In the colonial era, many writers describing Creole languages (see DeGraff 2005a for an overview) explicitly alleged an intrinsic connection between language and race—especially between the posited inferior structural status of Creole languages and the posited inferior intellectual status of the enslaved Africans and their descendants who were taken as the main creators of Creole languages. This language-race connection was, not only "normal science" (in the sense of Kuhn 1970) in the colonial era (see, e.g., Schleicher [1863] 1869 and the extended critique in DeGraff 2001b), but it also provided a convenient apology for the enslavement of fellow humans deemed inferior, thus the widely held and unshakable belief that Creole languages are lesser languages spoken, by and large, by lesser humans—withstanding the fact that Europeans in the colonial Caribbean also spoke Creole languages and participated in their formation.

3.1.2. The "Normalcy" of Creole Languages Was (Is?) Unthinkable

Recall that the colonial belief in racial (and *then* linguistic) inferiority is one of the reasons that made the Haitian Revolution seem "unthinkable" (Trouillot 1995: 73) or, if *thinkable*, then "un-acceptable" (as analyzed by Ghachem 2012), even as the new Creole language, along with the Vodou religion, served to bond the multi-lingual and multi-ethnic enslaved Africans into the emerging nation that would eventually win its independence after a heroic war against French, Spanish and British armies. In Trouillot's (1995) analysis, parts of which are inspired by Foucault's notion of power/knowledge cycles (Foucault 1980), Europeans linked their justification for slavery to the alleged inferiority of the Africans in order to help guarantee, via the production of "knowledge" about the Africans, that the latter deserved their enslavement. Even though the Europeans long suspected that the enslaved would eventually revolt (Ghachem 2012), they were in for a major surprise when these so-called "inferior" Africans, not only revolted, but also managed to defeat a major European army under the command of Napoleon's brother-in-law.

The "surprise effect" of the Haitian Revolution has now been translated into one of the many "formulas of erasure" around the heroic birth of Haiti. The Haitian Revolution is still relatively unknown, even among academic circles in North America and Europe. In many of my classes and lectures, in the U.S. and in Europe, I am no longer surprised when I learn that most of my students and audiences have never heard of the Haitian Revolution

even though they are familiar with both the French and the American Revolutions. Yet it is the Haitian Revolution that actually managed to implement the much awaited promise of liberty for all, including the enslaved, whereas both the French and the U.S. revolutions *spoke* of “liberty, equality and fraternity” while holding entire populations in bondage within their borders and in their colonies. In effect, then, while the American and French revolutions, in 1776 and 1789 respectively, made hypocritical promises of liberty for all, it’s the Haitians in 1804 who realized that promise by liberating the enslaved in Saint-Domingue and creating a republic on the premise that all its citizens deserved equal opportunity. It’s from this perspective that we must understand the rationale whereby American and European scholars would develop “formulas of erasure” in order to remove the *true* revolution of Haiti outside of popular consciousness in the so called “enlightened” West where Haiti became an embarrassing counter-example to Europe’s claims of moral and intellectual superiority.

3.1.3. The Myth that Creoles Are “Born Again” Protolanguages that Are Destined to Decreolization and Are, Thus, Outside the Family of “Normal” Human Languages

When it comes to the description of Creole languages (or to *prescription* passing for description), somewhat similar “formulas of erasure” can be found in the 20th and 21st centuries under new theoretical clothing. Consider, for example, Derek Bickerton considering Creoles as “missing linguistic fossils” and as “the equivalent of the Galapagos to Darwin” (Begley 1982 reporting on Derek Bickerton). This hypothesis entails that, when I myself switch languages from French or English to Kreyòl, I automatically become a living fossil! Bickerton’s claim about Creole languages as linguistic fossils entails that Creole speakers’ cognition is of the utmost primitiveness, once we reasonably assume that the languages we speak are reflexes of our cognition. Yet this ridiculously erroneous and racist claim is quoted by respectable newspapers and magazines such as, for example, *Newsweek* (Begley 1982) and the *New York Times* (Dreifus 2001).

The claims and the attitudes described above have real-life consequences for Creole speakers. Consider the claim in Valdman (1978, 1992) that, because Creole languages are structurally deficient, they are destined to dissolve into the closest European language. This is “decreolization” to an extreme—namely, “decreolization” as the total *demise* of a Creole language.⁷ These claims assume that, structurally, Creole languages do not have enough expressive power to convey semantically complex content; therefore, if these languages are used for education or in government, they will have to “borrow” so much from “donor” languages that Creoles will eventually die out. There are no reliable methods in linguistics that can predict if or when a language will die. But it is a known

⁷ Valdman has, since, become aware of the empirical and theoretical fallacies in such claims (see, e.g., Valdman 2001).

fact that the creation or borrowing of new words is a rather banal strategy to expand the lexicon of a language as needed—that is, speakers create or borrow new words into their lexica as they entertain new concepts that need to be expressed through language. Consider, say, English neologisms in the domain of information technology: “fax,” “email,” “tweet,” “skype,” “zoom,” etc.

Traditionally, Creole languages are not included in language family trees in historical linguistics. Creoles vs. non-Creoles are classified as the outputs of distinct diachronic processes: Creoles, and only Creoles, are assumed to evolve from Pidgins, outside the “normal” family tree of human languages, whereas non-Creole languages are taken to generally descend from full-fledged languages and fit the family tree model (Thomason & Kaufman 1988). According to the classic definition of the “Pidgin-to-Creole Life Cycle,” a Pidgin, as a structurally very reduced language without any native speakers, becomes a Creole when it acquires native speakers. In other words, this hypothesis posits that the Creole emerges when children learn the ambient Pidgin as a first language.

According to this reasoning, the Pidgin status of the Creole’s immediate ancestor language places it at the lowest level of structural complexity. In addition, Bickerton (1990, 1998; also see Bickerton & Calvin 2000) has made popular the claim that the Pidgin-to-Creole cycle recapitulates the transition from our hominid ancestors’ protolanguage to *Homo sapiens*’ earliest language. In this view of Creoles as “linguistic fossils,” data from these languages are cast as an exceptional trove for insights into the earliest, most primitive languages in the human species. The idea that Creole languages have “started again” and are, thus, most reduced in structural complexity is found in the writings of linguists of different theoretical orientations. For example, it has been claimed tendentiously that “the world’s simplest grammars are Creole grammars” (McWhorter 2001) and that “of all Creoles none equals the complexity of a non-Creole language” (Dixon 2010).

In Bakker et al. (2011), it’s computational models from biology that are enlisted in order to “prove” that Creoles form a typologically unique group of languages. There are substantial critiques of both the methods and the data in Bakker et al. (2011) (see Aboh & DeGraff 2017 and references there). In a nutshell, it seems to me that all these claims about Creoles err from the start in their assumption that Creoles, by definition, *must* be exceptional languages. In the case of Bakker et al., it is this assumption of Creole Exceptionalism that may have led to the selection of features and languages in a biased way in order to “prove” the authors’ foregone conclusion that Creoles are typologically distinct among the world’s languages.

3.1.4. But, But, But... Doesn’t English Look More Like a “Creole” Than ... Haitian Creole—This “Most Creole of Creoles?”

In light of the usual assumptions about the “mixedness” (or “macaronicity”) of Creoles or their structural “discrepancies” when compared to potential ancestors, English itself could qualify as a Creole. Consider, for example, the lexicon. The mixedness of the English lexicon may well qualify as very “macaronic.” Indeed, it is well attested that more than half of the English lexicon comes from outside of Germanic, with many morphemes, including affixes, having non-Germanic (e.g., Latin or French) etymology (Dalton-Puffer

1996). In contrast, the Kreyòl lexicon, including affixes, comes by and large from French. In sum, if “Creole” makes any sense as a linguistic-structural diachronic term, then the English lexicon, being more macaronic than that of Haitian Creole, reveals a history that should qualify English as a “Creole” language that has “out-Creoled” Haitian Creole, even though the latter has been called the “most Creole of Creoles” (as in McWhorter 1998).

Related experiments in the syntax of Kreyòl and English also show that there’s no clear *structural* boundary between Creole formation (as in the history of Kreyòl) and language change (as in the history of English and French). Indeed, structural patterns in Creole formation (e.g., in the domain of verbal or pronoun syntax) find robust analogues in the history of non-Creoles (DeGraff 2005b). So far, no clear pan-Creole structural pattern of evolution has been presented that would isolate Creole languages, and only Creole languages, in an exceptional typological corner.

These considerations challenge the widely accepted premise that there’s a set of “Creole” developmental and structural traits that exclude all non-Creoles (see Thomason & Kaufman 1988 for a small sampling of the debate on the “Creole” status of English).

3.2. Uniformitarian Linguistics: Creole Languages as Perfectly “Normal” Languages

If the “gold standard” of the comparative method (see, e.g., Dunn et al. 2008)—namely the identification of cognates across possibly related languages—were applied to Creole languages, then Kreyòl would be straightforwardly classified as historically related to French and grouped into the Romance language family. In all the core domains of the Haitian Creole lexicon, most of the lexemes are derived from French: numbers, kinship terms, color terms, body part terms, markers for tense, mood, and aspect, prepositions, determiners, pronouns, complementizers, and so on. All linguistic evidence, including the regular sound-change correspondences across cognates, seems to indicate that Haitian Creole meets the “gold standard” of comparative linguistics. One could actually push the comparison even further by asking whether the comparison of cognates across French and Haitian Creole meets the “individual identifying threshold” (in Nichols’s 1996, 2003 terminology). In other words, are there enough idiosyncratic forms in Haitian Creole that take their etyma from French? Here too, the answer is positive: there are various idiosyncratic features of Haitian Creole (phonological, morphological, syntactic, semantic, etc.) that have their origins in French.

There is also West African Niger-Congo influence, which is to be expected in light of what we know about transfer in second language acquisition (see DeGraff 2002). There is a high degree of African influence in the Caribbean, and not only in language. Consider, e.g., the Vodou religion and its lexicon (Anglade 1998). Then again, analyses of the history of French and English have unearthed massive influence from languages outside their respective families (recall, say, that the English lexicon, for example, is 65% non-Germanic). However, linguists usually do not use such evidence to exclude English

from the Germanic family. If English is still considered a Germanic language in spite of massive non-Germanic (e.g., Romance) influence, then we should apply similar methodology to languages such as Haitian Creole, which show much less lexical influence from outside of Romance than English shows from outside Germanic. Therefore, we can comfortably entertain the African input into the formation of Haitian Creole while also accepting the evidence-based conclusion that Haitian Creole is phylogenetically related to French. The correspondences between Haitian Creole and French are very robust, arguably even more robust than the correspondences between English and Germanic—and more robust than the correspondences between French and Latin.

Therefore, regarding linguistic structure and history, there seems to be no fundamental difference between the history of a Creole language—in this case Haitian Creole—and that of a non-Creole language—such as English or French. Basically, when it comes to its development and grammar, a Creole language is a perfectly normal human language. Claims to the contrary seem to be rooted in the same racism that made the Haitian revolution unthinkable or unacceptable (see Meijer & Muysken 1977 for related comments).

Mufwene (2001) has extensively argued that Creole languages are on par with non-Creole languages in terms of historical development. He has used maps very effectively in order to show the parallels between the speciation of Latin into Romance languages in Europe as well as the speciation of French into the French-derived Creoles in Africa and the Caribbean. Both sets of diachronic developments instantiate speciation via language contact and variation. Mufwene shows that there is a deeply problematic double standard in linguists' treatments of the evolution of Creoles vs. non-Creoles. In my analysis, this double standard stems from the Foucaultian relationship, as analyzed above, between power and knowledge, both in the formation of Creole languages and in the emergence of Creole studies.

Now, one may disagree with the theoretical bases of any comparison that classifies Haitian Creole as a "(neo-)Romance" language and not as an "African" language. In fact, historical linguists (e.g., the contributors to Durie & Ross 2006) have duly questioned the theoretical and epistemological bases of the Comparative Method in historical linguistics. But such theoretical disquisition is not the point of my argument. Even as I reflect on Audrey Lorde's (2007) dictum that "the master's tools will never dismantle the master's house," my argument is that we should treat Creoles as we do other languages—no matter what theoretical tools we adopt, and if the theoretical tools turn Creole languages into empirical freaks, then we should reject these tools as they implement a "master's house" that violates the humanity of Creole speakers.

Be that as it may, I would like to invite scholars to be truly "enlightened" in their analyses and to be consistent with any "universalism" in their theoretical approach. In this particular case, if you believe that you can classify languages using the family tree model, then you should not be changing your methods and criteria when you approach Creole languages; rather, you should use the very same criteria in your analyses of Creole's phylogeny as you do in your analysis of other languages.

From a uniformitarian perspective, there seems to be no valid reason why one kind of language contact would lead to “genetic” and “normal” languages, as in the history of English or French, while a similar kind of contact would lead to “non-genetic” and “abnormal” languages (in the terminology of Thomason & Kaufmann 1988).

4. The Nefarious Impact of Neo-Colonial Linguistics

After discussing two broad theoretical issues—power-knowledge relationships through history, and the role that linguists have played in maintaining these hierarchies that have been created through these power-knowledge relationships—the next step is to look at the impact of these hierarchies on the ground level, namely on the lives of Creole speakers.

My particular focus is Haiti’s education (or *mis*-education) system. These hierarchies have had extraordinarily negative effects in the daily lives of Kreyòl speakers in terms of opportunities (or lack thereof) to enhance socio-economic status, culture, identity, mental health, and basic human rights.

As for schools in Haiti, the key fact is that these institutions uphold a robust language barrier through their use of French as the primary language of instruction and examination, when all Haitians speak Haitian Creole, with a vast majority being monolingual Kreyòl speakers. This language barrier in education brings about a fundamental flaw in pedagogy: in a school system that insists on French as the primary language of instruction, teachers who do not speak French fluently often have no other choice but to teach through rote-learning and note-taking methods whose main goal is to prepare students for exams where answers are recited by heart, with little, if any, comprehension. Most often, the materials being memorized bear little relevance to the students’ everyday reality. Worse yet, course materials, along with the language and method of their delivery, often do violence to the students’ identity and culture (see Dejean 2006; Gourgues 2016; Jean-Pierre 2016). Recently, in the context of the COVID-19 pandemic, the Ministry of National Education launched a digital platform that recycles online materials mostly from outside of Haiti and mostly in French, including videos by French-speaking children speaking of the Corona Virus in a social context totally alien to most Haitian kids.⁸

4.1. Linguistic Violence from Kindergarten Onward

This sort of violence can be illustrated with an example from a literacy class in a kindergarten in La Gonâve where children are being introduced to the French names for various objects. As the teacher asks the children to repeat the French nouns, she notices that they use unrounded vowels where French uses rounded vowels. For example, the Kreyòl-speaking children in that kindergarten class, like most everywhere else in Haiti,

⁸ <http://pratic.menfp.gouv.ht/> https://youtu.be/_KbpL5tVgoE (17 June, 2020).

say /ble/ ‘blue,’ whereas French-speaking children would say /blø/. As is usually the case in most varieties of Kreyòl, the children use syllables with no final /r/ where the syllables in the corresponding French cognates would have a final /r/. Combining these two regular French-to-Kreyòl sound changes together, we get /kule/ instead of /kulœr/ for ‘color’ (which is written *couleur* in French and *koulè* in Kreyòl). This contrast instantiates a well-known set of phonological differences between Kreyòl and French (Cadely 2003). In French there are rounded vowels (/ø/, /œ/ and /y/) while in Haitian Creole the vowels in the relevant cognate words are unrounded (/e/, /ɛ/ and /i/, respectively). These unrounded vowels in Kreyòl are a clear shibboleth for determining whether or not the speaker knows French well. Such shibboleths double as brutal social class markers (see Schieffelin & Doucet 1994) while they give rise to endless hostile jokes against monolingual Kreyòl speakers who, through linguistically insecure hypercorrections, overuse the rounded vowels (i.e., they pronounce rounded vowels in position where the French cognates would use the corresponding unrounded vowels).

Interestingly, but unsurprisingly given the social history of Kreyòl, the kindergarten teacher treats the unrounded vowels and the absence of coda-final /r/ as “mistakes” to be corrected at all costs. These unrounded vowels in the children’s speech trigger what looks like expressions of disgust on the teacher’s face, and she makes no reference to the fact that these are instances of normal language transfer among Kreyòl-speaking second language learners of French. Ironically, the teacher herself seems not perfectly fluent in French. She produces noun phrases without determiners in contexts where French would require the use of a determiner, e.g., omitting the definite article *le* in her utterance *plastique est bleu* ‘the plastic material is blue’ (the correct sentence is *le plastique est bleu* with the article *le* obligatorily preceding *plastique*). She makes such “mistakes” even as she tries, quite unsuccessfully, to correct the children’s pronunciation, asking them to produce rounded vowels and syllable-final /r/ where the children produced unrounded vowels in /r/-less syllables.

As the teacher keeps correcting the children’s pronunciation during several minutes of rote-learning exercises, her apparent goal is to have the children replace their Kreyòl unrounded vowels with the French rounded vowels. There is no acknowledgement that the children have their own native language, namely Kreyòl, where both unrounded vowels and absence of syllable-final /r/ are the norm. Yet the teacher could have explained that it’s perfectly normal for the children, as speakers of Kreyòl, to say /kule/ whereas speakers of French say /kulœr/. The teacher could have also pointed out that in Kreyòl it is perfectly normal for the children to say /ble/, but as they learn to speak French, they could try to say /blø/—though we could also imagine that, in an ideal world where multiple linguistic varieties can coexist peacefully, /ble/ instead of /blø/ would be an acceptable variant in Haitian French, devoid of any stigma. Such explanations would help the children to *not* consider their native Kreyòl as “imperfect” or “corrupted” French. In this ideal world far from the brutal anti-Kreyòl prejudices of Francophilia, the teacher would help her students realize that the two languages are systematically different, then the students would learn how to make certain linguistic substitutions (in phonology, syntax, semantics, etc.) when switching from one language to the other. This method would be pedagogically more sound, and it would also be more respectful of the children’s

home language and of their Haitian identity (see relevant insights in Pinnock & Vijayakumar 2009).

Instead, the children are being indoctrinated into an alienating belief that their native Kreyòl is a “broken” version of French, a variety that must be “fixed” at all costs in order for them to become “educated” and fully “human.” In interviews with me, some of these children readily told me they spoke “French.” In fact, they know very little, if any, French. But they grow up with the idea that their native Kreyòl is an incorrect approximation of French that schoolteachers will help them correct. Now imagine the profoundly debilitating damage this sort of teaching has been doing to the identity and wellbeing of Haitian children, generations after generations.

4.2. Mis-Education in French

Another example of mis-education is from a quiz in 3rd-grade biology, also in a school in La Gonâve. The quiz has a multiple-choice question about trees. The three options (a, b and c) ask whether trees are: (a) “living beings” (*êtres vivants*); (b) non-living beings (*êtres non vivant* [sic] with a spelling mistake: a missing “s” for the plural adjectives *non-vivants* to accord with the plural noun *êtres*); or (c) being that “*passess* [sic]” feet (*passédant des pieds*). The (c) option contains a word that is misspelled. Indeed, *passédant* is not a French word with the relevant meaning in this context; the correct form with the appropriate meaning would be *possédant* (meaning ‘owning’).

When asked about the meaning of *passédant*, the teacher repeated incredulously “*passédant, passédant*” without providing any explanation. The question “Are trees beings that own feet?” itself may seem out of place, but there is a rationale for it based on the logic of Kreyòl morphosyntax and semantics for the word ‘tree’ and its derivatives. We come back to this rationale below.

Despite the fact that the children in question live in rural areas, surrounded by trees, one of the children replied (b), namely that the trees are *êtres non-vivants* (i.e., non-living beings). I asked him in Kreyòl whether or not trees live, but I used the Kreyòl verb *viv* ‘to live’ instead of the adjective *vivan* which was used in the quiz. The pupil replied without missing a beat: “Of course, trees live.” Then I asked him, also in Kreyòl: “But if the trees do live, how come they are not *vivant*?” and he said, “*Non, non, non, yo pa vivan. Men, y ap viv*” ‘No, they are not [*vivan*], but they live.’ At that moment, the reason for the misunderstanding became clear: the source of the pupil’s reasoning lies in that the Kreyòl word *vivan* is often used in the phrase *kretyen vivan* ‘human beings’ with reference to a being that is *human*, and one of the meanings of *vivan* is “human being.” In the pupil’s Kreyòl, (b) is the correct answer because he is interpreting the French text of the quiz through the lexical semantics of his native Kreyòl.

The teacher as well, perhaps unwittingly, used his native Kreyòl in the design of the quiz when he asked the question whether trees “own feet.” Kreyòl words for trees often use a morpheme that also means “feet.” For example, a tree is a *pye bwa* ‘foot wood’ (lit.), and an orange tree is a *pye zoranj* ‘foot orange’ (lit.).

In effect, both teachers and students are using their native Kreyòl to, respectively, create and interpret school materials in French. In both cases they are missing the mark vis-à-vis French. It is, among other things, such recurrent and recursive mis-interpretation of French on the part of Kreyòl speakers that turns French into a barrier to both teaching and learning. In Haiti, such barriers are ubiquitous among teachers and students who live in communities where only Kreyòl is spoken on any regular basis and where students are taught *in* French (or some approximation thereof) even though they are barely, if at all, taught French.

The focus here is on the school system, but the use of French as a barrier is also a socio-linguistic characteristic of other social sectors in Haiti where power and knowledge are created and transmitted. Another such case in point is the government and the courts. There too Haitians' human rights are violated on a daily basis. For example, courts routinely discriminate against Kreyòl speakers as court proceedings, decrees and jurisprudence are typically in French, judges and lawyers usually speak French while most of the accused speak Kreyòl only.

Basically, the use of French from schools to administration, courts, etc., amounts to a daily violation of Haitians' human rights, it blocks access to quality education, and it preempts sustainable development. These language-related processes of impoverishment are rooted in a colonial history of oppression and exclusion, a history that, to this day, continues to exclude the use of Kreyòl in education and administration, thus blocking the majority of the population from gaining access to quality education and to the full enjoyment of their rights.

5. Moving Forward and Onward with Kreyòl as Technology for Broadening Access to Quality Education

In this section of the article, two distinct but related efforts to train teachers are analyzed, related to one area where systemic, transformative and sustainable change can be made in Haiti through language and education. One is at the primary- and secondary-school level (at the Lekòl Kominotè Matènwa in La Gônave), and the other is at the university level (with the MIT-Haiti Initiative).

5.1. Some Historical Context

Before delving into the details of these teacher-training projects, let us sketch a broader envelope of structural changes happening at the national level.

Figure 1 (PNUD 2014: 31) shows that there is an encouraging upward curve for school enrollment in Haiti. However, in addition to increased "access," there is also the need to ensure the "quality" of what's being accessed. If the children are being mis-educated, the increase in enrollment may not necessarily translate into an increase in capacity building. With increased enrollment, it is perhaps even more important to make sure that the children who do go to school can benefit from an education that is adapted to their profiles and their needs, and that does not alienate them from their culture.

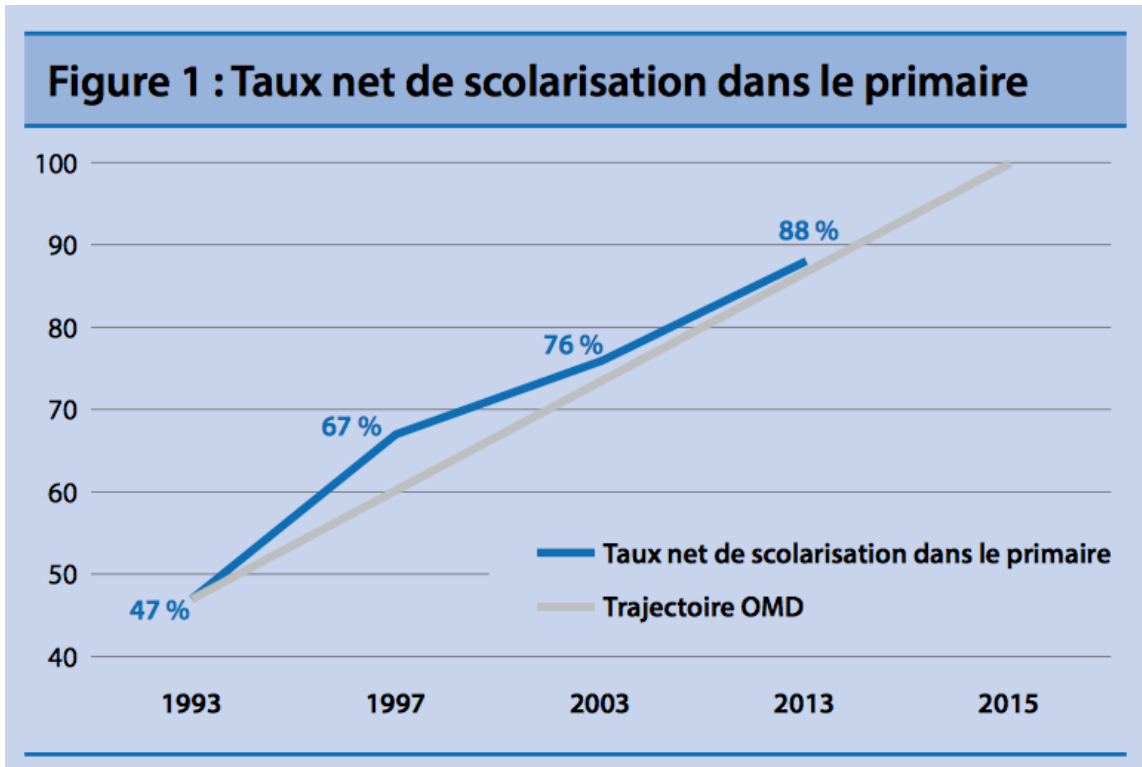


Figure 1. *Primary school enrollment rate in Haiti*

Other positive national efforts include campaigns for adult literacy, generally carried out in Kreyòl. One jingle that accompanied one of the recent adult literacy campaigns describes literacy as the sun that will ensure the growth of self-awareness, freedom, and democracy in Haiti. The notion that language and literacy should serve as foundations for knowledge and liberty is also one that runs through the work of the *Akademi Kreyòl Ayisyen* (Haitian Creole Academy), a constitutionally-mandated and autonomous state institution whose goal is to promote the use of Kreyòl in society, including the school system.⁹

All these national efforts point to the general awareness of a need for systemic change vis-à-vis the use of Kreyòl in education and in society at large. The projects described in this section are part of this systemic change, as we aim to move teachers and students towards an inclusive academic culture where quality education is accessible, in principle, to all Haitians—without the sort of language barrier that polices the border between social classes in Haiti and that has blocked socio-economic development since independence in 1804.

⁹ Though I am a founding member of *Akademi Kreyòl Ayisyen*, I have been at odds with the leadership of that institution after my having to publicly denounce what I perceived to be potential sources of corruption and dysfunction (DeGraff 2018).

The foundations of our own efforts in the MIT-Haiti Initiative can be summarized by an image that is very popular in Haiti, one that is frequently sighted in the Haitian country side: a cauldron that is propped up by three rocks on the ground, with wood pieces burning in the middle of the three rocks. These rocks are called the *trwa wòch dife* ‘three rocks of fire,’ and they provide the support that is needed for the cauldron to remain securely stable as nutritious food is being cooked in it, food that will feed the families in the *lakou*—the communal courtyard.

Our project relies on three provably strong “rocks of fire” for improving access to quality education through pedagogy based on active learning that is enhanced both by technology and by the students’ mother tongue. Indeed, the first rock stands for active learning where the children are not just sitting and repeating, but rather are deeply and actively engaged in building their own knowledge through hands-on and collaborative experimentation. The second rock stands for the sort of technology that facilitates and enhances active-learning pedagogy. This technology component is particularly important in light of the fact that laboratories are so hard to come by in Haiti. Educational software developed at MIT and elsewhere can simulate laboratories for STEM fields. Even smart phones can be used to run software for simulations of experiments in physics, chemistry, biology, math, etc. These tools can be adapted for Haiti in Kreyòl. The concept of “technology” also includes inexpensive teaching aids (“manipulatives”) that are easy to come by in Haiti and that can double as toys: objects such as marble, kites, rubber bands, water, plans, etc.—all of which can be enlisted for active learning of STEM disciplines. The third rock of fire stands for the Kreyòl language as the mother tongue of all Haitian children—most of whom speak Kreyòl only. Perhaps we should think of Kreyòl, not as a rock, but as the *ground* on which everything else rests—without the use of Kreyòl, no part of the project would be accessible to the whole population.

5.2. Lekòl Kominotè Matènwa (LKM): Innovative and Successful Education through Kreyòl

The first case study is from a research project I conducted at a school in La Gonâve, Haiti, Lekòl Kominotè Matènwa (“LKM”). This project was funded by the U.S. National Science Foundation in order to evaluate the use of Kreyòl in the teaching of literacy and mathematics.

The children in the school were among the happiest readers I had observed anywhere. In Haiti, it is common to hear children who, as they read their lessons, cut sentences randomly in the middle, or even mid-word, memorizing chunks of sounds in a sing-song mode. This means that they are not at all understanding what they are reading: they are just memorizing texts in order to regurgitate them, with little or no comprehension, at recitation or examination time. Yet at LKM, the children I observed were, not only understanding what they were reading, but also enjoying the whole process.

In a 2010 study commissioned by the World Bank and USAid, nearly half of the third graders in the study could not read one single word. More generally, agencies such as the World Bank and USAid have been spending millions of dollars on education projects whose results are often dismal. The World Bank itself was aware that their financial support of some of the schools in the study was not improving reading scores. Our project

aimed to assess reading fluency at LKM in order to evaluate the impact of the use of Kreyòl in the teaching of literacy.

Our first measurement of the LKM children showed that third graders were reading an average of sixty words a minute, as compared to third graders in the World Bank study with an average of less than 23 words a minute. The method in use at LKM, now known as *Liv nan Lang Manman* ‘Mother Tongue Books,’ is straightforward. It is based on books that the children themselves write in Kreyòl with the help of teachers. The children gather, on a weekly basis, in meetings that they call *grann wonn* ‘big circles’ (lit.) where parents and the larger community come together to enjoy stories being read by the children (see online video, DeGraff 2016d). It is a joyful community-building event because the children write stories about their everyday lives, stories that are familiar to the whole community: donkey rides, running after dogs, walks through scary cemeteries, fear of going to cockroach-infested latrines at night etc. These are all fresh stories about the children’s life experiences, and the children take much pride in reading their books to the community.¹⁰

The Mother Tongue Books (MTB) model has spread, since 2011, from LKM to other schools nearby. In a benchmark that was established in 2011 with the Early Grade Reading Assessment (EGRA) tool (DeGraff 2017c), we were able to determine how poorly non-LKM pupils fared vis-à-vis their LKM counterparts in terms of reading fluency. The former consistently read much more poorly than the latter, as measured along various parameters, including knowledge of letter names, phoneme segmentation, knowledge of letter-sound correspondences, and familiar word identification. Then, after one year of using the MTB method, the non-LKM children substantially caught up with the LKM children, thanks to the use of the children’s native Kreyòl in participative methods for literacy.

In the mathematics-related part of the project, we developed and evaluated a suite of Kreyòl-based educational tools for active learning of mathematics. As with the teaching of literacy, the use of Kreyòl made learning joyful, and it deepened the children’s interest in mathematics. Such interest was also expressed through song and dance (see online video, DeGraff 2011).

At the end of the pilot we interviewed the children about their feelings about the project, especially regarding language. We asked them how they felt about using Kreyòl for the first time while learning mathematics with computer games. Most of them were positive about the use of Kreyòl, and they were explicitly enthusiastic about the fact that the use of Kreyòl helped them learn faster and better. Yet there was a small percentage of children who said they would have preferred French. The main reason they gave is that they so wanted to learn French that they would have preferred an interface in French for the computer games.

¹⁰ See AJ+ (2017) for a video summarizing the rationale, methods, and intermediate results of the projects.

As it turns out, the children who stated a preference for French were also the ones who were doing the most poorly in mathematics and who most needed a better understanding of mathematical concepts. But from their perspective, it was more important for them to learn French than to learn mathematics. In effect, their stated preference was for the language (French) that would have made the concepts even less accessible to them. Such an apparently irrational preference might actually make sense as a consequence of the high premium that these children's families and communities put on learning French. This hunch is confirmed by studies such as Jean-Charles (1987) that have documented an overall preference for French among both parents and teachers in Haiti though there are substantial percentages that also advocate for the use of both French and Kreyòl, especially in primary school. Jean-Charles also found that parents were the group most resistant to the use of Kreyòl in the classroom, and they were especially resistant to the use of rural varieties of Kreyòl that are negatively stereotyped as low-class speech. As it turns out, these rural varieties are the varieties most spoken in Haiti, given that Haiti is mostly rural. One may thus surmise that the preference for French over Kreyòl on the part of some of the children in my pilot study reflects societal class-related pressures that affect the children's outlook as well as their self-confidence. This data point from Jean-Charles' study should also make us worry about these children's future. Indeed, their preference for French, which they are not all fluent in, over Kreyòl, which they speak natively, has the potential to negatively affect the formation of their identity, their mental health, and their human rights.

An old argument maintains that teaching in Kreyòl will isolate Haiti because Kreyòl is not considered an "international" language. In a similar vein, Kreyòl is often viewed as an obstacle to learning French. Comparable attitudes are found in other Creole-speaking communities where the children's native Creole language is considered a handicap to learning a European language (Migge, Léglise, & Bartens 2010). In fact, it is well documented that children's mastery of literacy in the native language gives them the foundation to learn, not only mathematics and science, but also second languages (Pinnock & Vijayakumar 2009). This is especially the case for children who grow up in largely monolingual communities such as Haiti. In such cases, the exclusion of the vernacular language of the community is the very factor that will eventually "isolate" these children as they will end up with poor reading skills and eventually be unable to become proficient learners of science, mathematics, second languages, etc. Therefore, the current practice in Haiti creates generations after generations of children who are being academically and psychologically handicapped from the first grade onward. Such handicap seems a much greater cause of "isolation" than the use of Haitian children's mother tongue. The latter, if anything, will help them build the foundations that are necessary for acquiring the skills to access and build knowledge, either locally or globally.

The science of reading tells us why the mother tongue is so crucial for the very foundations of learning. One key aspect of learning how to read involves making a triangular connection between sounds, meaning and letters (Dehaene et al. 2011). The sounds and meanings are represented in the reader's mind, while letters are symbols on the page being read. This triangular connection is most robust when all three layers of linguistic representations (phonemes, semantics and graphemes) belong to the same

language. But in the case of most Haitian children who are learning to read, the words on the page are in French (i.e., the graphemes are in the French orthography), but what they have in their minds are meanings and phonemes in Kreyòl. With such a “broken” triangle, the learners will resort to connecting letters exclusively to sounds, without any robust connection with the semantics. This is how most instances of “reading” in Haiti becomes a parrot-like “sounding out” of letters without any deep understanding of what is being “read.” And this is how most Haitian children never achieve reading fluency, as confirmed by the data collected by USAid, the World Bank, and other agencies (see, e.g., Messaoud-Galusi & Miksic 2010).

In solving this predicament, we can enlist, among other things, songs that enhance children’s literacy learning. In one such project, a team of Haitian scholars, musicians, and activists that I am happily part of (Louis-Charles, Telfort, & DeGraff 2015) has created two alphabet songs for Kreyòl. These songs teach the basics of the Kreyòl orthography. One song introduces the basic graphemes of the Kreyòl alphabet, and another introduces the fundamental principles of the orthography (DeGraff 2017a).

For the majority of children in Haiti (i.e., those who live in Kreyòl-only communities) French is best taught as a *second* language. All languages—be it Kreyòl, French, Spanish, English, etc.—are sources of knowledge that can be useful to students; French, too, can be an additional and very helpful linguistic and intellectual asset, but one that, as a second language, should be learned after initial mastery of literacy in the native Kreyòl. It is also important that the use and the teaching of second languages such as French in Haiti do not violate children’s rights, their emotional well-being, or their sense of identity as Kreyòl speakers. The fundamental point here is that we need to systematically and intelligently use children’s native languages as a robust foundation toward academic success in all fields, including the learning of second languages.

5.3. Three Rocks of Fire for Advanced STEM Education: Native Language, Participative Pedagogy, Technology for Active Learning

Moving from efforts at LKM to efforts at the high-school and university levels, the same three factors (the *twa wòch dife*) are, again, at the heart of our efforts to improve STEM education in Haiti and beyond.

Why STEM? There are at least three reasons. The most immediate is that the Initiative was launched at MIT, a world leader in STEM fields. Another reason concerns Haiti’s sustainable development: nowadays, STEM education seems indispensable for any country to flourish in the global economy of the 21st century. The final reason has to do with my own “anti-Exceptionalist” research in linguistics, namely the theoretical and empirical findings that disprove the erroneous hypothesis that Creole languages, because of an alleged history of development from putative Pidgins, cannot express abstract or complex concepts (see e.g. Valdman 1978, 1992; Seuren 1998). The MIT-Haiti Initiative shows that, not only can Kreyòl express abstract and complex STEM concepts, but Kreyòl also helps improve teaching and learning in Haiti. The MIT-Haiti Initiative is thus a proof of

concept against the age-old dogma that Creole languages are somehow abnormal or deficient, either developmentally, structurally or expressively.

In Haiti, active learning happens most effectively in Kreyòl. Our data about active learning via Kreyòl-based and technologically-enhanced educational resources constitute a game changer. In one of our post-workshop surveys, a teacher reported that when he teaches his STEM class using software tools in Kreyòl, the children get so excited that the class sometimes becomes too noisy and rowdy. To quiet down the children, what does he do? He switches from speaking Kreyòl to speaking... French! This anecdote confirms that, for most Haitian students, there cannot be any active learning when the language of instruction is French. The overdue creation of a Haitian school system where all children nationwide will be able to learn deeply requires the adoption of Kreyòl as the main language of instruction.

The best news for the MIT-Haiti Initiative's long-term sustainability is that Haitian faculty have shown encouraging changes in attitude regarding the three pillars at the bases of our Initiative: Kreyòl as language of instruction, participative pedagogy, and educational technology (DeGraff & Stump 2018a, 2018b). Better yet, there are now Haitian faculty leading local efforts based on the *twà wòch dife* model of the MIT-Haiti Initiative. They are helping to promote Kreyòl and technology in support of interactive pedagogy for STEM in various institutions—ranging from the most prestigious schools in Port-au-Prince (such as the Institution Sainte Rose de Lima) to schools in remote rural areas (such as Lekòl Kominotè Matènwa in La Gonâve).

Another milestone was reached in July 2015 when Haiti's Ministry of National Education and Vocational Training (MENFP) and the Haitian Creole Academy (AKA) signed an agreement in order to collaborate on the promotion of Kreyòl as the language of instruction at all levels of the school system. To date, this agreement has remained a promise awaiting to be executed—since most of the Ministry of Education's communications and materials, including a digital platform launched in April 2020, are published in French only! Yet this MENFP-AKA agreement still provides a blueprint that can be helpful if/when the Ministry finds a leadership that can, at long last, sever its neo-colonial ties with the French language and truly appreciates and exploits the national language (Kreyòl) for universal access to quality education.

Meanwhile, toward institutional capacity building and sustainability, the MIT-Haiti Initiative has pursued its efforts to create or deepen partnerships with faculty all over Haiti. One such attempt has involved one of the newest campuses of Haiti's State University: the Campus Henry Christophe, Limonade, in the northern part of the country (see Miller 2016, 2019 for further details).

The most recent advance in the MIT-Haiti Initiative has been the launching in September 2019 of a digital platform (<http://MIT-Ayiti.NET>) for the crowdsourcing, co-creation and curating of educational materials in Kreyòl in all disciplines and at all levels. This new development is due to repeated demands from Haitian faculty that we expand our reach from highschool- and university-level STEM to all disciplines at all levels. This platform is bringing together Kreyòl-speaking educators, in Haiti and in the Haitian diaspora, and MIT-Haiti Initiative team members. Together we are co-creating, curating and sharing lesson plans and other materials in Kreyòl. These materials are openly shared

through a Creative Commons license so that all in Haiti (and elsewhere) can freely download and distribute for classroom use. Thus far, this platform has been productive beyond expectations. It has brought to a large public previously unknown networks of Haitian faculty who were already producing Kreyòl materials in siloes. Now they have the opportunity to contribute their resources on a platform that can, in principle, serve the entire country and beyond. Another added value is that a few contributors to the platform are learning, by doing, to write active-learning lesson plans in Kreyòl while improving their writing skills in the language. This is some of the best sort of “active learning” that we could have dreamt of when we first came up with the project.

So now we’re seeing more and more faculty in Haiti and in the Haitian diaspora produce high-quality materials in Kreyòl in various technical fields, and proudly share them via the MIT-Haiti Platform. We’re also seeing Haitian faculty who have participated in our MIT-Haiti workshops share materials in Kreyòl on social media. Even better still, some of the faculty who have participated in our Initiative are now producing their own content on their own websites.

More generally, and this is the most encouraging news of all, our work at the Initiative MIT-Haiti, including Platfòm MIT-Ayiti at <http://MIT-Ayiti.NET>, has become part of a much larger ecosystem of organizations, both in Haiti and in the Haitian diaspora, that are producing a wide variety of digital and hardcopy materials in Kreyòl. These organizations are mostly led by young (or young at heart!) and media-savvy Haitians who deeply understand the importance of Kreyòl as foundation of knowledge, liberty, development and social justice in Haiti. I trust that it's this new generation of Haitians and their allies who will bring along the country's leadership and its society toward the realization of Jean-Dessalines' dream of liberty and equality for all.

6. Challenges and Opportunities Ahead: Mens et Manus et Mundus et Linguae et Cor

On the linguistic front, there was one apparent challenge, which quickly turned into an opportunity for the MIT-Haiti Initiative and similar projects engaged in the production of high-level STEM material in Kreyòl, namely the elaboration of a new lexicon for STEM in Kreyòl. Because of the exclusion of local vernacular languages in education worldwide (to the detriment of some 40% of the globe’s population!), it is often the case that scientific and technical concepts have not been expressed in these vernaculars. Any solution to this challenge requires, first and foremost, political will, as in the case of, say, Descartes, in the 17th century, deciding to write his *Discours sur la méthode* in his French vernacular, instead of Latin. Once the will is there and once the language is put to use in a wide and diverse range of academic contexts, lexical expansion will naturally follow with the help of scientists, linguists and teachers—especially those who are fluent and creative in the corresponding local language. As it turns out, the creation of a new lexicon for STEM fields in Kreyòl has been an exciting project, especially as we have been able to constructively enlist Haitian teachers’ own linguistic creativity in coining new Kreyòl terms for various technical concepts—alongside incorporating French or English

cognates into Kreyòl, as needed. These new resources, in the format of digital glossaries, have now been shared with Google Translate (Dizikes 2017). This collaboration will eventually improve online automatic translation from and into Kreyòl, especially for technical and scientific texts.

It is a major challenge to create a new culture of learning that goes beyond rote-learning and promotes problem solving and creativity. This new culture of deep learning depends on the support of the public and private sectors as well as parents, educators, leaders, activists, artists, etc. It is especially important to organize consciousness-raising campaign in order to reach parents and other stakeholders, many of whom have been brainwashed into the belief that Kreyòl is not a language worth using in school, and that it is necessary to speak French in order to be “educated.” These stakeholders need to be convinced that the best way for children to learn anything worth learning (including French) is through their native Kreyòl.

A much larger challenge and opportunity to consider is the fact that Haiti is only one of many communities, mostly in the Global South, where children’s intellectual growth and opportunities for socio-economic advancement are being blocked at the onset due to neo-colonial language barriers. The MIT-Haiti Initiative provides a model whereby scientists, engineers, and humanists in both the Global North and the Global South can collaborate, in mutually respectful and enriching ways, to solve global challenges to human rights, as they relate to language, education, and equal opportunity.

The good news is that there are successful models, at the level of entire nations, that already show the viability of educational systems based on children’s home languages, even when these are not “international” languages—and many such languages are spoken by populations that are much more local and smaller than that of Kreyòl. The latter, incidentally, counts more speakers in the Americas than French (Mathieu 2005). Consider, say, countries such as Finland, Norway, Sweden, Thailand, Korea, and Japan that do make systematic use of their respective local languages in schools and universities. In Finland and Norway, for example, Finnish and Norwegian are used as languages of instruction all the way up to university, with other languages functioning as second languages. Similarly, Kreyòl in Haiti should be used as language of instruction from kindergarten to university. Students could learn French, English, or Spanish as second languages.

Fortunately, this movement to promote local languages as primary languages of instruction, though it is struggling in many parts of the world, is spreading nonetheless. Cheikh Anta Diop in Senegal, many years ago (in the 1970s already), showed that local vernaculars such as Wolof can be used to write about and teach physics. His proof of concept consisted of a translation into Wolof of Einstein’s Relativity Theory, demonstrating that African languages could, and should, be used for science and mathematics. Recently, Ghana announced plans to use local Ghanaian languages as languages of instruction.

All these societies, from Haiti to Ghana via Finland, can be analyzed as undergoing the language-ideology transformation that France underwent in the 17th century under the intellectual leadership of Descartes, among others—as discussed above. When Descartes first published his *Discours sur la méthode* in 1637, French was at roughly the same

sociolinguistic predicament that Haitian Creole was in the 1970s: there was no scientific literature in French because scientists back then were writing in Greek and Latin. Descartes decided that he wanted his compatriots, speakers of vernacular French, to understand philosophy. So he took that first bold step to express science in the “vulgar” French at a time when students were still forbidden to use it at university.

Fortunately, with the rise of Information and Communication Technology, including the Internet, Google Translate, crowdsourcing, etc., the prospects for Kreyòl vis-à-vis French in 21st-century Haitian schools look much more promising than those for French vis-à-vis Latin and Greek in 17th-century French schools. Although we do not yet have all the materials for all academic disciplines available in Kreyòl, we in the 21st century can more easily do for Kreyòl and other local languages what Descartes and other French intellectuals in the 17th century did for French back then. This is exactly one of the objectives of the MIT-Haiti Initiative and the Platfòm MIT-Ayiti (at <http://MIT-Ayiti.NET>).

Political will—alongside an unyielding desire for democracy, for equal opportunity, and for the greater good—is the number one condition for success in that venture toward quality education to be made accessible to all. Meanwhile, in Haiti and elsewhere in the Global South and beyond, the long arc of the moral universe is already bending towards justice, exactly as Martin Luther King Jr. predicted.

References

- Aboh, Enoch & Michel DeGraff. 2017. A Null Theory of Creole Formation Based on Universal Grammar. In Ian Roberts (ed.), *The Oxford Handbook of Universal Grammar*, 401–458. Oxford: Oxford University Press.
- AFP. 2014. *France-Haïti: Martelly évoque un ‘partenariat’ pour l’éducation*. AFP video, 1:52. Posted October 31, 2014. <https://youtu.be/d2CJYucVVrU> & <https://www.facebook.com/michel.degraff/videos/10156132035733872/> (17 June, 2020).
- AJ+. 2017. *Kids Make Schoolbooks*. AJ+ video, 2:24. Posted May 29, 2017. <https://www.facebook.com/ajplusenglish/videos/967994680008706/> (17 June, 2020).
- Alcenat, Westenley. 2017. The Case for Haitian Reparations. *Jacobin* January 14, 2017. <https://www.jacobinmag.com/2017/01/haiti-reparations-france-slavery-colonialism-debt/> (17 June, 2020).
- Anglade, Pierre. 1998. *Inventaire étymologique des termes créoles des Caraïbes d'origine africaine*. Paris: L'Harmattan.
- Arthus, W. W. 2012. *La machine diplomatique française en Haïti: 1945–1958*. Paris: L'Harmattan.
- Arthus, W. W. 2014. *Duvalier à l'ombre de la guerre froide: Les dessous de la politique étrangère d'Haïti (1957–1963)*. Port-au-Prince, Haïti: L'Imprimeur S.A.

- Bakker, Peter, Aymeric Daval-Markussen, Mikael Parkvall, & Ingo Plag. 2011. Creoles Are Typologically Distinct from Non-Creoles. *Journal of Pidgin and Creole Languages* 26(1). 5–42.
- Begley, Sharon. 1982. The Fossils of Language. *Newsweek* March 15, 1982. 80.
- Bellegarde-Smith, Patrick. 2004. *Haiti: The Breached Citadel*. Toronto: Canadian Scholars' Press.
- Bickerton, Derek. 1990. *Language and Species*. Chicago: University of Chicago Press.
- Bickerton, Derek. 1998. Catastrophic Evolution: The Case for a Single Step from Protolanguage to Full Human Language. In James Hurford (ed.), *Approaches to the Evolution of Language: Social and Cognitive Bases*, 341–358. Cambridge: Cambridge University Press.
- Bickerton, Derek & William Calvin. 2000. *Lingua Ex Machina: Reconciling Darwin and Chomsky With the Human Brain*. Cambridge, MA: MIT Press.
- Biko, Steve. 2002. *I Write What I Like: Selected Writings*. Chicago: University of Chicago Press.
- Bourdieu, Pierre. 1990 [1980]. *Le sens pratique* [The Logic of Practice], Richard Nice (transl.). Stanford: Stanford University Press.
- Bourdieu, Pierre. 1991 [1982]. *Ce que parler veut dire: L'économie des échanges linguistiques* [Language and Symbolic Power], Gino Raymond & Matthew Adamson (eds. and transl.). Cambridge, MA: Harvard University Press.
- Bourdieu, Pierre & Loïc Wacquant. 1992. *An Invitation to Reflexive Sociology*. Chicago: University of Chicago Press.
- Cadely, Jean-Robert. 2003. Les sons du créole haïtien. *Journal of Haitian Studies* 9(2). 4–41.
- Chomsky, Noam. 1993. *Year 501: The Conquest Continues*. Boston: South End Press.
- Dalton-Puffer, Christiane. 1996. *The French Influence on Middle English Morphology: A Corpus-based Study of Derivation*. Berlin: Mouton de Gruyter.
- Daudier, Valery. 2016. La bourse d'excellence Haïti-France lancée à Paris. *Le Nouvelliste* December 14, 2016. <http://lenouvelliste.com/lenouvelliste/article/166339/La-bourse-dexcellence-Haiti-France-lancee-a-Paris> (17 June, 2020).
- Daut, Marlene. 2009. Un-silencing the Past: Boisrond-Tonnerre, Vastey, and the Re-writing of the Haitian Revolution, 1805–1817. *South Atlantic Review* 74(1). 35–64.
- DeGraff, Michel. 2001a. Morphology in Creole Genesis: Linguistics and Ideology. In Michael Kenstowicz (ed.), *Ken Hale: A Life in Language*, 52–121. Cambridge, MA: MIT Press.
- DeGraff, Michel. 2001b. On the Origin of Creoles: A Cartesian Critique of Neo-Darwinian Linguistics. *Linguistic Typology* 5(2/3). 213–310.
- DeGraff, Michel. 2002. Relexification: A Reevaluation. *Linguistic Anthropology* 44(4). 321–414.
- DeGraff, Michel. 2003. Against Creole Exceptionalism. *Language* 79(2). 391–410.
- DeGraff, Michel. 2004. Against Creole Exceptionalism (redux). *Language* 80. 834–839.
- DeGraff, Michel. 2005a. Linguists' Most Dangerous Myth: The Fallacy of Creole Exceptionalism. *Language in Society* 34(4). 533–591.
- DeGraff, Michel. 2005b. Morphology and Word Order in 'Creolization' and Beyond. In Guglielmo Cinque & Richard S. Kayne (eds.), *The Oxford Handbook of Comparative Syntax*, 293–372. New York: Oxford University Press.

- DeGraff, Michel. 2010. Language Barrier: Creole is the Language of Haiti, and the Education System Needs to Reflect That. *Boston Globe* June 16, 2010.
- DeGraff, Michel. 2011. *Chrisla and Dieuricame's Place-Value Duet*. YouTube video, 4:32. Posted April 2, 2011. <https://youtu.be/CU4NuFcK8D0> (17 June, 2020).
- DeGraff, Michel. 2014. The Ecology of Language Evolution in Latin America: A Haitian Postscript toward a Postcolonial Sequel. In Salikoko Mufwene (ed.), *Iberian Imperialism and Language Evolution in Latin America*, 274–327. Chicago: University of Chicago Press.
- DeGraff, Michel. 2015a. France's Misconceived 'Marshall Plan' for Haiti. *Le Monde Diplomatique* May 26, 2015. <http://mondediplo.com/blogs/france-s-misconceived-marshall-plan-for-haiti> (17 June, 2020).
- DeGraff, Michel. 2015b. Lettre ouverte à l'Ambassadeur de France en Haïti, Madame Elisabeth Béton-Delègue. *Le Nouvelliste* December 21, 2015. <https://lenouvelliste.com/lenouvelliste/article/153797/Lettre-ouverte-a-lambassadeur-de-France-en-Haiti-Madame-Elisabeth-Beton-Delegue> (17 June, 2020).
- DeGraff, Michel. 2015c. Yon nòt sou Dany Laferrière nan Académie Française: Defann franse pa vle di sakrifye kreyòl ; kreyòl se nannan istwa nou, idantite nou, dwa nou, devlopman nou. *Le Nouvelliste* June 17, 2015. <https://lenouvelliste.com/lenouvelliste/article/145966/YON-NOT-SOU-DANY-LAFERRIERE-NAN-ACADEMIE-FRANCAISE-Defann-franse-pa-vle-di-sakrifye-kreyol-kreyol-se-nannan-istwa-nou-idantite-nou-dwa-nou-devlopman-nou> (17 June, 2020).
- DeGraff, Michel. 2016a. Lang matènèl, pedagoji entèraktif, lojisyèl edikatif nan Inisyativ MIT-Ayiti: 'Twa wòch dife' pou bon jan edikasyon ak inovasyon alawonnbadè ann Ayiti. *The Journal of Haitian Studies* 22(2). 128–141.
- DeGraff, Michel. 2016b. La langue maternelle comme fondement du savoir: L'Initiative MIT-Haiti: Vers une éducation en créole efficace et inclusive. *Revue transatlantique d'études suisses. Diglossies suisses et caribéennes: Retour sur un concept (in)utile* 6/7. 177–197.
- DeGraff, Michel. 2016c. Linguistic Equality as a Precondition for Economic and Political Equity. *Boston Review* May 9, 2016. <http://bostonreview.net/forum/what-education/michel-degraff-michel-degraff-responds-danielle-allen> (17 June, 2020).
- DeGraff, Michel. 2016d. *Liv Lang Manman: 'Ti kochon k ap chante' (Lekòl Kominotè Matènwa, 17 fevriye 2011)*. YouTube video, 5:03. Posted May 4, 2016. <https://youtu.be/KHU-GHeQEQs> (17 June, 2020).
- DeGraff, Michel. 2017a. An n konprann Chante Alfabè Kreyòl La [Let's Understand the Alphabet Creole Song]. *Journal Bon Nouvèl & Potomitan* February 2017. <https://www.facebook.com/michel.degraff/posts/10155247087073872>, <https://www.potomitan.info/ayiti/alfabe2.php> & <https://mit-ayiti.net/resous/an-n-konprann-chante-alfabe-kreyol-la> (17 June, 2020).

- DeGraff, Michel. 2017b. Diskriminasyon lengwistik ann Ayiti se yon mepri pou dwa timoun epi sa frennen devlopman peyi a [Haiti's 'Linguistic Apartheid' Violates Children's Rights and Hampers Development]. *openDemocracy* January 31, 2017. <https://www.opendemocracy.net/en/openglobalrights-openpage/diskriminasyon-lengwistik-ann-ayiti-se-yon-mepri-pou-dwa-timoun-epi/> & <https://www.openglobalrights.org/haiti-s-linguistic-apartheid-violates-children-s-rights-and-hampers/> (17 June, 2020).
- DeGraff, Michel. 2017c. Mother-tongue Books in Haiti: The Power of Kreyòl in Learning to Read and In Reading to Learn. *Prospects: Comparative Journal of Curriculum, Learning and Assessment*. <http://rdu.be/qm1X> (17 June, 2020).
- DeGraff, Michel. 2018. Dezòd e koripsyon nan Akademi Kreyòl Ayisyen. *AyiboPost* April 2018. <https://ayibopost.com/degraff-denonse-dezod-ak-koripsyon-k-ap-fet-nan-akademi-kreyol-ayisyen-an/> (17 June, 2020).
- DeGraff, Michel. 2019. Against apartheid in education and in linguistics: The case of Haitian Creole in neo-colonial Haiti. Foreword in Donaldo Macedo (ed.), *Decolonizing foreign language education: The misteaching of English and other colonial languages*, ix–xxxi. New York: Routledge. http://lingphil.scripts.mit.edu/papers/degraff/DeGraff_2019_Against_Apartheid_in_Haiti.pdf (17 June, 2020).
- DeGraff, Michel. 2020. Toward racial justice in linguistics: The case of Creole studies. Ms. To appear in *Language*.
- DeGraff, Michel & Molly Ruggles. 2014. A Creole Solution to Haiti's Woes. *New York Times* August 1, 2014. <http://nyti.ms/1ohUIOf> (17 June, 2020).
- DeGraff, Michel & Glenda S. Stump. 2018a. An n bati lekòl tèt an wo: Lang manman, pedagoji ak teknoloji kòm engredyan fondal natal pou yon chanjman radikal. *Journal of Haitian Studies* 24(2). 114–124. http://lingphil.scripts.mit.edu/papers/degraff/DeGraff-Stump_JoHS_2018_lekol_tet_an_wo.pdf (17 June, 2020).
- DeGraff, Michel & Glenda S. Stump. 2018b. Kreyòl, pedagogy, and technology for opening up quality education in Haiti: Changes in teachers' meta-linguistic attitudes as first steps in a paradigm shift. *Language* 94(2). 127–157. http://lingphil.scripts.mit.edu/papers/degraff/DeGraff_and_Stump_2018_Kreyol_pedagogy_and_technology_for_education_in_Haiti.pdf (17 June, 2020).
- Dehaene, Stanislas, Ghislaine Dehaene-Lambertz, Édouard Gentaz, Caroline Huron, & Liliane Sprenger-Charolles (eds.). 2011. *Apprendre à lire: Des sciences cognitives à la salle de classe*. Paris: Odile Jacob.
- Dejean, Yves. 2006. *Yon lekòl tèt anba nan yon peyi tèt anba* [An Upside-down School in an Upside-down Country]. Port-au-Prince: FOKAL.
- Descartes, René. 1966 [1637]. *Discours de la méthode*. Paris: Vrin.
- 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.
- Dessalines, Jean-Jacques. 2006 [1804–1806]. *Lois et actes sous le règne de Jean-Jacques Dessalines*. Port-au-Prince: Éditions Presses nationales d'Haïti.
- Dixon, Robert M. W. 2010. *Basic Linguistic Theory: Volume 1, Methodology*. Oxford: Oxford University Press.

- Dizikes, Peter. 2017. MIT, Google team up to boost education in Kreyòl. *MIT News* October 30, 2017. <http://news.mit.edu/2017/mit-haiti-google-team-boost-education-kreyol-1031> (17 June, 2020).
- Dreifus, Claudia. 2001. How Language Came to Be, and Change. *New York Times, Science Times section* October 30, 2001. D3.
- Dubois, Laurent. 2005. *Avengers of the New World: The Story of the Haitian Revolution*. Cambridge, MA: Belknap Press of Harvard University Press.
- Dubois, Laurent. 2012. *Haiti: The Aftershocks of History*. New York: Metropolitan Books.
- Dunn, Michael, Stephen C. Levinson, Eva Lindström, Ger Reesink, & Angela Terrill. 2008. Structural Phylogeny in Historical Linguistics: Methodological Explorations Applied in Island Melanesia. *Language* 84(4). 710–759.
- Durie, Mark & Malcolm Ross (eds.). 2006. *The Comparative Method Reviewed: Regularity and Irregularity in Language Change*, 39–71. New York: Oxford University Press.
- Farmer, Paul. 2003. *The Uses of Haiti*. Monroe, ME: Common Courage Press.
- Fanon, Frantz. 1952. *Peau noire, masques blancs*. Paris: Editions du Seuil.
- Foucault, Michel. 1980. *Power/Knowledge: Selected Interviews and Other Writings 1972–1977*, Colin Gordon (ed. and transl.). New York: Pantheon.
- Freire, Paulo. 1985 *The Politics of Education: Culture, Power and Liberation*. South Hadley, Massachusetts: Bergin & Garvey.
- Freire, Paulo & Donaldo Macedo. 1987. *Literacy: Reading the Word and the World*. South Hadley, Massachusetts: Bergin & Garvey Publishers.
- Ghachem, Malick W. 2012. *The Old Regime and the Haitian Revolution*. Cambridge: Cambridge University Press.
- Gordon, David C. 1978. *The French Language and National Identity (1930–1975)*. The Hague: Mouton.
- Gourgues, Jacques-Michel. 2016. *Les manuels scolaires en Haïti: Outils de la colonialité*. Paris: L’Harmattan.
- Groupe de travail sur l’éducation et la formation (GTEF). 2010. *Pour un pacte national pour l’éducation en Haïti: rapport au président de la République, Port-au-Prince, Haïti, août 2010*. Port-au-Prince, Haïti: Bibliothèque Nationale.
- Hector, Michel & Claude Moïse. 1990. *Colonisation et esclavage en Haïti: Le régime colonial français à Saint-Domingue (1625–1789)*. Port-au-Prince, Haïti: H. Deschamps.
- Heinl, Robert Debs, Nancy Gordon Heinl, & Michael Heinl. 1996. *Written in Blood: The Story of the Haitian People, 1492–1995*. Lanham: University Press of America.
- Humboldt, Wilhelm von. 1988 [1836]. *Über die Verschiedenheit des menschlichen Sprachbaues und ihren Einfluss auf die geistige Entwicklung des Menschengeschlechts* [On Language: The Diversity of Human Language-Structure and its Influence on the Mental Development of Mankind], Peter White (transl.). Cambridge: Cambridge University Press.

- James, C. L. R. 1938. *The Black Jacobins*. NY: The Dial Press.
- Jean-Charles, Hervé Louis. 1987. *Attitudes of Teachers and Parents toward French and Creole in Haiti*. Stanford University PhD Dissertation.
- Jean-Pierre, Marky. 2016. *Language and Learning in a Post-Colonial Context: A Critical Ethnographic Study in Schools in Haiti*. London: Routledge, Taylor & Francis.
- Jenson, Deborah. 2011. *Beyond the Slave Narrative: Politics, Sex, and Manuscripts in the Haitian Revolution*. Liverpool: Liverpool University Press.
- Kuhn, Thomas. 1970. *The Structure of Scientific Revolutions*, 2nd ed. Chicago: University of Chicago Press.
- Lambert-Prudent, Félix. 1980. Les processus de la minoration linguistique: Un coup d'oeil à la situation antillaise et à la créolistique. *Pensée* 209. 68–84.
- Louis-Charles, Mandaly C., Bémol Telfort & Michel DeGraff. 2015. *Chante alfabè kreyòl la*. Pennsauken, NJ: Disc Makers. <https://mit-ayiti.net/resous/an-n-konprann-chante-alfabe-kreyol-la> (17 June, 2020).
- Lorde, Audrey. 2007. *Sister Outsider: Essays and Speeches*. Berkeley: Crossing Press.
- Mathieu, Suze. 2005. *Depi nan Ginen, nèg renmen nèg: Kreyòl ak demokrasi nan peyi d Ayiti*. Port-au-Prince: Bibliyotèk Nasyonal Peyi d Ayiti.
- Macaulay, Thomas Babington Macaulay. 1979 [1835]. *Speeches: With His Minute on Indian Education*. New York: AMS Press.
- McWhorter, John. 1998. Identifying the Creole Prototype: Vindicating a Typological Class. *Language* 74. 788–818.
- McWhorter, John. 2001. The World's Simplest Grammars Are Creole Grammars. *Linguistic Typology* 502. 125–166.
- Meijer, Gus & Pieter Muysken. 1977. On the beginnings of Pidgin and Creole studies: Schuchardt and Hesselink. In Albert Valdman (ed.), *Pidgin and Creole linguistics*, 21–45. Bloomington: Indiana University Press.
- Messaoud-Galusi, S. & E. Miksic. 2010. *Haiti: Early Grade Reading Assessment (EGRA): Rapport pour le Ministère de l'Éducation et la Banque Mondiale—Résultats en français et en créole*. Prepared for the World Bank and USAID. Washington, DC: RTI International Research Triangle Institute. <https://www.scribd.com/document/148402621/Haiti-EGRA-Report-Final> (17 June, 2020).
- Migge, Bettina, Isabelle Léglise, & Angela Bartens (eds.). 2010. *Creoles in Education: An Appraisal of Current Programs and Projects*. Amsterdam: John Benjamins Publishing Company.
- Miller, Haynes. 2016. The MIT-Haiti Initiative: An International Engagement. *MIT Faculty Newsletter* 29(1), September/October 2016.
- Miller, Haynes. 2019. Language, Technology, and Engagement in the Haitian Classroom: An Interim Report on the MIT-Haiti Initiative. *CODEE Journal* 12, Linking Differential Equations to Social Justice and Environmental Concerns. <https://scholarship.claremont.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1043&context=codee> (17 June, 2020).
- Mufwene, Salikoko. 2001. *The Ecology of Language Evolution*. Cambridge: Cambridge University Press.
- Morrison, Toni. 1979. *The Bluest Eye*. London: Chatto and Windus.

- Myers-Scotton, Carol. 1993. Élite Closure as a Powerful Language Strategy: The African Case. *International Journal of the Sociology of Language* 103. 149–63.
- Nichols, Johanna. 1996. The Comparative Method as Heuristic. In Mark Durie & Malcolm D. Ross (eds.), *The Comparative Method Reviewed: Regularity and Irregularity in Language Change*, 39–71. Melbourne: Oxford University Press.
- Nichols, Johanna. 2003. Genetic and Typological Diversification of Language. In Brian D. Joseph & Richard D. Janda (eds.), *Handbook of Historical Linguistics*, 283–310. Oxford: Blackwell.
- Piketty, Thomas & Arthur Goldhammer. 2020. *Capital and Ideology*. Cambridge, Mass.: Harvard University Press.
- Pinnock, Helen & Gowri Vijayakumar. 2009. *Language and Education: The Missing Link: How the Language Used in Schools Threatens the Achievement of Education for All*. Reading: CfBT Education Trust.
- PNUD. 2014. Programme des Nations Unies pour le développement, République d'Haïti. 2014. In *Rapport Objectifs du Millénaire pour le Développement (OMD) 2013, Haïti: un nouveau regard*. Port-au-Prince, Haïti. <http://www.ht.undp.org/content/haiti/fr/home/library/mdg/rapport-omd-2013---haiti-un-nouveau-regard.html> (17 June, 2020).
- Saint-Germain, Michel. 1997. Problématique linguistique en Haïti et réforme éducative: quelques constats. *Revue Des Sciences De L'éducation* 23(3). 611–642.
- Schieffelin, Bambi & Rachelle Doucet. 1994. The 'Real' Haitian Creole: Ideology, Metalinguistics and Orthographic Choice. *American Ethnologist* 21(1). 176–200.
- Schleicher, August. 1869 [1863]. *Die Darwinsche Theorie und die Sprachwissenschaft*. [Darwinism Tested by the Science of Language], Alex Bikkers (transl.). London: John Camden Hotten.
- Seuren, Pieter. 1998. *Western Linguistics: An Historical Introduction*. Oxford: Blackwell.
- Thomason, Sarah & Terrence Kaufman. 1988. *Language Contact, Creolization, and Genetic Linguistics*. Berkeley & Los Angeles: University of California Press.
- Trouillot, Michel-Rolph. 1995. *Silencing the Past: Power and the Production of History*. Boston: Beacon Press.
- UNESCO. 1953. *The Use of Vernacular Languages in Education*, Monographs on Fundamental Education VIII. Paris. <https://unesdoc.unesco.org/ark:/48223/pf0000002897> (17 June, 2020).
- UNESCO. 2016. *Comment apprendre, quand on ne comprend pas?* https://unesdoc.unesco.org/ark:/48223/pf0000243713_fre.locale=en (17 June, 2020).
- Valdman, Albert. 1978. *Le créole: Structure, statut et origine*. Paris: Klincksieck.
- Valdman, Albert. 1992. Aspects de l'enseignement du créole comme langue étrangère et langue seconde. *Études créoles* 15(2). 81–94.
- Valdman, Albert. 2001. Sur les processus lexicogénétiques du créole haïtien. In Hartmut Schröder et al. (eds.), *Linguistik als Kulturwissenschaft: Festschrift für Bernd Splilner zum 60. Geburtstag*, 43–53. Frankfurt am Main: Peter Lang.