1 Introduction

An obvious empirical fact about languages is that they evolve constantly in core domains of their grammars. This evolution (or change), though not obvious in the present, becomes evident when a language is investigated diachronically. For instance, students of Modern English know about the Great Vowel Shift (Otto Jespersen 1860–1943), which distinguishes phonological and phonetic properties of Middle English from those of Modern English. Similarly it is not uncommon that words start with a precise semantics but acquire new meanings in the course of time, sometimes losing their original semantics. A simple illustration is that of *Waterloo*, the name of a village in present-day Belgium where "the allied pursuit caused Napoleon's army to disintegrate entirely," and which is commonly used in current English to mean "a decisive defeat or failure" (*The New Oxford Dictionary of English*: 2001: 2087). With regard to syntax, Old English displayed V-final patterns comparable to those of Modern German as illustrated in (1), cited from Kroch, Taylor, and Ringe (1997, their example 3a):

(1)

ðeah	hit	ær	upahæfen	wære
although	it	before	up-raised	was

While Middle English had lost the V-final pattern, it maintained V2 properties similar to those encountered in modern Dutch (Kroch 1994: 2):

(2) Quene Ester looked never with swich an eye.

As can be seen from this example, the verb is placed to the left of the negative adverbial *never*. Such verb placement is impossible in Modern English as can be illustrated by the pair of sentences in (3), where the sequencing in (2) is excluded (3b), in contrast with the construction where negation precedes the verb (3a):

(3) a. Queen Esther never looked with such an eye
b. *Queen Esther looked never with such an eye

What we see here is that over the centuries, English has changed in various modules of its grammar (e.g., phonology, semantics, syntax). For instance, the

syntax has gradually moved away from a proto-typical West Germanic language with robust V-final and V2 properties, to an SVO language in which the lexical verb necessarily occurs to the right of negative adverbs such as *never*, with the object immediately to its right (e.g., van Kemenade 1987; Roberts 1993, 2007; Haeberli 1999; Kroch 1989a, 1989b, 2001; Kroch and Taylor 1997; Pintzuk 1999; Lightfoot 2006). The only legacy of English past history lies in direct questions, where the verb or the auxiliary verb necessarily occurs in the second position as is in V2 languages.

(4) a. What will John buy?
b. Wat zal Jan kopen? [Dutch]

Another domain of English syntax that has changed is the use of determiners or articles. Present-day English has a complex set of rules regarding usage and omission of articles in ways that contrast with Old English, in which bare nouns could be used in syntactic contexts not acceptable today. About the development of articles in English, Gardnier (1932: 47) cited in McColl Millar (2000: 300) notes:

> It is sometimes said that such relatively insignificant words [such as the articles] are grammatical tools. But the function of tools is to achieve some specific end. That is precisely what, in many cases, the article does not do, or at all events does only in a very slight and uncertain degree. Often it is a mere useless ballast, a habit or mannerism accepted by an entire speaking community . . . The accumulation of old rubbish is so easy.

What Gardnier refers to as "old rubbish" is now part of the mental grammar that every native speaker of English develops.

One notices the same drastic change in the Romance languages as well. While Latin lacks articles and complementizers, most modern Romance languages include such grammatical items. Comparable lists of notable changes could be drawn for every single human language. Speakers often notice linguistic changes in the lexicon (including borrowings from other languages); sometimes they resist them (often in vain). However, language users are typically less aware of more subtle changes involving grammatical notions, such as, the loss of V2 in English or its correlated change from OV to VO order. These are far more obscure changes which, once they are created, may take a very long time before they spread within the population of speakers and become a stable feature of the language that is passed on to later generations of speakers. While the English example above indicates that certain syntactic changes may sometimes take several centuries before they spread through the community or population of speakers, it is obvious that it does not take speakers centuries to create these changes. Building on Chomsky's (1986) notions of I(nternal)-language and E(xternal)-language,

DeGraff (1999: 9) characterizes the time-lapse between the birth or "creation" of a change (i.e., the development of an I-language) and the moment when this change becomes noticeable on the population level (i.e., the E-language) by distinguishing between two levels of analysis when it comes to language change.[1] As DeGraff puts it:

> We need to draw a sharp conceptual line between, on the one hand, the diachronic accretion of the "elements of a creole's grammar" and the dating of a creole in terms of establishment of a new community language with such elements (i.e., an *E-creole*) and, on the other hand, the genesis of a creole as the emergence of an I-language of a particular sort (i.e., the development in individual speakers' minds/brains of a grammar that shows a certain typological distance from the grammars of the languages in contact – an *I-creole*).

Applied to language change in general, this would mean that studies of language evolution must address the topic of language change on two independent, though related, levels: (i) the population level where one can observe how a particular new feature is being used in a community (see also Mufwene 1986, 1994, 2001, 2002, 2003, 2005a, 2005b, 2008, 2009; Croft 2000), and (ii) the individual level where we may try to observe how a new form is created by the speaker (e.g., Aboh 2006a, 2009a).

This book is about language change at the individual level (as characterized by DeGraff (1999). Within the context of the Minimalism framework (e.g., Chomsky 1995, 2001, 2008), which I'm adopting here, many questions arise including the following: How does change come about? What are the ingredients of change? How can we access such ingredients? These questions drive the discussion in this book.

It has traditionally been assumed that *contact* is a major factor in language change. In the literature on language change, various proposals have been made to explain how grammatical changes arise gradually in a contact situation. A common hypothesis is that such changes evolve from imperfect second language acquisition (SLA) by adults. In the case of English, for instance, Kroch, Taylor, and Ringe (2000) argue that Northern Middle English and Southern Middle English display distinct V2 properties. In the Northern varieties, the verb moves to the complementizer domain (CP), making these varieties CP-V2 languages, similarly to Mainland Scandinavian, German, or Dutch. In the Southern varieties, however, the verb moves to the inflectional domain (INFL), as it does in Yiddish and Icelandic. These variants therefore display the IP-V2 phenomenon. The authors further indicate that the emergence

[1] According to Chomsky (1986), an Internal-language, which is the object of linguistic study, is the mental representation of the linguistic knowledge of a speaker. Thus, I-language is a mental object, which contrasts with External language roughly characterized as the knowledge of language use in a community, which includes performance.

of CP-V2 in the Northern dialects is contingent to the loss of verb movement to INFL to support verbal inflectional morphology. The latter is a consequence of the collapse of the verbal inflectional morphology, itself resulting from imperfect SLA by the Vikings who invaded Northern and Eastern England. Given that the Northern and Southern varieties of Middle English had divergent V2 properties (viz, CP-V2 versus IP-V2), the authors hypothesize that the eventual loss of V2 in Modern English, which made it an SVO Germanic language, could have resulted from extensive contact between speakers of the Northern and Southern varieties. This language contact situation would have led to competition between the two variants, which eventually led to the loss of the V2 linguistic feature in the changing language. Under this scenario therefore, the main agents of variation within English dialects, and the resulting change from OV to VO, were L2 learners.

According to this scenario, language change is primarily a consequence of imperfect SLA (or imperfect replication): new features emerge in a language because adult L2 learners fail to replicate the features of the target faithfully or inject features of their native language in the target (L1 transfer). Though this view is compatible with various sociolinguistic aspects of language change (e.g., code-switching, borrowing of vocabulary items, or calques), it leaves unanswered the fundamental question that this book tries to answer: Which properties of grammar allow the combination of syntactic features into a new system? In the case at hand, how can we account for the emergence of CP-V2 in Northern Middle English, attributed to the linguistic influence of Scandinavian invaders, in a principled manner? As is well known in Germanic syntax, V2 phenomena correlate with verbal morphology, verb movement as well as very subtle syntactic operations that relate to general principles of UG (e.g., economy, head movement, probe–goal relation, subject–auxiliary inversion) that go beyond borrowing of a lexical category or a simple misanalysis of a grammatical category. If we make the reasonable hypothesis that the same general UG principles are at work in the syntax of Middle English, where they may have different effects from V2, we may want to ask how Scandinavian CP-V2 syntax combined with the syntax of the verb in Middle English to produce the Northern Middle English variant with CP-V2 (instead of, say, a completely unspeakable or un-learnable language). Indeed, if languages (as we know them) are extrapolations from idiolects (which in turn are expressions of speakers' I-language), what principles govern the combination of the linguistic features from different languages into a speaker's I-language? Assuming such a combination is possible (as suggested by the data) then the newly created I-language presumably involves a 'hybrid' system.

The term *hybrid* has been used in various social constructs with a pejorative meaning. I use this term here in a strictly neutral sense to refer to a stable

linguistic system that emerges from the contact of (typologically and/or genetically) different linguistic varieties. As I argue throughout the book, natural languages involve hybrid systems as a rule because every I-language derives from the mix of features that are expressed in the Primary Linguistic Data (PLD), the latter being fed by expressions of mutually distinct I-languages (cf. DeGraff 1999: chapter 1; Mufwene 2001). In this regard, linguistic hybridization as argued for here is fundamentally different from Whinom's (1971) views on hybridization and how it could apply to pidgins, creoles, and languages in general.

If languages are indeed the collective expressions of individual hybrid I-languages, how do such hybrid I-languages evolve into stable systems such that some features, replicated by other speakers, spread across a community to eventually become part of a stable E-language identified as a new language?

These questions are rarely directly addressed in the literature. In an effort to answer them, and contribute to the debate on language evolution in general, this book takes a closer look at some linguistic features in grammars and examines how, in a situation of *contact*, syntactic and semantic features of different language types may recombine into a new form as part of a new emergent language. In the context of this book, the term *contact* is taken to mean the coexistence and competition between linguistic systems (viz., languages, dialects, or idiolects) in the mind of the same speaker. The contact is thus between two (or more) different lexica and between typologically different linguistic systems, though the differences may vary from minor to very significant ones. Under this view therefore, both L1 acquisition and L2 acquisition involve language contact, though the two processes differ qualitatively. Issues of age aside, one such difference is that L1 acquisition necessarily involves contact of idiolects and/or dialects, both being related variants of the same language. In this case we are dealing with variants that are genetically and typologically related. Simultaneous bilingualism (2L1) and L2 acquisition, on the other hand, must involve (dialects or varieties of) two distinct languages that may not be related genetically or typologically. These differences notwithstanding, this study assumes that any learner, including L1 learners and L2 learners, finds himself/herself in a situation of linguistic contact, often having to select from among competing variants in his/her feature pool (Mufwene 2001, 2005a, 2008). In L1 contexts, the learner develops a system from competing inputs and produces a new grammatical system, though not completely different from the input systems. In 2L1 and L2 contexts, however, the learner operates on different languages that may influence each other, thus creating a new linguistic system that may be significantly different from the source languages. This view explains why learners systematically develop hybrid mental grammars.

Once we adopt this perspective, it becomes clear that the study of the creation of change informs us about the evolution of language in general but it also bears on issues of language acquisition. In understanding how learners (whether L1/2L1 or L2) create new idiolectal varieties based on their individual linguistic experiences, we hope to understand how learners access abstract linguistic properties during the acquisition process. A crucial assumption that this book builds on is that new varieties do not generally emerge as the result of misanalysis (or imperfect replication), as is often assumed in theories relying on imperfect SLA, but from 'a certain analysis of abstract features of linguistic entities' (see, for instance, Klein and Perdue 1997). Though this linguistic analysis may be deviant from the one generally accepted in the community or the one a school teacher may expect learners to make in order to acquire command of the target language (i.e., the normative form), it remains one of the possible alternatives the learner has access to, based on UG and linguistic experience. This in turn implies that in order to understand the driving forces of language change we have to try to probe into the speaker's knowledge at the moment of the creation. That is, we have to probe into I-language. Obviously, such endeavor can only be indirect, and in most cases speculative because we often do not know when the change came into existence and diachronic studies only inform us about the distances between two communal systems (which are collective abstractions), for instance, between Middle English and Modern English. While the enterprise may look completely hopeless, creole languages might offer us an extraordinary opportunity to investigate the creation of change, largely because of the shallow history and because we have more information about the communal systems in contact and about the ethnographies of the contacts than in traditional historical linguistics.

1.1 Creoles as a test-bed

In order to study the production of change, this book focuses on the genesis of the creoles of Suriname and Haiti. The choice of these creoles as case studies is not guided by the supposedly exceptional nature of creole languages (e.g., Bickerton 1981, 1984; Lefebvre 1998; McWhorter 2001, 2011; Bakker et al. 2011), but by the following factors:

(i) Creoles developed recently (within about four centuries) and have not lived long enough for their original 'ingredients' to fade out due to a long history of linguistic change.
(ii) Creoles result from the extensive contact between languages that are not genetically related (and exhibit typological differences in certain domains of their grammars; e.g., Romance/Germanic vs. Niger-Congo). Thus, creole languages differ from contact languages which developed from

the contact between languages that are genetically and typologically related (Indo-European languages).

In the literature on contact languages and language change, creoles have been considered by many to be extreme cases of SLA, allowing extensive influence from the substrate languages spoken by the enslaved Africans. The general assumption has been that the Africans whose descendants became native speakers of creoles had very limited access to the target language spoken by the European colonial power, typically identified in English as the *lexifier*. In Lefebvre's (1998) Relexification Hypothesis, for instance, creoles are assumed to be radically divergent L2 varieties involving massive L1 transfer. Therefore, creoles combine syntactic and semantic properties of the substrate languages with PF properties of the target language: Haitian Creole = Fongbe (Kwa) grammar + French PF.

On the other hand, Bickerton (1981, 1984, 2008) claims that radical SLA failure, coupled with break in transmission, led to a situation where adult learners developed a macaronic pidgin that is inadequate for L1 acquisition. Bickerton contends that in such a situation of language degeneration, children as L1 learners are faced with an inadequate input. Accordingly, they rely on their innate language capacity, the Language Bioprogram, which allows them to create a full-fledged language out of the degenerate inputs provided by their parents or other adult speakers of the local pidgin. According to him, the Language Bioprogram explains the fundamental similarities observed across creoles, which appears to have led McWhorter (1998, 2001, 2011) to posit creole prototypes, whose structures are putatively the closest to that produced by the bioprogram.

Under the same premises of SLA failure, theories that reject both the Relexification and the Language Bioprogram hypotheses but focus on the role of the superstratum assume that creole languages are new varieties of European languages spoken in the colonies. For instance, Chaudenson (2003: 448) suggests that French creoles result from "the unguided appropriation of approximate varieties of French koiné" (see also his earlier work since 1979). According to him, creole languages emerged as a consequence of imperfectly acquired koinés of European languages spoken by the European colonists, with incremental divergences from the original colonial variety, hence the idea of 'approximations of approximations.' This theory presupposes that even though creoles may differ from the target European varieties in various respects, they share basic and fundamental morphosyntactic features (identified by Chaudenson as *matériaux de construction*) with the non-standard dialects of these languages.

More recently, Plag (2008a, 2008b) has proposed a theory of creolization (and therefore language change) that interprets creoles as 'conventionalized

interlanguages of an early stage.' What this means is that creoles are instances of interlanguages that got frozen before their inventors had the chance to reach a more advanced stage in acquiring the target language. Here again, SLA failure is assumed to be one of the driving engines of creolization.

1.2 Speakers create variants not imperfect replicas

I return to a critique of these theories in Chapter 3. In the current discussion, suffice it to note that these theories uniformly presuppose that creoles and, by implication, contact languages in general are (in)direct consequences of imperfect replications of the relevant target languages. As this book will show, however, the linguistic output of language contact, which we commonly refer to as contact (mixed or creole) languages, depending on their socio-historical context, is systematically a complex object made of morpho-phonological and semantico-syntactic features of the source languages. This position raises some serious conceptual and empirical issues about the above-mentioned theories, because they fail to properly address the question of language change and language creation as general phenomena in language evolution, that is, the combination of distinct linguistic features in a developing I-language.

Following Mufwene (1996, 2001, 2005a, 2008), DeGraff (1997, 1999, 2001a, 2001b, 2002) and much related work, this book shows that creoles represent a normal instance of language change resulting from the contact between typologically different and genetically unrelated languages (e.g., Romance/Germanic vs. Kwa/Bantu [Niger-Congo]) that had been geographically far apart (Europe/America vs. Africa). These languages were brought together in extensive, multiple contacts in a very limited space (e.g., a plantation). As already noted in the previous section, a creole differs in this respect from the case of English cited above in that Middle English evolved out of contacts between genetically and, to a large extent, typologically related languages. Thus creoles represent an empirical domain where, focusing on particular syntactic and semantic aspects of the emergent languages, we can isolate distinctive syntactic and semantic features contributed by particular languages or language groups. Under the uniformitarian view of language change adopted in this book (shared also with DeGraff and Mufwene), the same principles underlying linguistic variation apply to creoles and non-creoles. The only difference is that changes may be more contrastive in creoles due to their diverse typological origins (Aboh and Ansaldo 2007). This way, creoles like any contact language, provide us with a window into the general principles of language evolution.

Adapting Mufwene's (2001, 2002, 2003, 2005a, 2005b, 2008, 2009) ecological approach to the evolution of syntactic features/patterns, as well as

work on the competition of grammars (e.g., Kroch 1989a, 1989b, 2001; Lightfoot 2006) it is shown that new languages emerge from a process of competition and selection that leads to a recombination of the syntactic features of the languages in contact. Following current minimalist assumptions, I assume that syntactic features are the properties of functional categories, the latter being the locus of parameters and language variation (e.g., Chomsky 1995; Kayne 1994; Muysken 2008). I further hypothesize that syntactic features (e.g., TENSE, DEFINITENESS, and INTERROGATIVE) have specific semantic properties (Chomsky 1995: 381, footnote 14). Therefore, a functional category involves three aspects minimally: phonology, which I'm not discussing here, semantics, and syntax. Semantics has to do with issues of interpretation, while syntax relates to the formal licensing of the category. Building on this characterization, I argue that language contact (during the development of an I-language) may lead to fission of the functional category such that its syntax and semantics are affected differently under the pressure of the languages in competition. I demonstrate that the ecology of language contact allows competing components of functional categories to be recombined into a new functional category that intersects with the same category in the source languages.

According to this theory, two major possibilities arise in a contact situation: The emergent language may retain both the semantic and syntactic properties of a functional category from one of the competing languages. This situation is described in (5a) and is referred to as *pattern transmission*. On the other hand, the emergent language may exhibit a functional category that results from the recombination of a feature on the basis of its semantics (e.g., discourse function) in a competing language, while its syntax may be determined under pressure from other competing languages and/or based on the principles of UG, the ultimate filter for combinatory possibilities in syntax. The latter possibility, represented in (5b) and referred to as *feature transmission*, illustrates linguistic hybridity as discussed in this book.

(5) a. F_x [Function (semantics) = L_x; Syntax = L_x] ➜ Pattern transmission
b. F_y [Function (semantics) = L_x; Syntax = . . .] ➜ Feature transmission

Within the Minimalist Program, such a split between syntax and semantics is reasonable if we assume that a feature (F) is associated with a unique general semantic representation cross-linguistically (e.g., the notion of DEFINITENESS, PAST, NEGATION), while its syntax (i.e., its licensing properties) is subject to variation which itself is related to parameter-setting. This would mean that the same syntactic feature may be valued differently cross-linguistically, even though its semantics remains the same (Aboh 2006a).

As I show in Chapter 5, the patterns in (5) can be illustrated by noun phrases in Haitian and Sranan, two creoles that have the same substrate languages (Gbe;

see Smith 1987, Arends 1989), but differ with regard to their major superstrate languages: French and English, respectively. According to Aboh (2006a), these two creoles display specificity markers which function in a way very similar to the Gbe languages. Therefore, both Haitian and Sranan display bare nouns similarly to Gungbe as shown by the bracketed nouns in (6a–c):

(6) a. [Wosiyòl] manje kowosòl. [Haitian; DeGraff 1992: 105]
nightingale eat soursop
'Nightingales eat soursop.'

b. Kofi, go na wowoyo go bai [bana] tya kon gi mi. [Sranan]
Kofi go LOC market go buy banana carry come give 1SG
'Kofi, go to the market to buy me (plantain) banana(s).'

c. [Àxwèlé] nɔ̀ ɖù [gbàdó]. [Gungbe]
turtle-dove HAB Eat corn
'A turtle-dove habitually eats corn.'
'Turtle-doves habitually eat corn.'

Such nouns can be interpreted as DEFINITE, INDEFINITE or GENERIC depending on context. Yet, Gungbe, Haitian, and Sranan display discourse specificity markers (7):

(7) a. Wosiyòl manje [kowosòl a]. [Haitian; DeGraff 1992: 105]
Nightingale eat Soursop DET
'Nightingales ate the soursop (in question).'

b. Kofi, teki [a bana] tya gi mi. [Sranan]
Kofi take DET banana carry give 1SG
'Kofi, give me the (plantain) banana (in question).'

c. Àxwlé ɖù [gbàdó lɔ́] [Gungbe]
turtle-dove eat Corn DET
'A turtle-dove ate the corn (in question).'
'Turtle-doves ate the corn (in question).'

Aboh (2006a: 224) defines the combination of SPECIFICITY and DEFINITENESS in these languages as in (8) (see Chapter 5 for discussion):

(8) a. A specific definite noun phrase is strongly D(iscourse)-linked and represents a unique referent assumed to be known to both speaker and hearer, to which the speaker intends to refer.
b. A specific indefinite noun phrase need not be D-linked. It represents an existing referent that the hearer may not know about, but which the speaker has in mind and to which he/she intends to refer.

As is obvious from these examples, Haitian and Gungbe display the same pattern in that the noun phrase precedes the specificity marker (viz, NP-DET). In Sranan, however, this marker precedes the noun phrase (viz., DET-NP) even