Is phonology different?
Untangling a discrepancy in the "simplicity hypothesis"

Jeff Good
jcgood@buffalo.edu
University at Buffalo (The State University of New York)

1 Introduction

[1] Background assumptions (not necessarily uncontroversial)

- [a] If not exactly "right", work like McWhorter (2001a) touches upon something noteworthy.

- [b] Even if we only go so far as to say creoles are "locally simple" (Plag 2008:117), we're still dealing with something pretty important.

- [c] Even if we weaken the claim further to limit it to "canonical" creoles, it's still something to take note of.

[2] The current state of the evidence suggests, in fact, we probably don't need to weaken the claim (Parkvall 2008).

[3] Framing the question

- [a] The useful question is not whether or not creoles are "simple"

- [b] But, rather, *how* they are simple

[4] Big-picture ideas

- [a] They instantiate some cognitively "default" grammar (Bickerton 1984)

- [b] They are "streamlined" in two ways (McWhorter 1998:792)

  - [i] Product of a social environment not favoring grammatical exuberance
  - [ii] Lack of history (i.e., time) to acquire exuberance

[5] Goals of (fairly programmatic) talk

- [a] Introduce problems raised for simplicity by "phonology"

- [b] Develop a typology of complexity

- [c] Apply it to selected cases of creole "simplicity"/"complexity"

- [d] Map out possible refinements to the "streamlining" research program

[6] The "meta-goal": Suggest a reorientation in debates about creole "simplicity"

- [a] Away from an unnecessarily reductionist debate centered around whether the claim is correct or incorrect. . .

- [b] Towards the more complex question: What does this sort of typologizing get us, and how can we make sure we get it right?

[7] In short, the study of pidginization, by requiring us to study simplification, may lead to recognition of a sociolinguistic universal. Simplification may prove to be, not an isolated phenomenon, but one pole of a continuum applicable to outer form in all languages. (Hymes 1971:73).

2 Complex phonology?

[8] From this perspective, it must be concluded that the Creole simplicity hypothesis makes the wrong predictions. The segmental inventories of Creole languages are not simple, notwithstanding a very small number of exceptions. On the other hand, they do not tend to be very complex either. Instead, Creole inventories have a strong affinity to the typological middle. (Klein 2006:18)

[9] Perhaps the most common comment among these replies is that my address of phonology is superficial and preliminary. This is quite true. (McWhorter 2001b:391)

[10] While I still believe that older languages are more complex OVERALL than a crucial subset of creoles, if it is found that older languages can have less complex phonologies than creoles, then it will be interesting and fruitful to seek a principled reason why this should be so in this particular module of language but not others. (McWhorter 2001b:391)

[11] Prosodic complexity

- [a] Comparative studies: Devonish (1989, 2002), Rivera Castillo and Faraclas (2006) (see also Sutcliffe (2003:149–151))

- [b] Kouwenberg (2004), Rivera-Castillo and Pickering (2004), Remijsen and van Heuven (2005) on Papiamentu tone and stress

- [c] Good (2004, 2006) on Saramaccan tone and intonation

- [d] Less striking patterns, but still relevant studies: Gooden (2003), James (2003), Hualde and Schwegler (2008)

[12] Is phonology different?

[13] Conclusion (to anticipate): Probably not. To find out, we need to make sure we're not comparing complex apples with complex oranges.

[14] Parade example, segment inventories (McWhorter 2001a:138–139)

[a] Chechen (see Nichols and Vagapov (2004:19–21))

[i] **Consonants**

p	t	c	č	k	q	ʕ	ʔ
p'	t'	c'	č'	k'	q'		
b	d		g				
m		n					
(f)	s		š	x		ħ	h
v		z	ž			ɣ	
	l	r	j				
		ṛ̥					

Plus: Phonemic length and pharyngealization

[ii] **Vowels**

i	y		u
e			o
ia	oe		uo
		a	
ae		aa	oa

Plus: Phonemic length and nasalization; various vowel combinations

[b] Saramaccan

[i] **Consonants**

p	t	tj	k	kp∼kw
b (ɓ)	d (ɗ)	dj	g	gb∼gw
mb	nd	ndj	ng	
m	n	nj		
f	s			h
v	z			
	l	j		w (hw)

[ii] **Vowels**

i		u
e		o
ɛ		ɔ
	a	

Plus: Phonemic length and nasalization; various vowel combinations

[c] Rotokas (Firchow and Firchow 1969:273)

[i] **Consonants**

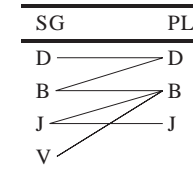| p	t	k
ɓ	ř	g

[ii] **Vowels**

i		u
e		o
	a	

Plus: Phonemic length and nasalization; various vowel combinations

[15] Parade morphology example, noun classes (McWhorter 2001a:139)

[a] Chechen

[i] The Chechen noun class system (based on data from Johanna Nichols)

[ii] *Cickuo   ch'aara **b**u'u.*
cat.ERG fish.ABS B.eat.PRS
"The cat eats the fish."

[iii] *Ch'eeruo cicig   **d**u'u.*
fish.ERG cat.ABS D.eat.PRS
"The fish eats the cat."

[iv] Superficially looks somewhat "normal"—except that only a subset of verbs and adjectives actually show this alternation.

[16] Bantu

[a] The Proto-Bantu noun classes (simplified from Maho (1999:51)). Pairings indicate common singular/plural pairs.

SINGULAR		PLURAL	
1	mù-	2	βà-
3	mù-	4	mì-
5	lì	6	mà-
7	kì-	8	βį-
9	nì-	10	lį̀-nì-
11	lù-		
12	kà-	13	tù-
14	βù-		
15	kù-		
16	pà-		
17	kù-		
18	mù-		
19	pį̀-		

[b] Prefixal concord in Swahili (Katamba 2003:111)

[i] **M**-*toto* **m**-*dogo* **a**-*me-fika.*
1-child 1-little 3s-TNS-arrive
"The little child arrived."

[ii] **ki**-*kapu* **ki**-*dogo* **ki**-*me-fika.*
7-basket 7-little 7-TNS-arrive
"The little basket arrived."

[17] Saramaccan

[a] Saramaccan does not have noun classes in the usual sense.

[b] The closest thing it has are words which could be analyzed as having vestigial noun class prefixes.

[c] There are even a few words with "prefixed" and bare alternate forms, for example, *(a)kulí* 'Hindustani', *(a)masíni* 'machine', *(a)tengútengú* 'limping', and *(a)dikpókpo* 'mushroom'.

[18] **Are segment inventories and noun classes the same kind of thing?**

3   The sociohistorical model

[19] What do we mean by *pidgin*?

[a] (i) Not mother tongue, (ii) medium for interethnic communication, (iii) **normalized**, (iv) not primary language of any speech community (see, e.g., Bakker (2003:4-5) for a brief overview)

[b] For "streamlining", the relevant stage cannot be a pidgin in this sense.

[c] Rather it would be what has been termed the *jargon* stage, preceding a pidgin "in which people experiment with forms and structure, before any norms establish" (Bakker 2003:4).

[20] "Pidginization", then, refers not necessarily to the development of a pidgin used over a long period of time, but simply to a particularly extreme degree of reduction, unknown in language change unintermediated by a break in transmission. (McWhorter 2001b:406–4067).

[21] See also Hymes (1971:70) on "imperfective" and "perfective" senses of *pidginization* and discussion of the related term *pre-pidgin continuum*.

[22] So, we arrive at something like the following picture (with possible variations):
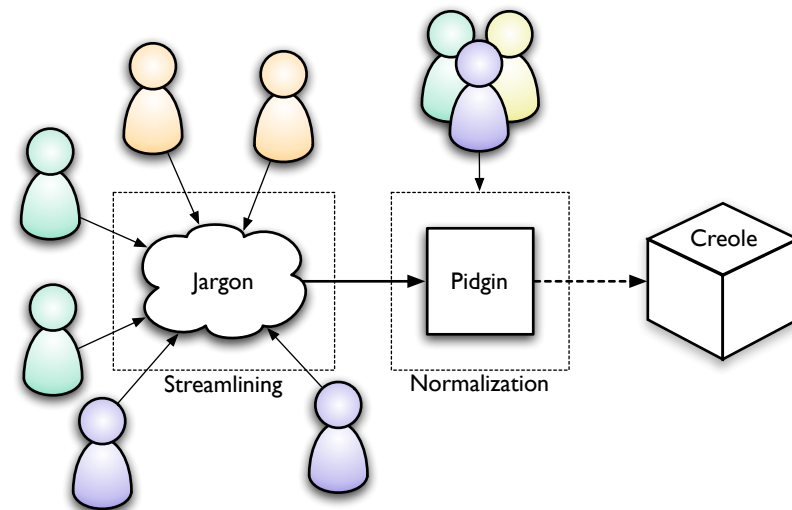
[23] In pidgin genesis[=jargonization], all the participants are making guesses, and "right" guesses are those that are understood by everyone. (Thomason 1993).

[24] Note that what we care about here is "language" as a social artifact, not a mental representation.

[25] What's important here is that the speech variety is not yet "normed": There is not yet structure (or, at least, very much structure).

4 Typologizing complexities

[26] Hypothetical scenario: Pidgin developing from interaction between two languages with clicks.

  [a] Language A word for 'dog': ǂa

  [b] Language B word for 'dog': ǂa

  [c] Pidgin word for 'dog': complex ǂa or simple *ta*?

[27] Three kinds of complexities (based on Moravcsik and Wirth (1986:7))

  [a] **Syntagmatic complexity:** Complexity deriving from the structure of a given linguistic object.

  [b] **Typological "markedness":** Not complexity, per se, but typological rarity or phenomena at the "top" of an implicational hierarchy (Haspelmath's (2006:33–37) "markedness as abnormality" grouping).

  [c] **Paradigmatic complexity:** Complexity deriving from the range of subdistinctions available within a particular, grammaticalized (in a broad sense) linguistic category.

[28] Some sample complications

  [a] Syntagmatic: A syntagmatically unmarked syntactic structure would hold a one-form–one-meaning pattern; discontinuous marking (e.g., French-style discontinuous negation) would constitute a syntagmatic complication.

  [b] Typological: A rara whose substance can be reasonably understood to be "difficult" in some sense, e.g., a labiodental flap, tonal TMA marking, German split word order.

  [c] Paradigmatic: The more members of the paradigm, the more complicated. Extreme examples are arbitrary declension/conjugation classes (as found in, for example, Latin).

[29] Are all typological rara complicated?

  [a] It doesn't seem possible to say given what we now know about areal skewing (see, e.g., Nichols (1992), Dryer (1989, 1992)).

  [b] Rara may be rare because they involve an improbable series of diachronic events, not because the end state is somehow "marked" (see Harris (2008)).

[30] Complications of structure versus complications of substance

  [a] For syntagmatic and paradigmatic complexities, the substance of the relevant categories could be an extra, independent complication.

  [b] Discontinuous negation, for example, would probably be less substantively complex than, say, discontinuous marking of a discontinuous tense (e.g., the Dagaare hodiernal+remote past marker (Schwenter 1998)).

  [c] A voiced fricative will always be more complicated, in an articulatory sense than a voiceless fricative (see Ohala (1999)).

[31] Structural/typological definition of *jargon*: The unstructured enumeration of linguemes that has been understood in a given jargon's setting.

[32] Lingueme: A unit of linguistic structure that can be inherited in replication (see Croft (2000:200–205))

  [a] Substance linguemes: A lingueme (e.g., a morpheme) with phonological substance (representable, for example, as a phonemic string)

  [b] Schematic linguemes: A lingueme without phonological substance into which substance linguemes can be placed (e.g., "SOV" or "CVCV")

[33] How complexities can be transferred

  [a] Syntagmatic: An input lingueme's complex syntagmatic properties are introduced into the jargon and correctly interpreted by the jargon community.

  [b] Typological: An input lingueme's rare typological properties are introduced into the jargon and correctly interpreted by the jargon community.

  [c] Paradigmatic: A *set* of linguemes evincing a paradigm's (in a broad sense) structure is introduced into the jargon and the members of the set are correctly identified as belonging to the same abstract paradigmatic structure.

[34] Another option for each case: misanalysis.

[35] Number of linguemes necessary for a complexity to make it into a jargon

- [a] Syntagmatic: One
- [b] Typological: One
- [c] Paradigmatic: The number of distinctions found in the paradigm

[36] What's a segment inventory

- [a] A structured object representing the available segmental contrasts in a speech variety. (This what we'd find in a "language".)
- [b] An enumeration of the segments that happen to be present in that variety. (This is what we'd find in a "jargon".)

[37] How to get a non-simple segment inventory: Fill up the jargon with linguemes whose phonological forms, in total, contain more segments than a Rotokas.

[38] How to get inherent inflectional morphology (see Booij (1996))

- [a] Not required by syntactic context (paradigm example: nominal number)
- [b] Heuristic lingueme pool in jargon: *cat* and *cats*
- [c] Distinction: *form1* vs. *form2* linked to SINGULAR vs. PLURAL
- [d] Minimum size of paradigmatic set: Two

[39] How to get contextual inflectional morphology (see, again, Booij (1996))

- [a] Appearance sensitive to syntactic context (paradigm example: case)
- [b] Heuristic lingueme pool in jargon
  - [i] **Puer** *currit.*
    boy.NOM run.PRS.3S
    "The boy runs."
  - [ii] *Puella* **puerum** *vidit.*
    girl.NOM boy.ACC see.PAST.3S
    "The girl saw the boy."
- [c] Distinction: *form1* vs. *form2* linked to SUBJECT vs. OBJECT
- [d] *form1* + SUBJECT = "nominative"; *form2* + OBJECT = "accusative"

[40] Compare Latin with Aghem (Hyman 1979:47–49)

- [a] **m̀** *m̂* *bvừ nò*
  1s.B DPST fall FOC
  "I fell."
- [b] *ò* *mɔ̀* *kɔ̀ʔ* **mùɔ**
  3s.B DPST see 1s.A
  "He saw me."
- [c] *à* *zɨ́á* **mùɔ** *bɛ́ʹkɔ́*
  DS eat.INC 1s.A fufu.B
  "*I* am eating fufu."
- [d] Distinction: *form1* vs. *form2* linked to TOPIC vs. FOCUS.

[41] Transfer of contextual inflection into a jargon requires

- [a] Transfer of morphological paradigm
- [b] Transfer of constructional paradigm

[42] Acquiring singular/plural

- [a] [cat]SINGULAR
- [b] [cats]PLURAL

[43] Acquiring nominative/accusative

- [a] [[puer]SUBJECT [ ]PREDICATE]INTRANSITIVE
- [b] [[ ]SUBJECT [puerum]OBJECT [ ]PREDICATE]TRANSITIVE

[44] The easier route: acquiring the morphological paradigm, but no construction

- [a] [m̀]TOPIC
- [b] [mùɔ]FOCUS

[45] See also Manessy (1977:135–141) on formative invariability and paradigmatic and syntagmatic univocity in pidginization.

[46] Under the interlanguage hypothesis put forward here the loss of inflectional categories and their exponent is the predictable consequence of universal constraints on language processing in early second language acquisition. (Plag 2008:131).

[47] Different predictions?

   [a] *Streamlining* model: Paradigmatic complexities are lost. No predictions regarding presence/absence of other complexities.

   [b] Interlanguage model: Paradigmatic *and* syntagmatic complexities are lost(?) (and possibly typological complexities, too, depending on one's theory of grammar).

[48] The meaning of "⊕"

   [a] Simplest possible meaning: "association" (see Gil (2008))

      [i] *ayam   makan*
         chicken eat   (Riau Indonesian (Gil 2008:114–115))

      [ii] "The chicken is eating."

      [iii] "Someone is eating the chicken."

      [iv] "Someone is eating for the chicken."

      [v] "the chicken that is eating"

      [vi] "where the chicken is eating"

      [vii] . . .

      [viii] A(CHICKEN, EAT)

   [b] More complex meanings

      [i] [AGENT] ⊕ [PREDICATE] (e.g., *John died.*)

      [ii] [MODIFIER] ⊕ [MODIFIED] (e.g., *strong man*)

[49] Compositional associational semantics would seem to be the "simplest" (i.e., least specified) logical possibility for concatenation (see Gil (2008:116)).

[50] How do "isolating" creoles fare (based on Gil (2008:121))

MOST ASSOCIATIONAL
Minangkabau
Sundanese
Yoruba
Vietnamese
Bislama
Cantonese
Twi
Papiamentu
Hebrew
English
MOST ARTICULATED

[51] Under the streamlining model, the meaning of concatenation in a jargon will presumably be subject to "compromise"—not simplification—effects

[52] And the data is suggestive of a compromise (but don't take me too seriously)

   [a] The Atlantic creole falls between the European and African languages

   [b] The Pacific creole falls between the European and Austronesian languages

[53] See also Faraclas (2003) who documents significant syntagmatic complexity in Tok Pisin, attributing it to substrate languages.

[54] Is "tone" special?

   [a] Of course, it depends on what you mean by "tone"

   [b] A language with tone is one in which an indication of pitch enters into the lexical realisation of at least some morphemes. (Hyman 2006:229)

   [c] Tone would seem to be "different" in the relevant way: The nature of its phonetic substance makes discovery of the full range of tonal contrasts in a language difficult without paradigmatic comparison.

   [d] This also can be true of certain segmental contrasts, e.g., /b/ vs. /p/ vs. /pʰ/.

   [e] But it is pervasive for "true" tone (i.e., tone without substantial secondary accompaniments)

   [f] Hypothetical examples: [tata ⁄] vs. [tata ⁄] vs. [tata ⁄]

   [g] Each involves a rise: So, when you encounter one of them on its own, is it *tàtā*, *tātá*, or *tàtá*

   [h] A single lingueme can tell you some things about tone, but miscategorization is almost a given unless the jargon contains a rich set of forms evincing the relevant tonal paradigms.

5 Conclusion

[55] So, is phonology different?

   [a] Not yet.

   [b] We need a better understanding of the structure of different complexities.

[56] Segment inventories ultimately derive from the importation of syntagmatic complexities into a jargon.

[57] We need to look at paradigmatically complex phonological phenomena

 [a] Morphophonological alternations

 [b] Phonosyntactic alternations

 [c] Unnatural phonological alternations

[58] The kind of comparanda McWhorter should have used: The following data is from Nyakyusa. (See Hyman (2003:74) and Good (2007:214–215).)

ROOT	TRANS	APPL	APPL-TRANS	ROOT GLOSS
-sok-	-sos-y-	-sok-el-	-sok-es-y-	'go out'
-lek-	†-les-y-	-lek-el-	-lek-es-y-	'let go'
-syut-	-syus-y-	†-syut-el-	†-syuk-es-y-	'swing'
-kind-	-kis-y-	†-kind-il-	-kik-is-y-	'pass'
-jong-	-jos-y-	†-jong-el-	-jok-es-y-	'run away'
-ag-	-as-y-	†-ag-il-	-ak-is-y-	'come to an end'
-tup-	-tuf-y-	†-tup-il-	-tuk-if-y-	'become stout'
-pub-	-puf-y-	†-pub-il-	-puk-if-y-	'get used to'
-lim-	-lim-y-	†-lim-il-	-lim-ik-is-y-	'cultivate'
-lum-	-lum-y-	†-lum-il-	-lum-ik-is-y-	'bite'

[59] And this is nothing compared to Tiene (Ellington 1997, Hyman and Inkelas 1997), which may have been in the Loango "catchment" area.

[60] An important shift

 [a] Bickerton's (1984) simplicity hypothesis is grounded in the notion of "language as mental grammar"

 [b] McWhorter's simplicity hypothesis is grounded in the notion of "language as cultural artifact"

[61] This is important since it already tells us that criticisms like Lefebvre (2001) and DeGraff (2001) misconstrue the relevant notion of simplicity.

[62] Can a language's sociohistorical profile be correlated with its grammar?

 [a] Research agenda: Use languages whose history is well-known to discover correlations between sociohistorical profiles and grammatical types.

 [b] Application: Infer the sociohistory of a language with an unknown history. (See, McWhorter (2007:252–276, 2008:106–108).)

[63] Antecedents can be found at least as far back as the 1930's in work trying to explain divergences between Germanic and the rest of Indo-European (see Polomé (1996)).

[64] The reason why pidgins and creoles are interesting here: We know more about their sociohistorical background than all but a handful of other languages.

[65] Work like this is timely in light of a shift within the field of typology from the question "what's possible" to "what's where why" (Bickel 2007).

[66] This is a potentially important line of research and is, therefore, worth getting right, which means:

 [a] Properly circumscribing its explanatory possibilities

 [b] Properly understanding the structure of a valid falsification

[67] Cartesian-uniformitarian linguistics is anti-exceptionalist: it aims at understanding the speaking mind, and thus our very humanity, which includes the humanity of Creole speakers, notwithstanding the "accidents" of (post)colonial history. (DeGraff 2003:791)

[68] But it is these "accidents" of history which make creole languages (or at least Saramaccan) exceptional(ly interesting):

Taking the long view, one might say that in 1690, Saramaka society and culture had not yet been born, but that by 1765, when the first window opened to the outside, it was already fully formed. The miracle of creolization, then, occurred over just several decades. (Price 2007:298)

Indeed, one might even suggest that societies born of creolization—creole societies—are not, as some would have it, unusually poor but unusually rich in cultural resources, in their cultural "building blocks" and "grammar", and, especially, in the processes by which they play with, transform, and remodel these resources into something fresh. (Price 2007:298)

References

Bakker, Peter. 2003. Pidgin inflectional morphology and its implications for creole morphology. In G. Booij and J. van Marle (eds.) *Yearbook of Morphology 2002*. Dordrecht: Kluwer. 3–33.

Bickel, Balthasar. 2007. Typology in the 21st century: Major current developments. *Linguistic Typology* 11:239–251.

Bickerton, Derek. 1984. The language bioprogam hypothesis. *The Behavioral and Brain Sciences* 7:173–188.

Booij, Geert. 1996. Inherent versus contextual inflection and the split morphology hypothesis. In G. Booij and J. van Marle (eds.) *Yearbook of morphology 1995*. Dordrecht: Kluwer. 1–16.

Croft, William. 2000. *Explaining language change: An evolutionary approach*. Harlow, England: Longman.

DeGraff, Michel. 2001. On the origin of creoles: A cartesian critique of neo-darwinian linguistics. *Linguistic Typology* 5:213–310.

DeGraff, Michel. 2003. Against Creole exceptionalism. *Language* 79:391–410.

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

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

Dryer, Matthew S. 1989. Large linguistic areas and language sampling. *Studies in Language* 13:257–292.

Dryer, Matthew S. 1992. The Greenbergian word order correlations. *Language* 68:81–138.

Ellington, John. 1997. *Aspects of the Tiene language*. Madison, Wisconsin: University of Wisconsin, Ph.D. Dissertation.

Faraclas, Nicholas. 2003. The *-pela* suffix in Tok Pisin and the notion of 'simplicity' in pidgin and creole languages: What happens to morphology under contact. In I. Plag (ed.) *Phonology and morphology of creole languages*. Tübingen: Niemeyer. 269–290.

Firchow, Irwin, and Jacqueline Firchow. 1969. An abbreviated phoneme inventory. *Anthropological Linguistics* 11:271–276.

Gil, David. 2008. How complex are isolating languages? In M. Miestamo, K. Sinnemäki, and F. Karlsson (eds.) *Language complexity*. Amsterdam: Benjamins. 109–131.

Good, Jeff. 2004. Tone and accent in Saramaccan: Charting a deep split in the phonology of a language. *Lingua* 114:575–619.

Good, Jeff. 2006. The phonetics of tone in Saramaccan. In A. Deumert and S. Durrleman (eds.) *Structure and variation in language contact*. Amsterdam and Philadelphia: Benjamins. 9–28.

Good, Jeff. 2007. Slouching towards deponency: A family of mismatches in the Banu verb stem. In M. Baerman, G. G. Corbett, D. Brown, and A. Hippisley (eds.) *Deponency and morphological mismatches*. Oxford: Oxford University. 203–230.

Gooden, Shelome A. 2003. *The phonology and phonetics of Jamaican Creole reduplication*. Columbus, Ohio: The Ohio State University, Ph.D. Dissertation.

Harris, Alice C. 2008. On the explanation of typologically unusual structures. In J. Good (ed.) *Linguistic universals and language change*. Oxford: Oxford University. 54–76.

Haspelmath, Martin. 2006. Against markedness (and what to replace it with). *Journal of Linguistics* 42:25–70.

Hualde, José Ignacio, and Armin Schwegler. 2008. Intonation in Palanquero. *Journal of Pidgin and Creole Languages* 23:1–31.

Hyman, Larry M. 1979. Phonology and noun structure. In L. M. Hyman (ed.) *Aghem grammatical structure: With special reference to noun classes, tense-aspect and focus marking*, Southern California Occasional Papers in Linguistics 7. Los Angeles: University of Southern California Department of Linguistics. 1–72.

Hyman, Larry M. 2003. Sound change, misanalysis, and analogy in the Bantu causative. *Journal of African Languages and Linguistics* 24:55–90.

Hyman, Larry M. 2006. Word-prosodic typology. *Phonology* 23:225–257.

Hyman, Larry M., and Sharon Inkelas. 1997. Emergent templates: The unusual case of Tiene. *Maryland Working Papers in Linguistics* 5:92–116.

Hymes, Dell H. 1971. Introduction (to part III). In D. H. Hymes (ed.) *Pidginization and creolization of languages*. Cambridge: Cambridge. 65–90.

James, Winford. 2003. The role of tone and rhyme structure in the organisation of grammatical morphemes in Tobagonian. In I. Plag (ed.) *Phonology and morphology of creole languages*. Tübingen: Niemeyer. 165–192.

Katamba, Francis. 2003. Bantu nominal morphology. In D. Nurse and G. Philippson (eds.) *The Bantu languages*. London: Routledge. 103–120.

Klein, Thomas. 2006. Creole phonology typology: Phoneme inventory size, vowel quality distinctions and stop consonant series. In P. Bhatt and I. Plag (eds.) *The structure of creole words: Segmental, syllabic and morphological aspects*. Tübingen: Niemeyer. 3–21.

Kouwenberg, Silvia. 2004. The grammatical function of Papiamentu tone. *Journal of Portuguese Linguistics* 3:55–69.

Lefebvre, Claire. 2001. What you see is not always what you get: Apparent simplicity and hidden complexity in creole languages. *Linguistic Typology* 5:186–213.

Maho, Jouni. 1999. *A comparative study of Bantu noun classes*. Göteburg: Acta Universitatis Gothoburgensis.

Manessy, Gabriel. 1977. Processes of pidginization in African languages. In A. Valdman (ed.) *Pidgin and creole linguistics*. Bloomington: Indiana University. 129–154.

McWhorter, John H. 1998. Identifying the creole prototype: Vindicating a typological class. *Language* 74:788–818.

McWhorter, John H. 2001a. The world's simplest grammars are creole grammars. *Linguistic Typology* 5:125–166.

McWhorter, John H. 2001b. What people ask David Gil and why: Rejoinder to the replies. *Linguistic Typology* 5:388–412.

McWhorter, John H. 2007. *Language interrupted: Signs of non-native acquisition in standard language grammars*. Oxford: Oxford University.

McWhorter, John H. 2008. Why does a language undress? Strange cases in Indonesia. In M. Miestamo, K. Sinnemäki, and F. Karlsson (eds.) *Language complexity*. Amsterdam: Benjamins. 167–190.

Moravcsik, Edith A., and Jessica R. Wirth. 1986. Markedness: An overview. In F. R. Eckman, E. A. Moravcsik, and J. R. Wirth (eds.) *Markedness*. New York:Plenum. 1–11.

Nichols, Johanna. 1992. *Linguistic diversity in space and time*. Chicago: University of Chicago.

Nichols, Johanna, and Arbi Vagapov. 2004. *Chechen-English and English-Chechen dictionary*. London and New York: RoutledgeCurzon.

Ohala, John J. 1999. Aerodynamics of phonology. In *Linguistics in the morning calm 4*, 92–97. Seoul: Hanshin.

Parkvall, Mikael. 2008. The simplicity of creoles in a cross-linguistic perspective. In M. Miestamo, K. Sinnemäki, and F. Karlsson (eds.) *Language complexity*. Amsterdam: Benjamins. 265–285.

Plag, Ingo. 2008. Creoles as interlanguages: Inflectional morphology. *Journal of Pidgin and Creole Languages* 23:114–135.

Polomé, Edgar. 1996. How Indo-European is Germanic. In I. Rauch and G. F. Carr (eds.) *Insights in Germanic linguistics II: Classic and contemporary*. Berlin: Mouton. 197–206.

Price, Richard. 2007. *Travels with Tooy: History, memory, and the African American imagination.* Chicago: University of Chicago.

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

Rivera Castillo, Yolanda, and Nicholas Faraclas. 2006. The emergence of systems of lexical and grammatical tone and stress in Caribbean and West African creoles. *Sprachtypologie und Universalienforschung* 59:148–169.

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

Schwenter, Scott A. 1998. Discontinuous remoteness in Dagaare. In I. Maddieson and T. J. Hinnebusch (eds.) *Language history and linguistic description in Africa*. Trenton, New Jersey: Africa World Press: Africa World Press. 87–93.

Sutcliffe, David. 2003. African American English suprasegmentals: A study of pitch patterns in the Black English of the United States. In I. Plag (ed.) *Phonology and morphology of creole languages*. Tübingen: Niemeyer. 147–162.

Thomason, Sarah G. 1993. On identifying the sources of creole structures: A discussion of Singler's and Lefebvre's papers. In S. S. Mufwene (ed.) *Africanisms in Afro-American language varieties*. Athens, Georgia: University of Georgia. 280–295.