Innate Simplification Processes as Seen in Hawaiian Creole and Bileez Kriol

Addison Mangum

This article compares phonological, morphological, and semantic features in English, Hawaiian Creole, and Bileez Kriol to determine if innate simplification processes exist that could support universalist theories of language genesis. The article provides brief social histories of Hawaii and Belize, and original recordings collected from native speakers of each language are transcribed and analyzed. This study of creole and pidgin languages reveals remarkable structural similarities in their simplification processes; however, the universalist theory fails to account for sociohistorical development, language ideology, and the role of speakers as agents in language creation.

ne of the greatest areas of interest and debate in the study of pidgin and creole languages is the genesis of language itself. Linguist Mark Sebba asserts that, "there is, in fact, broad agreement that creole languages show similarities to each other which are not explainable by reference to their lexifier languages, and that there is a fair amount of agreement about what these similarities are. But there is no agreement over the reason or reasons for these similarities" (Sebba, 1997, p. 175). Some creolists believe that these structural similarities can be explained through the assumption that humans have, and make effective use of, innate simplification processes-this is the basis for universalist theories that claim such processes as evidence of the subconscious mental faculties used in all language genesis. Linguists have spent decades wrestling with this question: "Can the study of creoles reveal the role played by the universal faculties of language in language formation and interlingual communication?" (Jourdan, 1991, p. 187). More importantly, do these universal faculties even exist?

Study and Analysis Methods

To answer these questions, we must first recognize commonly occurring processes in creolized languages by identifying similarities and differences between creoles and their lexifiers, or the languages which provide the majority of the creoles' lexicons. Then we must decide whether these similarities and differences represent evidence of innate language design. To accomplish these aims, creoles must be compared to one another as well as to their lexifier languages. This study compared the phonological, morphological, and semantic features of English, Hawaiian Creole, and Bileez Kriol in search of features that could point toward an innate simplification process.

For this study, three native female speakers—one from Yakima, Washington, U.S., one from Molokai, Hawaii, U.S., and one from Corozal, Belize, C.A., who spoke English, Hawaiian Creole, and Bileez Kriol respectively—were each invited to record a reading of Luke 10:25–37 to be transcribed,

analyzed, and compared. A passage from the New Testament was chosen because it had been translated into all three languages. It also presented a distinct text with which all speakers would be familiar and would aid in semantic comparison and demonstrate clear feature changes. The voice recordings were slowed down with Adobe Audition software and transcribed by ear using sonic data from an interactive IPA (Isotalo, 2003). The data was then semantically organized into charts for ease of phonological comparison and to clearly identify syntactic alterations. Figures included in this article are excerpts from these charts, and each word provides the spelling and the phonetic transcription. Dictionaries and glossaries of Bileez Kriol (Crosbie, 2009) and Hawaiian Creole ('Ōlelo, 2010) proved useful since the orthography indicated significant changes in phonology, morphology, and semantics, but the conclusions were primarily based on phonetic transcription.

Sociohistorical Synopses of Hawaii and Belize

While linguists agree that creole languages are remarkably similar in their phonological, morphological, and semantic features—"even those that have unrelated lexifiers, unrelated substrate languages, and no geographical connections" (Sebba, 1997, p. 173)—understanding the sociohistorical situations in which these contact languages were created can provide insights into the genesis of such features. Although Hawaiian Creole and Bileez Kriol share English as their lexifier language, they have unrelated substrate languages (minor contributing languages which influence the creoles' grammatical structure) and no physical geographical connections. However, their social histories are remarkably similar: both were heavily influenced by colonization and servitude and remain in contact with their lexifier primarily due to tourism and government policy.

The development of Hawaiian Creole began in 1778 with the arrival of Europeans such as Captain James Cook. The introduction of trade between North America, China, and Europe increased the foreigners' contact with the Hawaiian Islands as they established sugarcane plantations. Workers from the South Pacific as well as Asia and Europe immigrated to the islands as indentured servants. The Territory of Hawaii was created in 1898 and later annexed to the United States in 1959. Currently, Hawaii is known for its tourist economy and has a population of approximately 1.5 million; 600,000 are native Hawaiian Creole speakers (SIL International, 2021).

The development of Bileez Kriol began with the first permanent British settlement in Belize, established in the 1710s. Conflict between Britain and Spain over the territory prevented a formal government and plantation agriculture system from taking root until 1796, but British colonizers participated in the logging industry and slavery. Bileez Kriol was primarily influenced by Igbo, but also by other West African languages such as Akan, Efik, Ewe, Fula, Ga, Hausa, Kikongo, and Wolof. Contention in Central America, particularly between the United States and Britain, led to the independence of Belize in 1981. Belize also has a predominantly tourist-focused economy and a population of approximately 400,000, with 150,000 native Bileez Kriol speakers (SIL International, 2021).

Results of the Study

This analysis was unable to identify the origins of most linguistic features; however, it was able to describe similar features and simplification processes. Although distinctions exist between pidgins and creoles, "it is apparent that the structural difference between an expanded pidgin and an incipient creole will be minimal" (Romaine, 1988, p. 155). For the purposes of this study, the terms 'pidgin' and 'creole' will be used interchangeably.

Phonology

When it comes to the phonological processes and features of pidgins and creoles, "we may say that pidgins prefer sounds

which are common to the main languages involved . . . tending to eliminate those contrasts that are rare or would present difficulties for the speakers of one or more of the languages in contact" (Sebba, 1997, pp. 47, 109). A clear example of this occurs in both Hawaiian Creole and Bileez Kriol when the voiceless dental fricative $/\theta/$ in English changes to a voiced alveolar plosive /d/ regardless of its position as a word initial or word final consonant. In consonant clusters, $/\theta/$ also seems to be of some concern and is changed to a voiceless palato-alveolar affricate /t J. Bileez Kriol and Hawaiian Creole also remove word-final, voiced alveolar approximants /x/. These changes are illustrated in Figure 1.

Figure 1

English	'with'	'the'	'three'	'forever'
	/w ^h I0 7/	/θi/	/θ.ɪi/	/fœιενəι/
Bileez	'wid'	ʻdi'	'chree'	ʻfareva'
Kriol	/w ^h Id 7/	/d	∕tĵ́́́π:/	/fuiev3/
Hawaiian	'wit'	'da'	'three'	'foeva'
Creole	/w ^h Id 7/	/də/	/t͡jːi:/	/foεvə/

Eliminating Contrasts and Consonant Clusters

Because "pronunciation and phonology are the least stable elements of the grammar . . . pidgins tend to reduce the number of sound contrasts . . . in comparison with the source languages" (Sebba, 1997, p. 109). This also applies to the deletion or reduction of English coda consonant clusters. In Bileez Kriol, the English pronunciations of 'correct' and 'exactly' undergo a deletion process in which the plosive /t/ is completely removed from the pronunciation in cases where the coda contains two plosives (Figures 2, 3). In other cases, rather than reducing or deleting sound contrasts, simplification presents itself in the form of metathesis, through which sounds are transposed within a word to ease production. In both Hawaiian Creole and Bileez Kriol,

the fricative /s/ and the plosive /k/ are transposed to a preferred order in the word 'ask' (Figure 3).

Figure 2

Deletion Process

English	'correct' /kəɪɛkt/	'exactly' /εgzæktli/		
Bileez	'karek'	'egzakli'		
Kriol	/kɐ.ıɛk/	/εgzækli/		

Figure 3

Metathesis

English	'ask' /æsk/	'next' /nεkst/
Bileez	'aks'	'neks'
Kriol	/æks/	/nɛks/
Hawaiian	'aks'	'nex'
Creole	/æks/	/nεks/

Morphology and Morphophonology

Perhaps the most notable feature of pidgins and creoles is the minimal usage of inflectional morphology, or the alteration of words to fit different grammatical contexts; "languages with the creole sociohistorical profile are not always completely devoid of inflectional affixes, but they rarely have more than one or two [alteration processes]" (McWhorter, 1998, p. 792). Neither Bileez Kriol nor Hawaiian Creole express tense with the English suffix '-ed' or aspect with the suffix '-ing.' Hawaiian Creole occasionally marks plurality with the suffix '-s' as illustrated in Figure 4. However, this suffix expresses no allomorphy, meaning it does not vary in sound or spelling (although it does in English, such as when '-s' is pronounced as /z/ or '-en' is used with certain nouns). This is to be expected, considering that "paradigms of allomorphs, so familiar in many [non-creole] languages, are alien to languages with the creole sociohistorical profile" (McWhorter, 1998, p. 793).

Figure 4

Expressing Plurality with Inflectional Morphology

English	'thieve-s' /θivs/
Bileez	'guy-s'
Kriol	/gɐis/

The minimal usage of affixes in pidgins and creoles "often implies the loss of grammatical categories like gender or tense which are indicated by means of inflectional morphology in the input languages" (Sebba, 1997, p. 44). Instead, these categories can be expressed by means of TMA (tense, modality, aspect) markers. TMA markers are distinct lexical items which have only one form and consist of morphemes that "are often not the ones which the lexifier would use, though they usually originate from the lexifier" (Sebba, 1997, p. 42). Bileez Kriol expresses plurality syntactically with the use of a TMA marker 'dehn,' which derives from the English 'them.' This marker always follows the nouns, except in cases where a specific number is also being expressed syntactically (Figure 5). Hawaiian Creole expresses past tense with the use of a TMA marker 'wen,' which derives from the English 'went' and always precedes the verb (Figure 6).

Figure 5

Expressing Plurality with a TMA Marker

English	'thie	ves'	'these'	'three' [men]		
	/θiv	vs/	/θis/	/θ.ɪi/		
Bileez	'teef' /ti:f/'dehn' /deĩn/		'dehn'	'chree'	'man'	
Kriol			/deĩn/	/t͡ʃːiː/	/mæn/	

Addison Mangum | 77

Figure 6 *Expressing Tense with a TMA Marker*

English	'came' /keim/		
Hawaiian	'wen'	'come'	
Creole	/wʰεn/	/cəm/	

The use of TMA markers is expected in pidgins and creoles due to "the fact that the rapid non-native adoption of a language as a lingua franca entails stripping down a system to its essentials for optimal learnability and processibility" (McWhorter, 1998, p. 793). This dismantling leads to a near elimination of inflectional affixes. In concurrence with the removal of inflection, derivational morphology develops to allow the lexicon of the pidgin or creole to expand rapidly. In Bileez Kriol, a possible instance of derivational morphology is found in the existence of two distinct third-person singular pronouns. Bileez Kriol does not mark gender on pronouns; rather, an abstract category of derogation is expressed (Figure 7). It's possible that the 'h-' and '-n' on 'hihn' are a circumfix that derives from the English 'him.' The addition of these pieces changes the lexical meaning of the pronoun and is not fully productive: in other words, it cannot be used on any word to denote derogation.

Figure 7

English	3sg.	'him' /hɪm/ 3sg.m.acc		
Hawaiian Creole	'ih' /I ^h / Зsg.nom	'hihn' /hin/ 3sg.nom (derogatory)	'ahn' /ɐ̃n/ 3sg.acc	

Derogation Using Derivational Morphology

Linguistic notation—3: third-person; SG: singular; M: masculine; ACC: accusative; NOM: nominative

78 | Innate Simplification Processes

Similarly, "reduplication is sometimes said to be a very widespread feature in pidgins and creoles but in fact the evidence on this is conflicting" (Sebba, 1997, p. 120). In this data, reduplication does not occur in Hawaiian Creole and only occurs in Bileez Kriol to express veracity, often taking the position of a modifier. The word 'chroo' can be glossed in English as 'truth' or 'true,' but when reduplicated, 'chroo chroo' expresses the truthfulness or trustworthiness of the noun or verb that follows.

Lexicon and Semantics

For the sake of simplification, a pidgin or creole engages "the referential power of its lexicon by taking existing words for common or familiar objects and extending their ranges of reference to things or concepts which are in some way similar" (Sebba, 1997, p. 119). Often, speakers of the lexifier—in this case, English—believe that a single word is unable to embody or incorporate various nuances of expression, but "[t]his line of reasoning . . . is deceptive because both languages share the same semantic domains, and hence their differences are superficial" (Clair, 1974, p. 79). Thus, pidgins and creoles invoke semantic neutralization to reduce their vocabulary while simultaneously maintaining their semantic domain; this is known as multifunctionality.

Hawaiian Creole and Bileez Kriol have fewer prepositions than English; "this is typical of pidgins, which often manage with only a handful of prepositions" (Sebba, 1997, p. 52). In Hawaiian Creole, the preposition 'fo' means 'for, of,' or 'towards.' In Bileez Kriol, 'a' means 'to' or 'of'; 'pahn' means 'on, upon, at,' or 'about'; and 'op' means both 'up' and 'down' depending on context. Bileez Kriol also extends multifunctionality to other function words: 'weh' encompasses 'what, who, because, that, which, where, why,' and 'away.' In this case, the word "indicates a perceptual field—its very lack of specificity is its strength" (De Bono, 1981, as cited in Sebba, 1997, p. 10).

Due to multifunctionality, homonyms often appear in pidgins and creoles: "many Kriol words sound like English words but have different meanings and grammar, a phenomenon known as 'linguistic camouflage'" (Salmon, 2015, p. 608). Often, these words can be distinguished only through syntactic and semantic context. An example from Bileez Kriol is the word 'ahn' (Figure 8). The word means both 'him' and 'and.' Because it is the same orthographically and phonetically, a speaker must recognize its syntactic purpose as either a pronoun or a conjunction in order to identify its meaning.

Figure 8

English	'on' 'him,' /kəıɛkt/ /him/		'and' /æn/	'help' /hεlp/	ʻhim' /hɪm/	
Bileez	'pahn'	'ahn,'	'ahn'	'help'	'ahn'	
Kriol	/pʰɐ̃n/	/ɐ̃n/	/ɐ̃n/	/hεlp/	/ẽn/	

Linguistic Camouflage and Multifunctionality

Additionally, because creoles have few synonyms and "in the compact vocabulary of the pidgin, there is no room for two words with the same meaning" (Sebba, 1997, p. 53), pidgins and creoles will exchange nuanced words from the lexifier for the most simplified version of that word. Both Hawaiian Creole and Bileez Kriol exchange the words 'eternal,' 'beast,' and 'mercy' for the words 'forever,' 'donkey,' and 'pity.' Words from the substrate languages are also selectively chosen for their enhanced cultural significance or meaning. In Hawaiian Creole, 'mahke' replaces the English words 'death' and 'dead,' and 'ohana' replaces 'family.' As is the case in many pidgins and creoles, there are instances in which "lexifier-language words have been altered in meaning to fit a differently structured semantic field, in keeping with an indigenous culture or concept of the world" (Sebba, 1997, p. 117). In Bileez Kriol, the word 'lee' comes from the English 'little,' but does not refer only to the physical stature of a person or object; rather, it primarily implies inferior intelligence or social standing. Even after class separation due to colonization. West African slaves in Belize often stratified themselves socially based on their region of origin

and native language. 'Lee' was used to refer to persons who came from a perceived 'lesser' region of Africa and spoke an 'inferior' language. Today, it refers to people of low socioeconomic standing and poor education.

Pidgins and creoles also use circumlocution, "a strategy available in any language for giving a description of something that does not (yet) have a name in that language." (Sebba, 1997, p. 116). When circumlocuting, pidgins and creoles usually describe the function, purpose, and origin of the unnamed item. In both Hawaiian Creole and Bileez Kriol, there is no word for 'Levite.' Each language circumlocutes: Hawaiian Creole describes the origin and the function of a Levite while Bileez Kriol describes only the function (Figure 9). Circumlocution goes hand in hand with semantic neutralization: "while circumlocution or paraphrase does not actually increase the number of lexical items, it provides a means of increasing the referential range of the language" (Sebba, 1997, p. 116), allowing creole languages the same semantic field as non-creole languages.

Figure 9

Circumlocution

English	'Levite' /livat [*] /								
Bileez	'man'	'weh'	h' 'werk' 'eena'			•	11'	'templ'	
Kriol	/mæn/	/ _{W^hε/}	/ /wʰɛɪk/ /ɪːnʒ/			/ċ	1 ခ/	/tɛmpəl/	
Hawaiian	'guy'	'from'	'da'	'Levi'	'ohana'	'dat'	'help'	'da'	'prieses'
Creole	/gɐi/	/fɪəm/	/də/	/li:veɪ/	/ohana/	/dət	/hεlp	/də/	/prisis/

Issues with Universalist Theories

Upon first glance, the data from English, Hawaiian Creole, and Bileez Kriol support the idea of innate simplification processes. "One might still suppose the structural uniformity of creole is derived . . . from certain structures of English, the language of the plantation owners" (Bickerton, 1983, p. 119), but this conjecture disregards the influence of the substrate languages. To account for the high level of mutual

intelligibility between Hawaiian Creole and English and the low level between Bileez Kriol and English, it makes sense that "the more homogeneous the substrate languages (i.e., as part of the same language family), the greater the chances that the substrate will significantly shape the pidgin or the creole created by their speakers" (Jourdan, 1991, p. 198). This appears to be the case in Bileez Kriol—the contributing substrate languages are primarily from West Africa. However, while it is obvious that the lexifier and the substrates play significant roles in shaping the structure of a pidgin or creole, it is more difficult to determine whether a feature comes from the lexifier, the substrates, a combination of the two, or neither. This inability to link most features directly to their contact languages could point to an innate simplification process. "It turns out that creole languages throughout the world exhibit the same uniformity and even the same grammatical structures that are observed in Hawaii" (Bickerton, 1983, p. 119), even ones with differing lexifiers and substrates.

However, while innate simplification processes likely exist in the formation of pidgins and creoles, we cannot assume that it explains the formation of all languages. In the cases of language evolution through isolation—including the first emergence of language in *Homo sapiens*—no language contact occurs. Additionally, some creolists who believe in universalist theories fail to consider the role of speakers as agents in language creation. They believe that language faculties provide "the child with a single and fairly specific grammatical model. . . . The innate grammar [is] then clothed in whatever vocabulary [is] locally available and [gives] rise to the creole languages heard today" (Bickerton, 1983, p. 119). This belief does not take into consideration the history, beliefs, attitudes, and decisions of the speakers.

Recently, the sociocultural history of the speakers and their points of view have altered the ways in which the formation of creole languages is studied. "Careful study of social relations in which speakers of pidgins have been immersed at the time when pidginization and creolization took place changes the predominant image of development of these languages" (Jourdan, 1991, p. 188). Humans are inherently social creatures, but "languages as socially created, established, acknowledged, and controlled forms of knowledge would be surface elaborations—mere variations of deep designs innate to our species" (Jourdan, 1991, p. 198). This universalist belief is problematic because language is not simply an automation caused by social factors—it also serves as an expression of identity through conscious and unconscious choice.

Considering the sociocultural organization of the time can help identify why some simplification processes occurred, though "it is difficult, if not impossible, to know for certain the linguistic intentions of people in past contact situations" (Siegel, 2003, p. 190). Throughout Hawaiian and Belizean history, plantations and slavery were central in social life. Because the plantation served as the nexus of social, political. and economic activities, social classes were often determined by racial factors, and "the social organization and culture associated with plantation production [was] seen as a microcosm of the whole society" (Bolland, 1998, p. 5). Class stratification occurred substantially in Belize and could account for the grammatical markers denoting derogation, which are marked on pronouns in Bileez Kriol. However, this form of derogation does not appear in Hawaiian Creole. Creolization, then, does not always result in the same features, though creoles are developed through similar processes. Creolization is, rather, "a process of contention between people who are members of social formations and carriers of cultures, a process in which their own ethnicity is continually reexamined and redefined in terms of the relevant oppositions between different social formations at various historical moments" (Bolland, 1998, p. 26). Creolization begins with contact situations but is not independent of contention or an individual's view within their social organization.

Examining the sociohistorical events surrounding the creation of a pidgin or creole also gives insight to the language

ideology of its speakers. History mirrors the linguistic development of a community and indicates reasons for language expansion and decreolization. Creating a creole identity promotes language expansion (Bolland, 1998). On the other hand, stigmatization and negative views toward creolized languages can cause a return to the lexifier through decreolization as "speakers progressively alter the grammar of the basilect [the most distinct form of the creole] so that the output comes to resemble the output of the acrolectal [the form most similar to the lexifier] grammar" (Sebba, 1997, p. 218). Understanding the sociocultural histories of Hawaii and Belize indicate reasons why Hawaiian Creole is currently expanding while Bileez Kriol is threatened by decreolization. The tourist economy of Hawaii encourages the learning and retention of Hawaiian Creole, and its status as a positive cultural identifier accounts for the language's relative stability. In Belize, however, Bileez Kriol is negatively viewed as 'broken English,' socially inferior, and crude in education and government settings. As such, fewer speakers of Bileez Kriol use the basilect, and over time it can be expected that the language will move towards the acrolect and merge with its lexifier unless a change in the language ideology of the speakers takes place.

Conclusion

A careful analysis of the phonological, morphological, and semantic features of Hawaiian Creole and Bileez Kriol in comparison to each other and their lexifier, shows evidence of innate simplification processes. While language genesis may be polygenetic, the universalist theory fails to acknowledge the role of speakers as agents in language creation. Analysis of pidgins and creoles under the lens of social history reveals possible reasons for the appearance or disappearance of features, for "it is our intuitions about what allows communication in the language we know, our abilities to simplify and strip off inessential surface marking, that allow us to negotiate meanings in intercultural communication" (Jourdan, 1991, p. 199). Greater attention to the language ideology of speakers and further study of unique linguistic features could give insight into reasons for language expansion or decreolization and will help prevent the loss of creole languages as an expression of identity.

References

- Belize Kriol Project. (2017). Look 10. In *Di Nyoo Testiment* eena Bileez Kriol (1st ed., pp. 180–181). Wycliffe, Inc.
- Bickerton, D. (1983). Creole languages. Scientific American, 249(1), 116–123. http://www.jstor.org/stable/24968948
- Bolland, O. N. (1998). Creolisation and creole societies: A cultural nationalist view of Caribbean social history. *Caribbean Quarterly*, 44(1/2), 1–32. http://www.jstor.org/ stable/40654019
- Crosbie, P., Crosbie, C., Decker, K., Herrera, Y., Manzanares, M., & Woods, S. (Eds.). (2009). *Kriol—Inglish dikshineri, English—Kriol dictionary* (2nd ed). Print Belize. https:// www.sil.org/system/files/reapdata/91/95/49/9195492 5699176285931841170600318709537/BelizeKriol_Eng-Dic_49337_2009.pdf
- Da Jesus Book Luke 10. (2000). Da Jesus book: New Testament in Hawai'i creole English. Wycliffe Bible Translators, Inc. ebible.org/hwcNT/LUK10.htm
- Isotalo, P. (2003). *Interactive IPA Chart*. UCLA Phonetics Lab Archive. www.ipachart.com
- Jourdan, C. (1991). Pidgins and creoles: The blurring of categories. *Annual Review of Anthropology, 20,* 187–209. http:// www.jstor.org/stable/2155799.
- McWhorter, J. H. (1998). Identifying the creole prototype: Vindicating a typological class. *Language*, 74(4), 788–818. doi:10.2307/417003
- ⁽Olelo Online LLC. (2010). A glossary of Hawaiian words in Hawaiian pidgin English. ⁽Olelo Online Hawaiian Language Lessons. oleloonline.com/glossary-of-hawaiian-words-in-hawaiian-pidgin-english
- Romaine, S. (1988). Pidgin and creole languages. Longman, Harlow.

- Salmon, W. (2015). Language ideology, gender, and varieties of Belizean kriol. *Journal of Black Studies*, 46(6) 605– 625. http://www.jstor.org/stable/24572901
- Sebba, M. (1997). Contact languages: Pidgins and creoles. St. Martin's Press.
- Siegel, J. (2003). Substrate influence in creoles and the role of transfer in second language acquisition. *Studies in Second Language Acquisition*, 25(2), 185–209. http://www.jstor. org/stable/44486671
- SIL International. (2021, April 20). *Belize English Creole*. Ethnologue. www.ethnologue.com/language/bzj
- SIL International. (2021, April 20). *Hawaii Pidgin*. Ethnologue. www.ethnologue.com/language/hwc
- St. Clair, R. N., & Murai, H. M. (1974). Code switching in Hawaiian creole. *The Kansas Journal of Sociology*, 10(1), 75–82. http://www.jstor.org/stable/23255183