Language Change in Contact Languages

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Language Change in Contact Languages. Grammatical
and prosodic considerations
Edited by J. Clancy Clements and Shelome Gooden

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in Contact Languages

Grammatical and prosodic considerations

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Language change in contact languages

Grammatical and prosodic considerations:
An introduction

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1.   Introduction

The papers in this volume are fully revised and expanded versions of presentations in two panels held at the January, 2006 meeting of the *Society of Pidgin and Creole Linguistics (SPCL)* held in Albuquerque, New Mexico. The first panel was entitled *Grammaticalization, Reanalysis, and Relexification* and the second *Prosodic Change in Creole Languages: Implications for Creole Formation.* The link between the two sets of papers is the common interest in the perennial problem in contact linguistics, especially in Creole studies, related to the development of systems (grammatical and prosodic) in contact varieties. The studies make interesting and meaningful contributions to the understanding of prosody, grammaticalization, and reanalysis in contact-induced language change. Several Caribbean Creole languages are discussed as well as a second language variety, Singapore English.

The juxtaposition of papers on both prosodic and morphosyntactic issues underscores our position that, in examining change in contact languages, grammar is best viewed as a whole. Following Lahiri (2000), we propose that this should be done even if that change only involves a specific lexical item. Thus, restructuring at different levels of the linguistic system — for example, the reanalysis of Fongbe morphemes in Haitian Creole, the transfer of Gbe tones in Saramaccan, or the reinterpretation of an HL melody as the boundaries of an accentual phrase in Trinidadian Creole — should not be seen as unrelated or as different types of change but rather changes that affect a given linguistic system as a whole.

At the same time, in dealing with grammaticalization, reanalysis, and relexification (GRR), the question arises as to whether or not these processes occur independently of one another. Regarding the first two processes, we follow Haspelmath (1998) in assuming that, although grammaticalization and reanalysis may often occur together and appear intimately linked, they are independent processes. In

other words, grammaticalization may or may not involve syntactic restructuring. Both these processes are fundamentally different from relexification, which is, essentially, the process of relabeling according to Lefebvre (this volume).

Not all the GRR studies operate with the same definitions. The main difference we perceive seems to stem from the formalist or functionalist approach adopted by the individual researchers. Croft (1991:17–32) notes that a key difference between formalist and functionalist perspectives is that the former operates with the notion of a universal absolute using discrete definitions while the latter operates with the notion of a prototype and gradient scales. Coming from a generativist perspective, Lefebvre offers discreet, clear-cut definitions of the phenomena in question, highlighting the differences among them. A case in point is her distinction between *transfer* and *relexification*: relexification of a lexical item or functional element constitutes relabeling and consists of an individual speaker assigning a lexical entry of his/her L1 a new label drawn from an L2; by contrast, transfer refers to the use of features of an individual's L1 in an L2 s/he is speaking or acquiring. By contrast, using a usage-based model Bao discusses two of the three functions of Chinese *de* as expressed by Singapore English (SE) *one*. While in Lefebvre's model this would be a case of transfer, in Bao's study the distinction between transfer and relexification seems less important than the features the two phenomena share. After establishing that the pronominal and emphatic functions of Chinese *de* are found in SE *one*, Bao shows that the frequency of the different uses is predictable based on the converging vs. diverging structures in the two languages in contact. He appeals to a usage-based model of relexification to account for this, assuming that relexification can be variable and partial.

In all the GRR studies in this volume, structure is of course a key concern, whether it be morphosyntactic structure or argument structure. Similarly, we consider changes in the prosodic system as changes in the structure of the languages. We take the view that prosody is *not* the suprasegmental property of utterances, but a hierarchical organization of phonologically defined units such as the mora, syllable or intonational phrase, i.e. phonological structure (cf. Selkirk 1984). This phonological organization of utterances has been recognized in the literature as part of the grammatical system of languages (cf. Warren 1996, among others). In fact, Beckman (1996) argues that prosody is itself a grammatical structure which needs to be interpreted (by listeners) as part of the structure of utterances. She goes further to suggest that prosody is language specific and is typically affected by language contact. We recognize also that there are different prominence relationships across syllables in a word and across words in a sentence and that these prominence relationships may differ across languages. Thus, we reserve the term *suprasegmental* for phonetic features such as fundamental frequency (perceived pitch), duration, amplitude and segmental properties of consonants and vowels

which serve as cues to prosodic structure and different prominence relationships. For example, in their paper Gooden, Drayton and Beckman show that although Trinidadian Creole and Jamaican Creole have different prosodic structures, wherein only Trinidadian has an accentual phrase, they both have stress systems and stress is realized in both languages with low pitch and longer segment durations. We focus attention on prosodic typology at the lexical and post-lexical levels, and consider how the languages in question might be classified.

Making these classifications is not a simple matter. Van der Hulst (1999) points out that scholars interested in the typology of prosodic systems must at some point unravel the distinction between lexical *tone* and *stress*. He poses two questions of primary interest to us: first, at what point do we say that a system has lexical tone? and, second, at what point do we say that a system is accentual? The contributors have different treatments of tone and accent, focusing on the phonetic correlates, the functional aspects or both and they do not work within the same framework. There is general agreement, though, that the specification of a language with lexical pitch or lexical tone is independent of its specification with stress. Thus, the prosody papers are able to account for cases where languages display complex interactions between lexically specified contrasts and prosodic structure. The description of these creole languages thus supports the idea that the traditional tripartite classification of prosodic systems into lexical tone, lexical pitch-accent and stress, is insufficient to capture the full array of patterns such that a language may be specified with one or none of these properties, and further that even these specifications can be achieved in different ways (cf. Hyman 2006, Gooden, Drayton and Beckman, this volume). Several of the papers also discuss phrase level prosody and its interaction with word level prosody in the languages.

In this introduction we first give an overview of grammatical processes of change in contact language (Section 2) and a summary of research on prosody in Creoles with specific reference to language contact (Section 3). Section 4 summarizes the papers in this volume, starting with the GRR papers (Section 4.1), followed by the papers on prosody (Section 4.2). A summary is given in Section 5.

2.   The processes of GRR in contact languages

The focus of all the studies in this section is to examine the contribution of contact-induced language change to the understanding of grammaticalization, reanalysis, relexification, and transfer. The studies range from Claire Lefebvre's qualitative study addressing all three phenomena and others, to Adrienne Bruyn's paper on various developments found in Sranan that illustrate different kinds of grammaticalization, to two corpus-based analyses, one by Bao Zhiming on the development

of *one* in Singapore English, and the other by Stephen Matthews and Virginia Yip on the emergence of aspectual *already* and the functional element *give*. This last study also discusses processes operating in bilingual development at the individual level and how these interact with grammaticalization in a language contact situation. Each of the studies in this part focuses on different aspects of the phenomena of GRR. In section (4) we will briefly summarize the studies, highlighting the main points of each.

All the GRR studies assume grammaticalization to be a process whereby either a lexical item undergoes a number of changes on its way to becoming a type of grammatical marker or a grammatical marker becomes another grammatical marker. (For a critique of grammaticalization, see Newmeyer 1998, and Campbell and Janda 2001.) According to Heine and Kuteva (2005:15), grammaticalization has four parameters:

a. extension, i.e. the rise of novel grammatical meaning when linguistic expressions are extended to new contexts
b. desemanticization (or "semantic bleaching"), i.e. loss (or generalization) in meaning content
c. decategorialization, i.e. loss in morphosyntactic properties characteristic of lexical or other less grammaticalized forms, and
d. erosion (or "phonetic reduction"), i.e. loss in phonetic substance

For the most part, the phenomena discussed by the four contributors fit within the characterization above. One exception to this may be what Adrienne Bruyn calls 'apparent grammaticalization' in creoles. For example, in Sranan the verb for 'give' is also used as the preposition 'for'. As Bruyn explains, this instance of verb-to-preposition grammaticalization was part of the substrate and both the verb and the related preposition found their way into Sranan, as a case of relexification. Thus, while for all GRR papers reanalysis, or syntactic restructuring, is relevant, only those by Lefebvre and Bruyn focus on issues involving full relexification, though Bao does discuss what he calls partial relexification.

An important aspect of the GRR studies involves the distinction between individual vs. community-wide solutions to the problem of oral communication. Lefebvre addresses the issue directly: she distinguishes between the multiplicity of solutions at the individual level vs. the leveling of distinctions through propagation at the community level (cf. Siegel 1997). In her model, this distinction forms part of relabeling, a phenomenon she considers independent from grammaticalization or reanalysis. Bruyn's study deals with data that already assume a community-wide solution, whereas the studies by Bao and Matthews and Yip are case studies that focus on individual solutions, although they may be interpreted in some cases as reflecting a community-wide solution.

Regarding the important question of language-internal vs. contact-induced grammatical change, Bruyn's *apparent grammaticalization* and the cases of *relexification* discussed in the contributions by Lefebvre and Bao assume language contact and can arguably only be found in contact languages. However, it has been made abundantly clear that grammaticalization and reanalysis are part and parcel of language-internal change (cf. Bybee 1985; Bybee, Perkins and Pagliuca 1994; Hopper and Traugott 2003; Heine and Kuteva 2005, among various others).

3.   Prosody in Creole languages

Creolists have always had an interest in the prosodic properties of creole languages and as with other areas of the grammar, have wondered about the influences of the contributing languages on the resultant systems. Thus, the role of prosody in the formation of creole languages and the classification of their prosodic systems with respect to their input languages, are issues which have been somewhat of the proverbial 'thorns in the flesh' for researchers. Although research on creole language prosody spans a period of more than 40 years, there has been less research in this area when compared to other areas. Much of the earlier works have concentrated on broad descriptions and analyses of the systems. These works included Voorhoeve's (1961) and Roundtree's (1972) descriptions of lexical tone in Saramaccan; stress in Jamaican Creole by Lawton (1963) and Wells (1973). Later works included more analyses as well as descriptions of even more varieties, such as Carter's several papers in the 1980s, Devonish (1989) on Guyanese Creole; Rivera-Castillo (1988), Römer (1991), Maurer (1998 in Rivera-Castillo this volume) on Papiamentu; Ham (1999) on Saramaccan, Sutcliffe (2003) on Jamaican. Much more recently, researchers have begun to include acoustic-phonetic analyses as well as phonological data in their research in order to shed light on the precise nature of the prosodic systems of these languages. These include Devonish (2002), Pickering and Rivera-Castillo (2004), Remijsen and Van Heuven (2005) among others on Papiamentu; Gooden (2003, 2007a, 2007b) on Jamaican Creole; Good (2006) on Samaraccan; Drayton (2006) on Trinidadian Creole; Prescod (2006) on Vincentian Creole.

This renewed interest in prosodic descriptions of the languages has also raised questions about the path of development of these systems and influences of the contributing languages (Gooden 2006). Since in most cases (at least for Atlantic Creoles) we were dealing with European stress languages and West African lexical tonal languages as inputs, the question becomes whether the resulting creoles developed lexical tone systems, stress systems, novel systems resulting from contact, or some other type of system not resulting from contact (Gooden 2006). Although these questions reveal in some sense a bit of naiveté since neither stress languages

nor tone languages are monolithic groups (Hyman 2006), there is a sense in which these are questions which the field must ask and address in some way. Indeed, a survey of the descriptions of the prosodic systems of Caribbean Creoles yields varied results. There are reports of at least 2 types of stress-accent systems, differentiated by presence/absence of an accentual phrase, and lexical tone systems of at least two types, differentiated by the specification of tones and their function in the languages.

Realizing the importance of this line of inquiry to Creolistics, prominent researchers such as Cassidy (1961), Cassidy and LePage (1967) and DeCamp (1974) have in their tenure with us called for more research in the area of creole phonology in general. Similarly, Singh and Muysken (1995) called for more research into the phonology of creole languages and for the research effort to be as rigorous as it has been for research on morphosyntactic areas of the grammar of these languages. In addition, they called for a reassessment of theories of creole formation vis-a-vis findings from phonological research. The papers on prosody can thus be viewed as a partial response to that. The main issue which the papers address is the whether and how language contact has influenced the prosodic systems of the languages. This is a reasonable question since we have seen evidence of purported influences in other aspects of the phonological system of these languages. For example, Holm's (1998) survey showed that the seven-vowel system of Haitian Creole is similar to that of its Fongbe substrate rather than its French superstrate and the Ndyuka five-vowel system is more similar to a Kikongo system than to the Gbe system. Similarly, typologically rare prenasalized and doubly-articulated stops not seen in superstrate languages show up in creoles like Fa d'Ambu, Palenquero and Saramaccan in the case of prenasalized stops and Saramaccan and Principe in case of doubly-articulated stops. (See Smith and Haabo 2007 for a recent discussion of implosives in Saramaccan).

Similar discussions have been presented in the Second Language Acquisition (SLA) literature as well, with analogous concerns about the mechanisms of change and explanation of patterns seen in second language (L2) phonologies. For example, Peng and Ann (2001) explain the stress patterns in three L2 English varieties from a structural perspective pointing to differences in vowel length in the input variety. Their view appears to support universal principles rather than a transfer approach, which they reject as an explanation for the patterns observed. They also review work that shows that first language (L1) Mandarin speakers tend to place a high-level tone (55 in the Chao system) where English words would have primary stress. Ham (1999) reports a similar phenomenon in Saramaccan. While their views on prosody are not all together in sync with those we propose here, they do raise important questions which scholars of language change ought to consider. Similarly, Queen (2001) argues for 'transfer' as the mechanism by which

intonation patterns of Turkish-German bilingual children incorporate elements of both German intonation and Turkish intonation in their speech. Her precise term is *fusion*, used to account for influence from both input languages.

In the spirit of transfer, Winford (2003:319) supports the idea that creole phonology is the result of varying degrees of restructuring of superstrate input in terms of substrate categories and phonological rules, a case of classic L1 influence, i.e. transfer. Further, where there is incongruence between the superstrate and the substrate sound, Winford proposes that the substrate sound is substituted. He briefly discusses segmental phonology, phonotactics and syllable structure and in less detail, prosody. Regarding prosody, he suggests that there are some respects in which the prosody is influenced by substrate languages.

Thus, the general theme in accounting for the (prosodic) phonology of contact-induced language systems is one of transfer. Still, Singh and Muysken (1995) ask whether it is wise for us to assume a priori that there is transfer from either substrate or superstrate into the new language system. Similarly, Bruyn (this volume) submits an important cautionary note that our examinations of the languages today are essentially synchronic reflections of diachronic changes. As a result, Bruyn suggests that it is crucial that the actual route of development be considered in our analyses.

The prosody papers raise several issues in this regard which should stimulate thought, discussion, and research in this area:

a. at what point in time do particular phonetic properties become part of the phonological grammar of the languages, in this case the prosodic system?
b. how was this achieved, what are the mechanisms of prosodic change, and can we speak of reanalysis and eventually incorporation into the system in these cases?
c. what do internal processes of prosodic change look like? and conversely
d. what do external or contact-induced processes look like?
e. how can we separate out changes due to universal processes?

In reference to grammaticalization, Bybee (2006) asks whether there was a way to predict which features would survive from the substrate or superstrate varieties. We can ask this question of the prosody as well. In fact, Van Coetsem's (1988) framework for language contact predicts that the phonology like the syntax is among the more stable parts of the language system. In his framework, it is these more stable domains of the system that are said to be resistant to change under language contact. In what can be considered a more conservative approach, Thomason and Kaufman (1998) predict that contact-induced change can affect all aspects of the linguistic system constrained only by sociohistorical factors, *not* structural constraints. This predicts that the extent to which certain systems are transferred depends on the nature of the contact situation. The papers explore how, or if, this is borne out by the prosodic systems of contact languages.

4.   Papers in this volume

4.1 Grammaticalization, reanalysis, and relexification

In the first paper in this section, Claire Lefebvre discusses the contribution of grammaticalization, reanalysis, and relexification to the understanding of creole genesis and development, as they apply to the formation and development of one Indian Ocean creole and various Atlantic creole languages, in particular Haitian Creole. She argues that relexification plays a major role in the genesis of creole languages, with the proviso that her analysis applies only to radical creoles, i.e., those creoles that 'display extreme divergence from their lexifier languages' (Winford 2003:307). She addresses the questions of whether relexification, which she also calls relabeling, is applicable to items belonging to lexical as well as functional categories, whether the process of transfer is operative in creole genesis, whether partial relexification is possible, and finally whether or not grammaticalization and reanalysis are distinct processes. The more commonly accepted cases of relabeling involve lexical items, but Lefebvre finds that functional items can also undergo relabeling, as long as in the superstrate language there is a semantically and syntactically 'appropriate form' to relabel the substrate lexical entry. In support of her argument that functional items can be relabeled, she contrasts in detail the significant differences in use and order between French and Haitian determiners on the one hand, and the identical use and order of Haitian and Fongbe determiners on the other, arguing that the Haitian forms are relexified Fongbe forms. She suggests that relexification in situations where radical creoles emerged is a strong tendency but is not an absolute, noting the exception of null subjects. External factors, she remarks, can and do play a role in increasing or decreasing the extent of relexification in particular contexts. As to whether the process of transfer is involved in creole genesis of the type focused on in her study, Lefebvre claims that is does not play a role. Recall that her notion of transfer refers to the use a speaker makes of features in their own language as they are speaking or acquiring another language. That is, while relabeling leaves the semantic content of a lexical or functional element untouched, transfer by Lefebvre's definition means that not all features belonging to a lexical item of an L1 are transferred into the L2 when a speaker of L1 is speaking in the L2 .

Since Lefebvre contends that to a large extent we find relabeling and not transfer in radical creoles, she appeals to leveling in order to account for those cases in which relabeling also involves a change in the semantics of the substrate item. Lefebvre assumes that relabeling occurs individually, that each individual speaker of the substrate languages relabels his or her own lexicon. In this process, speakers of the various substrate languages may introduce idiosyncratic semantic and

syntactic properties, making the result of relabeling non-uniform across the early creole community. Thus, one and the same lexical item may have slightly different properties from one speaker to the next. Over time, these differences are leveled, the result of which can sometimes mean that the semantic content of a lexical or functional item in the collective relabeling and leveling processes is distinct from the corresponding semantic content of the substrate languages, especially if there is divergence of semantic content in the different substrate languages involved. In Lefebvre's view, this set of processes found in creole formation is different than transfer, although the outcome of it may look like transfer. Such cases, argues Lefebvre, are also not instances of 'partial relexification', since by definition relexification (i.e. relabeling) involves no semantic change whatsoever.

Lefebvre also addresses the relation of relabeling to grammaticalization and reanalysis. Following Haspelmath's (1998) argument that grammaticalization and reanalysis are separate and distinct processes, Lefebvre views the former as either abrupt or gradual and initiated by either adults or children, and the latter as only abrupt and initiated only by children.

Thus, relabeling is the assignment of a new label to a lexical or functional element without any change in content. By contrast, in grammaticalization either a functional category label is assigned to an already-existing lexical element or a new functional category label is assigned to an already-existing functional element. According to Lefebvre, transfer can occur in the process of grammaticalization. For example, in her view if a functional element develops from an already-existing one in a contact situation, it may contain properties of the original substrate functional element through transfer.

In her contribution, Adrienne Bruyn examines various cases in the formation and development of Sranan as illustrations of the processes and mechanisms found in a creole language that could be interpreted as grammaticalization. While she acknowledges that cases of "ordinary" grammaticalization are found, citing the development of the definite article in Sranan, in other cases, such as the emergence of the Sranan indefinite article, Bruyn provides quantitative evidence suggesting that its formation was rapid and that substrate patterns may have provided a model. She also discusses the development of Sranan adpositions, suggesting that it represents a kind of relexification which she calls "apparent grammaticalization" (Bruyn 1996), which others have variously referred to as "calquing" (Keesing 1991) or "polysemy copying" (Heine and Kuteva 2005). For example, the Sranan word *taki* (< English *talk*) is used as a complementizer 'that', modeled on languages such as Gbe and Twi. Such cases of apparent grammaticalization happen, according to Bruyn, in three steps:

1. grammaticalization of item X has already occurred in language A

2.   item Y in language B is identified with item X
3.   a range of functions is transferred from item X to item Y

In this model, *taki* in Sranan would be a case of apparent grammaticalization, but could also be viewed as a relexification of the word 'say' from languages such as Gbe or Twi, along the lines sketched by Lefebvre. The Sranan postpositions *baka* 'back', *ini* 'in', *ondro* 'under', and *abra* 'opposite, across' however were incorporated through relabeling.

Bruyn discusses recent research carried out on grammaticalization by Heine and Kuteva (2005) that argues that contact-induced grammaticalization does not differ in essence from internally motivated processes of grammatical change in that both make use of the same conceptual sources and proceed in accordance with the same principles of unidirectionality and gradualness (see also Hopper 1991). However, Bruyn notes that in focusing on the similarities any differences are disregarded and the particularities of contact-induced change go unacknowledged. Specifically for creoles, Bruyn argues that there are reasons to question the assumption that synchronic phenomena necessarily reflect gradual, language-internal developments. The development of the Sranan indefinite article and the case of Sranan adpositions are illustrations of this. A further illustration is the Sranan preverbal tense marker *ben* (< English *been*). This functional element displays no traces of any use in Sranan other than a tense marker. Bruyn interprets this as implying that there has been a shortcut from the English past participle, with all its functions, directly to the function of a tense marker, without any evidence of gradual development based on the usage of the form within Sranan itself. Bruyn follows Detges (2000) in considering this a case of reanalysis without grammaticalization.

The other contributions in the GRR set are two case studies that examine the emergence of elements in a contact variety of English. Bao Zhiming's paper examines the grammar and usage of *one* in Singapore English (SE). He argues that SE *one* reflects, on the one hand, the grammar of Chinese *de* filtered through standard English morphosyntax (constrained by universal markedness), and, on the other, the frequency of use of standard English *one* rather than that of *de* in Chinese. However, SE *one* does not reproduce all three functions of Chinese *de* (pronominal, emphatic and pre-modification functions), but rather only the first two. Based on Lefebvre's definition, SE *one* constitutes a case of transfer and Bao also considers it a case of transfer.

Apart from the functions of SE *one* just mentioned, Bao examines its relative frequency of use compared to that of Chinese *de* and SE *one*. Based on the frequency of occurrence of *de/one* in Chinese, SE, and English, Bao argues that the frequency of use of SE *one* is constrained by use in English (see his Table 3).

Moreover, he shows that the acceptability judgments of certain frames by SE speakers correlate with the frequency of use. That is, when the frames are convergent in structure, they are accepted as grammatical by SE native speakers and exhibit normal productivity. However, when the frames are divergent in structure, they are either accepted as grammatical but exhibit low productivity or they are rejected as ungrammatical and are therefore not used at all in daily discourse. In this respect, the use of SE *one* is more akin to the frequency of use in English than in Chinese. Bao argues that both the structure of SE *one,* as well as the frequency effects on acceptability of structures by native SE speakers follow directly a usage-based model of relexification, or exponencing based on exemplar theory.

A significant contribution of Bao's study is that he is able to predict the level of productivity of certain frames in which *one* appears based on typological considerations. Specifically, he shows that both the structure of English and a typological implicational universal constrain the frame N [XP-*one*] in that they conspire to limit the development of XP-*one.* Bao argues that this frame cannot develop into a robust grammatical feature of SE precisely because of the specific and general constraints in place. Further, he notes that the relexification model can predict substratum convergence in structure, but it fails to provide an adequate account of the frequency effects, which follow directly from the exemplar-based model of relexification. However, given that SE *one* would be considered a case of transfer for Lefebvre, it might not be subject to any predictions generated by her relexification model.

The second case study, by Stephen Matthews and Virginia Yip, also involves Singapore English (referred to by them as Singapore Colloquial English or SCE). The study focuses on two grammatical phenomena attested in SCE for which the researchers find parallels in bilingual children acquiring Cantonese and English. Their main concern in this regard is the relationship between grammaticalization in circumstances of language contact and the corresponding processes in bilingual development at the individual level. The two phenomena they see as representative of two kinds of contact-induced grammaticalization are the emergence of *already* as a marker of aspect (a case of 'ordinary' contact-induced grammaticalization) and the development of grammatical functions of *give* (a case of replica grammaticalization as defined by Heine and Kuteva 2003, 2005). They include discussion of *one*, as well, as a case of further grammaticalization in relative clauses.

Matthews and Yip acknowledge the term 'apparent grammaticalization' introduced by Bruyn (1996) and they question this analysis on two grounds. First, there are principles of grammaticalization (cf. Hopper 1991) that cover such cases, principles such as DIRECTIONALITY, PERSISTENCE, DIVERGENCE, and LAYERING. Directionality refers to the fact that change is overwhelmingly from lexical to grammatical, and grammatical to more grammatical. Persistence states that a

grammaticalized form may retain characteristics of the lexical source from which it derives. According to divergence, a grammaticalized form can gradually diverge from its lexical sources in form (for example, by undergoing phonological reduction) and other properties. Layering states that grammaticalization introduces a new layer which coexists with older layers within the same functional domain, often resulting in specialization. These principles are operative for internal as well as contact-induced grammaticalization. According to Matthews and Yip, one key difference between the two kinds is that the first does not necessarily fill any functional gap whereas in the second 'gap-filling' is considered a motivating factor. In the cases of bilingual acquisition they study, they find evidence of gap-filling in the developmental systems of their informants. As in Bao's study, Matthews and Yip also bring up the question of frequency. They note that while in language-internal grammaticalization frequency plays a key role, this does not hold for contact-induced cases of grammaticalization they examine. Rather, the grammaticalized model already existed for bilingual speakers in the substrate language and can be transferred into the replica language, regardless of its frequency. They find that even low-frequency grammatical usages (e.g., the passive use of 'give' verbs in Chinese dialects) can be transferred to the replica language. Thus, the respective findings discussed by Bao on the one hand, and Matthews and Yip on the other, suggest that contact-induced grammaticalization is not a uniform phenomenon. What is underlying these differences is not clear. It may have to do with what is being grammaticalized in each case, or with individual differences of the speakers. Further research is needed to sort out this divergence.

4.2 Prosody

The papers on prosody evaluate whether there are changes in the prosodic system of Caribbean Creoles that can be attributed to contact-induced language change. The focus is on the classification of the outcomes of language change rather than on the processes (e.g. reanalysis, borrowing etc) of change themselves, though there is some discussion of this as well. Four creoles are discussed ranging from English-lexicon creoles to an Ibero-Romance creole representing varying degrees of divergence from input languages. Together they represent stress systems and lexical tone systems. Even within these small sets, there is variation in both types of prosodic systems, i.e. the stress systems are different from each other in the type of post-lexical tones associated with stressed syllables and in the type of associated prosodic structure. The tone systems are different by the degree of lexical specification of tone and its function in the languages, and in addition, both languages also have stress.

The first paper by Gooden, Drayton and Beckman, is essentially a theoretical one and sets the tone for the rest of the papers in this section. The paper gives an overview of the autosegmental metrical (AM) view of intonational phonology under which theory their review of several languages is subsumed. This aspect of their paper will be familiar to those who are conversant with the subject area but serves as a good review to allow other readers to make sense of the materials discussed in this section. Gooden, Drayton and Beckman give an overview of the typology of prosodic systems focusing on the organizational functions of prosody. They draw on the AM analysis of several languages including Beijing Mandarin, Cantonese, Tokyo Japanese, Stockholm Swedish and Basque which differ by the type and degree of lexical specification of prosody, i.e. lexical stress (e.g. English), lexical tone (e.g. Cantonese) and lexical pitch accent (e.g. Tokyo Japanese). Further, they point out that the kind of prosodic variation observed across related creole languages is analogous to the kind of variation seen across these unrelated languages. According to them, this presents challenges to the analyst who wishes to categorize the prosodic system of creole languages. The identified challenges are as follows:

a. language contact creates an environment that may be rife with parsing ambiguities such that there might be misinterpretation/reanalysis of prosodic structures as well as misinterpretation/reanalysis of the suprasegmental cues to these structures;

b. in the prosodic domain, languages differ in a number of ways both in terms of the density of tone specification and tone function which leads to different classifications of languages. This means that language contact can lead to change along these very dimensions by which languages vary;[1]

c. since markers of prosodic domains in non-stress languages might be misinterpreted as stress by learners, synchronic stress contrasts need not have developed from diachronic stress contrasts; and finally

d. acoustic cues to focus marking can involve prominence markers at several levels of the prosodic hierarchy, they differ crosslinguistically and so are potentially subject to the forces of language change. This means that a study of word prosody in contact-induced varieties must also include words that are not produced under prosodic focus.

Gooden, Drayton and Beckman maintain that the nature of prosody is inherently variable so that observed variability in contact languages need not be the result of language contact (interference, transfer) explanations of language change. A significant claim of this paper then is that not all prosodic variability across Caribbean creole varieties is necessarily a case of contact-induced change.

Yolanda Rivera-Castillo's paper discusses the prosodic typology of Papiamentu, which she categorizes as having a system intermediate between a traditional lexical tone system and an intonation-only system, hence her classification as a *restricted-tone* system. Rivera-Castillo discusses several criteria by which the typological classification for Papiamentu is made, which include phonetic analyses of several words and phrases. She provides a survey of the distribution of lexical tone in Papiamentu and discusses properties of the prosodic system at both the lexical and post-lexical levels. For example, she points out that tones in the language are lexically determined and are typically of two types HL or LH and further that stress affects tone placement and level. Papiamentu also has intonational tones which have discourse-pragmatic functions. Lexical contrasts in the language have both differences in tone level for some minimal pairs and differences in stress placement for others. These differences depend primarily on syntactic category and length of the word regardless of the lexifier language. Thus, stress occurs mainly on the penultimate syllable of words, but has a distinctive function for some categories (noun vs. verb). Stress also displays characteristics of stress systems like clash avoidance. Rivera-Castillo argues that Papiamentu stress also involves accent, since stress is attracted to accented syllables with H-tone. The fact that Papiamentu has both stress and lexical tone is attributed to a *reinterpretation* of input from intonational lexifier languages (Spanish and Portuguese) and tonal substrate languages (West African).

Jeff Good's paper discusses Saramaccan prosody from a historical perspective and also questions the path of development for its proposed split prosodic system. He argues that Saramaccan has a largely accentual system into which a tonal subsystem has been incorporated. Good's paper is the only one that explicitly proposes a mechanism of change for the prosodic system in question, in this case *transfer*. In the part of the lexicon marked by pitch-accent, the transfer is from European accent systems and in the part of the lexicon marked by lexical tone, the transfer is from West African tone systems. The proposal is supported by discussion of the historical development of the language. However, while Good supports the transfer view of prosodic change, he explicitly rejects the idea that the transfer itself is a product of the formative period of the language, i.e. creolization. Instead, he attributes the transfer to a later period in the development of the language, post-marronage. Good argues that during this period lexical items of pre-Saramaccan were 'systematically' replaced with new items in an effort to make them distinct in 'sound' by making them more African. In this sense, Good's arguments are reminiscent of a relexification proposal. In fact, comparison is made to Parkvall's (2000 cited in Good this volume) relexification explanation for the presence of Kimbundu items in Sãotomense. Finally, Good argues that it is the sociolinguistic context of the post-marronage era which motivated the prosodic

change towards a more African-type system, i.e. tonal, and thus contributed to the creation of 'a new Saramaccan linguistic identity'.

An obvious gap here is a description of non-Atlantic Creoles. However, the reader is referred to papers in Plag and Bhatt (2006) for some discussion on prosody in non-Atlantic Creoles. Devonish (2002) also provides a theoretical discussion on the prosodic development of West African Creoles.

5.   Summary

With this collection of studies, obviously not all creole languages or cases of contact-induced language change are addressed. On the one hand, the papers reflect the expertise of the panelists involved in the two SPCL special sessions. On the other, this work showcases the significant advances that pidgin and creole linguistics has experienced in the last decade. Indeed, the evolution of this field has now widened to encompass a much wider range of contact phenomena. Winford's (2003) *Introduction to Contact Linguistics* attests to this evolution. We have edited this collection of works with the hope that its publication in a non-pidgin/creole venue will make it available to a wider audience and thus add to debates in dialectology, historical linguistics, and language acquisition, among other fields. The fact that the studies highlight differences among creoles should in no way be understood that we advocate the view that certain structural criteria distinguish creoles from non-creole languages. Rather, the focus is meant to highlight the different degrees of restructuring languages might undergo as a result of language contact as well as the variety of effects that might be observed in the resultant grammatical and prosodic systems.

We hope that the papers in this volume will add to the trend of discussions and research on new views on development and change in contact languages, in addition to the testing of new methodologies and the exploration of language change brought about by speakers of different languages in contact.

Note

1. A reviewer pointed to us that a possible extension of this is that covariation of properties and dual function in input languages means that changes in the typological classification might be a gradient process for both grammatical and prosodic aspects of contact languages.

References

Bruyn, Adrienne. 1996. On identifying instances of grammaticalization in creole languages. *Changing meanings, changing functions: Papers related to grammaticalization in contact languages*, Philip Baker & Anand Syea (eds.), 29–46. London: University of Westminster Press.

Bybee, Joan. 2006. Respondent to Special SPCL Session *Grammaticalization, Reanalysis, and Relexification in Contact-induced Language Change*. Paper presented at the LSA/SPCL Meeting, January 6–7. Albuquerque, New Mexico.

Bybee, Joan. 1985. *Morphology*. Amsterdam: John Benjamins.

Bybee, Joan; Revere Perkins & William Pagliuca. 1994. *The evolution of grammar. Tense, aspect, and modality in the languages of the world*. Chicago IL: University of Chicago Press.

Campbell, Lyle & Richard Janda. 2001. Introduction. Conceptions of grammaticalization and their problems. *Language Sciences* 23(2–3):93–112.

Carter, Hazel. 1980. How to be a Tone Language: Theoretical considerations involved in the classification of Creole languages as tonal (or otherwise). Paper presented at Society for Caribbean Linguistics, Aruba.

Carter, Hazel. 1983. How to be a Tone Language: Theoretical considerations involved in the classification of Creole languages as tonal (or otherwise). *Studies in Caribbean Language*, Lawrence Carrington (ed.), 90–111. Society for Caribbean Linguistics.

Carter, Hazel. 1987. Suprasegmentals in Guyanese: some African comparisons. *Pidgin and Creole Languages*, Glen Gilbert (ed.), 213–63. Honolulu HI: University of Hawaii Press.

Cassidy, Frederick. 1961. *Jamaica talk: Three hundred years of the English language in Jamaica*. London: Macmillan.

Cassidy, Frederick & LePage, Robert. 1967. *Dictionary of Jamaican English*. Cambridge: CUP. (Reprinted in 1980).

Clements, J. Clancy. 2006. The lexicalization — grammaticalization continuum. *History, society, and variation in pidgins and creoles*, J. Clancy Clements; Thomas Klingler; Deborah Piston-Hatlen & Kevin Rottet (eds.), 77–101, Amsterdam: John Benjamins.

Croft, William. 1991. *Syntactic categories and grammatical relations: The cognitive organization of information*. Chicago IL: University of Chicago Press.

Croft, William. 1998. Event structure in argument linking. *The projection of arguments: Lexical and compositional factors*, Miriam Butt & Wilhelm Geuder (eds.), 21–63. Stanford CA: CSLI.

DeCamp, David.1974. Neutralization, Iteratives and Ideophones: The locus of language in Jamaica. *Pidgins and Creoles: Current trends and prospects*, David DeCamp & Ian Hancock (eds.), 46–50. Washington DC: Georgetown University Press.

Detges, Ulrich. 2000. Two types of restructuring in French creoles: A cognitive approach to the genesis of tense markers. *Degrees of restructuring in Creole languages,* Ingrid Newmann-Holzschuh & Edgar Schneider (eds.),135–162. Amsterdam: John Benjamins.

Devonish, Hubert. 1989. *Talking in tones: A study of tone in Afro-European Creole languages.* London: Karia Press.

Devonish, Hubert. 2002. *Talking rhythm stressing tone: The role of prominence in Anglo-West African Creole languages*. Jamaica: Arawak Publications.

Drayton, Kathy-Ann. 2006. Word level prosody in Trinidadian English Creole: A phonetic analysis. Seminar paper, University of the West Indies: St. Augustine, Trinidad.

Good, Jeff. 2006. The phonetics of tone in Saramaccan. *Structure and variation in language contact*, Ana Deumert & Stephanie Durrleman (eds.), 9–28. Amsterdam: John Benjamins.

Gooden, Shelome. 2003. The phonology and phonetics of Jamaican Creole reduplication. PhD Dissertation, The Ohio State University.

Gooden, Shelome. 2006. Introduction to Special SPCL Session, *Prosodic descriptions of Creole languages: Implications for Creole formation.* Paper presented at the LSA/SPCL Meeting, January 6–7. Albuquerque, New Mexico.

Gooden, Shelome. 2007a. Morphophonological properties of Jamaican Creole reduplication. *Synchronic and diachronic perspectives on contact languages,* Magnus Huber & Viveka Velupillai (eds.), 67–90. Amsterdam: John Benjamins.

Gooden, Shelome. 2007b. Intonational phonology of Jamaican Creole: An autosegmental metrical analysis. Paper presented at the Satellite Workshop of ICPHS XVI, August. Saarbrücken, Germany.

Ham, William.1999. Tone sandhi in Saramaccan: A case of substrate transfer? *Journal of Pidgin and Creole Languages* 14: 45–92.

Haspelmath, Martin.1998. Does grammaticalization need reanalysis? *Studies in Language* 22(2): 315–351.

Heine, Bernd & Tania Kuteva. 2003. On contact-induced grammaticalization. *Studies in Language* 27:529–572.

Heine, Bernd & Tania Kuteva. 2005. *Language contact and grammatical change*. Cambridge: CUP.

Holms, John. 1998. *Introduction to Pidgins and Creoles*. Vol. 1. Cambridge: CUP.

Hopper, Paul. 1991. On some principles of grammaticalization. *Approaches to Grammaticalization,* Vol. I, Elizabeth Traugott & Bernd Heine (eds.), 17–35. Amsterdam: John Benjamins.

Hopper, Paul J. & Elizabeth Close Traugott. 2003. *Grammaticalization* (2nd edition). Cambridge: CUP.

Hyman, Larry M. 2006. Word-prosodic typology. *Phonology* 22: 225–257.

Keesing, Roger M. 1991. Substrates, calquing and grammaticalization in Melanesian Pidgin. *Approaches to grammaticalization*, Vol. 1: *Focus on theoretical and methodological issues,* Elizabeth Close Traugott & Bernd Heine (eds.), 315–342. Amsterdam: John Benjamins.

Lahiri, Aditi. 2000. *Analogy, levelling, markedness: Principles of change in phonology and morphology*. Berlin:Mouton de Gruyter.

Lawton, David. 1963. Suprasegmental phenomena in Jamaican Creole. Phd dissertation, University of Michigan.

Newmeyer, Frederick J. 1998. *Language form and language function*. Cambridge MA: The MIT Press.

Peng, Long & Jean Ann. 2001. Stress and duration in three varieties of English. *World Englishes* 20(1): 1–27.

Plag, Ingo & Parth Bhatt. 2006. (eds). *Sprachtypologie und Universalienforschung* 59(2).

Prescod, Paula. 2006. Stress assignment and functions of pitch in Vincentian Creole. *Sprachtypologie und Universalienforschung* 59(2): 191–210

Queen, Robin. 2001. Bilingual intonation patterns: Evidence of language change from Turkish-German bilingual children. *Language in Society* 30: 55–80.

Remijsen, Bert & Vincent J. van Heuven. 2005. Stress, tone, and discourse prominence in Curaçao Papiamentu. *Phonology* 22: 205–235.

Rivera-Castillo, Yolanda.1998. Tone and stress in Papiamentu: The contribution of a constraint base analysis to the problem of Creole genesis. *Journal of Pidgin and Creole Languages* 13(2): 1–38.

Rivera-Castillo, Yolanda & Lucy Pickering. 2004. Phonetic correlates of stress and tone in a mixed system. *Journal of Pidgin and Creole Languages* 19: 261–284.

Römer, Raúl G. 1991. *Studies in Papiamentu Phonology*. Amsterdam: The University of Amsterdam.

Rountree, S. Catherine. 1972. Saramaccan tone in relation to intonation and grammar. *Lingua* 29: 308–325.

Selkirk, Elizabeth. 1984. *Phonology and syntax: The relationship between sound and structure.* Cambridge, MA: The MIT Press.

Siegel, Jeff. 1997. Mixing, leveling, and pidgin/creole development. *The structure and status of pidgins and creoles: Including selected papers from the meeting of the Society for Pidgin and Creoles Linguistics*, Arthur Spears & Donald Winford (eds.), 111–149. Amsterdam: John Benjamins.

Singh, Rajendra & Pieter Muysken .1995. Wanted: A debate in Pidgin/Creole phonology. *Journal of Pidgin and Creole Languages* 10(1):157–170.

Smith, Norval & Vinije Haabo. 2007. The Saramaccan implosives: Tools for linguistic archaeology? *Journal of Pidgin and Creole Languages* 21(1):101–122.

Thomason, Sarah G. & Terrence Kaufman. 1988. *Language contact, creolization, and genetic linguistics.* Berkeley LA: University of California Press.

Van Coetsem, Frans. 1988. *Loan phonology and the two transfer types in language contact*. Dordrecht: Foris.

Van der Hulst, Harry. 1999. *Word accent. Word prosodic systems in the languages of Europe,* Harry van der Hulst (ed.), 3–115. Berlin: Mouton de Gruyter.

Voorhoeve, Jan. 1961. Le ton et la grammaire dans le Saramaccan. *Word* 17:146–163.

Wells, John. 1973. *Jamaican pronunciation in London*. Oxford: Basil Blackwell [Publications of the Philological Society XXV].

Winford, Donald. 2003. *An introduction to contact linguistics*. Oxford: Blackwell.

The contribution of relexification, grammaticalization, and reanalysis to creole genesis and development*

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The theory of creole genesis developed in Lefebvre (1998 and related work) is formulated within the framework of the processes otherwise known to play a role in language genesis and language change in general, that is, relexification, grammaticalization and reanalysis. This paper evaluates the respective contribution of these processes to creole genesis and development. The following issues are taken up. Can functional categories undergo relexification? Is the process at work in creole genesis best characterised as relexification or as transfer? Can there be cases of partial relexification? Are grammaticalization and reanalysis distinct processes? Is keeping them separate useful in studying creole genesis and development? How are these three processes articulated with respect to each other in creole genesis and development?

1.   Introduction

Contact-induced changes are those that result from contact between languages rather than from language-internal change (see e.g. Thomason and Kaufman 1991). Borrowing and transfer are the two major processes involved in cases of contact-induced changes. All theories of creole genesis involve a language contact component (see e.g. Lefebvre 2004 Chapter 2). On the one hand, there are those that consider creoles as restructured varieties. These divide into three groups. The first one postulates that, for example, Caribbean creoles have emerged by means of the gradual transformation of the West African languages influenced by the European colonial languages (see e.g. Alleyne 1980; Holm 1988). The second one holds that creoles constitute restructured dialects of their superstrate/lexifier language. For example, in this view, French-based creoles would constitute restructured dialects of French, and so on and so forth (see e.g. Chaudenson 1973, 1983, 1992; Migge 2003). The third one claims that creoles constitute restructured varieties of