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Language X: A Controlled Experiment in Pidgin Creation

1.1 *Introduction: Why?*

One of the main problems with the study of pidgins and creoles is that there aren't any major ones being formed nowadays the way they were back in the Colonial period. As an added impediment, records are sketchy at best until the early part of the twentieth century, in many cases. What this means is that while there is quite a large amount data on a few creoles and pidgins after they have developed over a period of fifty to one hundred years, there is no significant record of what these languages were like in their infancy[1]. What I attempted to do with my experiment was to re-create the conditions in which a pidgin is born, and to see what happened. In some ways, the form of communication that developed (hereafter referred to as Language X) resembled a prototypical pidgin; in some ways it did not. However, dozens of hypotheses can be drawn from what resulted. Over the coming pages, I'll be discussing the problems that occurred, possible solutions, striking developments, features of Language X, and a few of my own far-reaching, all-encompassing theories about pidgins and creolization.

[1] John McWhorter, 2001.

1.2 *The Setup*

In order to communicate verbally, one needs words to articulate. Thus, I set about to come up with a list of 200 or so words with corresponding phonetic forms[2] . As my basis I used Swadesh's extended list of 200 words that every natural language (allegedly) has. I added some forms and deleted some others and came up with just over 200 words. In designing forms for these words, I came up with a romanization system and sound system that I thought would be relatively easy for English speakers to read and pronounce (see footnote 2). Some words were based on words from natural languages (e.g.: zava from Russian /zovut/, azub from Arabic /zub/), some from languages I constructed myself, and the rest were made up out of thin air. In addition to this, I came up with a complex, nearly unrecognizable class system to see if my subjects would figure it out and make it productive[3] . After this was done, I be-gan my search for subjects.

The process was long and arduous, but in the end, I selected six subjects based on their availability to meet at a pre-specified time during the week. A brief description of each shall follow:

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[2] See *Problem Alpha* below.

[3] See *Morphology Gone Awry*.

(a) Cindy: Cindy is a fluent English speaker, though she can understand Hindi. She proved to be least willing to adapt to innovations or to innovate on her own. She often monopolized conversation during our weekly meetings, though without raising the level of comprehension. She was constantly using English, even when I expressly, repeatedly forbade her. She has a slight background in linguistics, though no knowlegde of creoles or pidgins.

(b) Mary: Another fluent English speaker, her only second language experience is with French. She proved to be passive when others were domineering, though was the second most innovative member of the group. She adapted very quickly to changes and had a good memory. She was my number two; I could always count on her.

(c) Laura: As with Mary, fluent in English, some experience with French. More often than not, she was having a "bad day", and would excuse herself from making any comments during our weekly meetings, though she always showed up. When lazy, she would use false English cognates (e.g.: The Language X word for "four" to mean the English word "for" in the benefactive sense). She would often use English, though not as often as Cindy–only when in a bind. While she didn't innovate, she adapted quickly.

(d) Peyton: The most active and most innovative member of the bunch. The one week he didn't show up, the meeting fell apart. He would never use English, had a great memory, made a concerted effort to use the innovations already agreed upon and came up with new ones. He continually stretched the boundaries of semantics to get his point across, and more often than not was quite successful. Even if he didn't understand what someone else was trying to say, he would often try to help them, and if no one else understood and he did, he would rephrase the sentence in Language X that everyone else could understand. He's a native English speaker, and has a similar level of fluency with Chinese as Cindy does with Hindi, though moreso (he's relearning).

(e) Kurt: He was my number three; kind of a wild card. He discovered and made use of the word for "with", while no one else did (unless they were following his example), and was quite good at understanding and making himself understood. He was given to periodic memory lapses, though, and would often get frustrated and sink into silence if he couldn't express himself in the exact terms he wished. He's a fluent English speaker, and dabbled only in high school-level Spanish.

(f) Dan: If Dan ever said a word, I'm sure I didn't hear it. That's a bit of an exaggeration, but really, not much of one. For much of the experiment, he was Cindy's boy-

friend, and she rarely let him open his mouth, though her influence seemed to continue even after their split, for he never found his voice. When he did speak, it seemed as if he understood what was going on just fine and that he could keep up with everyone else's innovations. He's a fluent speaker of English, though it was his L2, Rumanian being his L1.

All my subjects were between the ages of twenty and twenty-three during the course of the project and of the same socioeconomic background.

The plan for the project (which spanned eleven weeks) was to meet for an hour once a week during which time I'd prompt them to speak in various ways and then record them on a handheld tape recorder while taking notes by hand. As compensation for their time, I made (i.e., bought) snacks such as cookies, chips and candy. Originally I had planned to "teach" the language in the format of an elementary class for any natural language. Once I realized, however, that it was more fun for them and more interesting for me to have them tell stories, this pretty much became what we did every week, and the results were quite fruitful. At one or two points during the experiment, I invented words that were needed for specific contexts, one of which proved to be very interesting[4] , but that was the extent of my tinkering.

[4] See *What the Heck Is a "Go Bag"?*.

Also of note, I became quite fluent in Language X and able to make myself understood. What was interesting, though, was that the form of the language I used differed from that of my subjects, even though I tried to make sure to use only the innovations they themselves created (this will be discussed later). And now, without further ado, my long list of problems and possible solutions.

2.1 *Problems and Solutions: Introduction*

Throughout the course of the semester I encountered many, many, many problems of varying sorts. My intent with listing these problems and possible solutions is to insure such problems don't occur again, should my experiment be repeated in the future.

2.2 *Problem Alpha*

The very first problem that logically occurs didn't occur to me until the very end of the experiment. It can basically be summarized as follows: The Swadesh list was *not* intended to be a basis for language creation. The following words occurred in the list of words for Language X: *heches* "dust"; *hezes* "sand"; *huches* "smoke"; *hoshes* "fog"; *ahosh* "breathe"; *asaf* "to blow"; *ashas* "to sleep"; *atsash* "to dance"; *ginges* "earth". In most modern-day languages, an argument can be made for having distinctions to separate

"dust", "sand" and "earth"; in a pidgin–or, even more correctly, a set of words hoping to *become* a pidgin–such distinctions are laughably unnecessary. Similarly, the difference between "fog" and "smoke" and "blow" and "breathe" are also unnecessary. But beyond that, look at the forms I accidentally gave "dust", "sand", "smoke", "fog", "breathe", "blow", "sleep" and "dance". One slip and there's a change in meaning, and this proved to be quite a problem–especially with "sleep" and "dance". People become tongue-tied and frustrated, and communication takes longer, and such lapses are quite destructive to a project whose life is only eleven hours long. In addition, some people (I'm thinking of Cindy, mainly) would pronounce the diphthong romanized as /ay/ as [ej], whereas others would do it the predictable way: [aj]. Then, because of English orthography, there was varying pronunciations of /o/, /e/ and /i/, which led to endless of confusion.

2.3 *Possible Solution Alpha*

When I was creating words, I tried to give them forms that reminded me of the semantics. Given that the above-listed culprits are all, in one way or another, interconnected in my mind, it's not hard to see how I came up with similar forms. Thus, in the future, a concerted effort should be made to create words that are maximally different phonetically. What's more, rather than basing the list of words on the Swadesh list, a new list should be created specifically for this project, with probable

variations each time it's repeated. I personally would do the following: More verbs, fewer abstract nouns, more animal nouns, fewer adjectives. Also, the pronunciation should be simpler than the target language: The *three* basic vowels, /a/, /i/, /u/; the traditional row of stops, voiceless only; voiceless fricatives only; the alveolar and bilabial nasal; one liquid, /l/; and, if necessary, the two glides, /j/ and /w/. Also, the language should have a rhythm of its own. Because of the morphology I imposed upon these words, I ended up with some words ending with vowels, some with consonants, and this disrupted the flow of the language and inhibited normal speech. CV syllables are a must with no consonant clusters permitted.

2.4 *Problem Beta*

Because my six subjects were my friends, they really were doing me a favor by participating in my project. Because of this, they didn't feel obligated to show up if there were more pressing matters, or to give their all at each meeting.

2.5 *Possible Solution Beta*

This project needs to be funded. There needs to be some sort of compensation other than the occasional treat to cause the subjects to feel obligated to show up and be active. My idea would be $10 per meeting, which (with six people and eleven meetings)

would come out to $660, $110 per person. If money was involved, combined with ultimatums and expectations, I've no doubt that full cooperation would be achieved.

2.6 *Problem Gamma*

I told everyone that they would never have to memorize any of the words at the very beginning of the project because, quite frankly, I didn't want to scare them off. My idea was that they would memorize them unconsciously over time. This never really happened, though. Each person memorized a small set of words, and while there was much overlap, there wasn't total overlap.

2.7 *Possible Solution Gamma*

The number of words should be reduced (particularly cutting back on the words already mentioned) so that the list is less daunting. The words should also be basic, so that they'll be words that are actually needed. Additionally, it would probably help to tell them to try to memorize the words. But this only goes part of the way towards solving the problem.

2.8 *Problem Delta*

These are several related problems. First, there was never any level of speaking fluency attained. This is partly due to the lack of rhythm which I already mentioned,

but it's also partly due to them not fully knowing the words, having to think before each word, and because they had no motivation to try to *speak*, just to communicate– two very different principles. Additionally, there was the reliance on English. The fact is, all seven of us spoke English fluently. If someone got fed up with trying to convey what they wanted to convey, they could just say, in English, "The fish dives into the ocean". While this is not what they're supposed to do, if they did do it, can the rest of us pretend that we don't understand what they mean? I could, because I'm the coordinator, but the idea of communication amongst themselves is defeated, since communication is easily achieved.

2.9 *Possible Solution Delta*

I have three proposed solutions to this problem, and while each is different, they all involve changing the structure of this experiment:

(a) This option involves the same idea: A list of 200 or so basic words (modified as the above solutions propose, of course), only with an added twist. Since here at Cal we have the wonderful De-Cal program, I propose it be utilized. Rather than arranging meeting times separately and meeting only once a week (a woefully inadequate amount of time), the De-Cal class will run for an hour five days a week. The basic idea will be to speak using Language X the whole time. There's no doubt in my mind that after two, maybe three weeks, everyone in the class would be speaking far better than any one of

my subjects was able to speak by the end of the semester. After fifteen weeks, there should be some data that would really say something. As for incentive, the fact that it's a class that will give the students credit should be incentive enough.

(b) This option also involves utilizing the De-Cal class system, though it would be a little different. The coordinator would speak a language to the subjects fluently, and they would have to communicate with him/her as best they could. Ideally, the language would be a natural language that no student knows, but, since learning a language that a group of people don't know and have no access to is quite difficult, I propose the language be a made-up language constructed by the coordinator. This may seem a bit unorthodox, but I think it would (as nearly as possible) duplicate the situation in which many creoles and pidgins arose: That being a person in a position of authority having power over those in the subordinate position, who share a common language, but who still have to communicate in the language of the authority figure. A pidgin should naturally develop. The only problem would be that they shouldn't actually *learn* the language, by any means.

(c) This option is quite different and would most likely require a lot of funding. Gather a bunch of monolingual speakers from around the globe, pay them hand-somely, and stick them on an island somewhere, *à la* the reality show *Survivor*. If everything works out the way theorists have theorized it would, a pidgin should develop. Here,

however, the language would end up being an amalgamation, and thus, substrate and superstrate theory would not apply (in theory).

2.10 *Problem Epsilon*

In English, there are shared metaphors that don't cross over linguistically. For instance, you couldn't say "he goes" to mean "he says" in Spanish or French or just about any other language I know of, whereas, in nonstandard English, you can. Similarly, you also can't translate word-for-word "he gets drunk" into any other language to get the meaning in English (ex.: Sp. **él obtiene bebido*). Yet, if you have words that are translated as "to go" and "to get" and "to drink", it's not hard to imagine that English speakers would use these words just as they're used in English. And why not? They all speak English; it gets the point across. It's difficult to explain to non-linguists just how much metaphor invades their thoughts, since metaphor is everywhere.

2.11 *Possible Solution Epsilon*

I suppose one could try to explain the theories behind metaphor to a group of non-linguists, but that would take time and effort on both the part of the linguist's and the non-linguists'. A better solution would be to take people of different language backgrounds so that they don't share metaphors. This would be quite difficult to do, however, especially in America. An imperfect median solution would be to define the

words in very specific ways. So, for example, the word *lusa* would not mean "to get", but, rather "to obtain", and the word *ayas* would not mean "to go", but "to move from one location to another". These definitions are clunky and could lead to other problems, but would lead to fewer metaphor mishaps (especially with words translated as "to come" and "to blow"). Ideally, the subjects would come up with their own metaphors as they went along, and, to some extent, this actually happened by the end of the semester with my group.

3.1 *The (Eventual) Structure of Language X*

I'll be breaking this down into the following groups: Phonology, Morphology, Syntax and Semantics. Some will get more attention than others.

3.2.1 *Phonology: Who Could've Guessed?*

When I originally envisioned myself writing this paper, I didn't see myself saying a word about the phonology. Why? Because I invented a romanization system that had a one-to-one correspondence, and which is highly predictable, based on the basic knowledge of the English spelling system. How wrong I was. If anything, what follows should prove that pidgins (at least initially) really do have a simplified sound system in comparison to their superstrate language.

3.2.2 *Predictable Stuff*

I could have predicted that voiceless stops would be aspirated word initially, and, they were. This came over directly from English. Same with the velar /l/, long vowels before voiced segments and vowel reduction, where possible. This I predicted, and it all came true.

3.2.3 *Unpredictable Stuff*

Oddly enough, all voiced consonants save glides, nasals and liquids became devoiced word-finally. What's more, they were treated as voiceless segments. For example, the word *kuz* was invariably pronounced /kus/ without a long vowel, which, were it pronounced with a [z], *would* have a long vowel in English. The simplification seemed to come naturally, and occurred even when they were looking straight at the spelling of the word.

3.3.1 *Morphology*

There's quite a lot to say about morphology, so it will be split up into a few sections, one dealing with inflectional morphology, and the other two dealing with derivational.

3.3.2 *Morphology Gone Awry*

As previously mentioned, I included a class system with my words. It went as follows:

(i) Animate nouns: *-i*
(ii) Natural, non-animate nouns: *-e*
(iii) Manufactured nouns: *-ev* (clothes, building, etc.)
(iv) Time nouns: *-ay* (time, day, night, etc.)
(v) Sub-stance/mass nouns: *-es*
(vi) Other nouns: *monosyllabic, beginning and ending with a consonant*
(vii) Color adjectives: *-o*
(viii) Adjectives with the meaning "covered with" or "full of" x substance: *ye-*
(ix) All other adjectives: *e-*
(x) Transitive verbs: *-a*
(xi) Intransitive, non-experiencer verbs: *a-*
(xii) Intransitive, experiencer verbs: *o-*
(xiii) Ditransitive verbs: *-u*
(xiv) Adverbs: *i-*

This was my system, and it was a fine system, yet it all came to naught; they didn't use it. Maybe someone picked up on adjectives beginning with /e/, since they were so difficult for them to say, but they never, for example, took the verb *ayak*, "to win", and formed the noun *yaki*, "winner". This never, ever happened, and I don't anticipate that it ever would have.

3.3.3 *What the Heck Is a "Go Bag"?*

While the class system method of derivational morphology didn't work out, my subjects devised a way to derive new words from other words semantically. To go along with a viewing of the Bugs Bunny cartoon *Herr Meets Hare*, I created a word for

bag, *duwev*, because they would need it to describe a specific scene, and I didn't want to have them sitting there scratching their heads trying to figure out a way to come up with a word for "bag". I figured that, after that week, the word would never see the light of day again. They, however, had a different idea altogether. They wouldn't let it go, and they kept bringing it back pretty much any time they needed a word for something they didn't know–in other words, a word for "thing". That was interesting enough, but the shock came in week 9, when they started using it in combined forms. The first was for the word "television". I had told them at the beginning that, in cases where there was no clear way to express the meaning of a particular English word, they could just use the English word and be done with it. Praise the heavens they forgot, for they came up with the gem *osim duwev* for "television", which means "see bag". Then, right after that, in order to describe a picture where a family gets into a car and drives off, Mary invented the word *ayas duwev* for "car", which glosses as "go bag". While one could argue that there's a metaphorical connection between a car and a bag (things go in a bag; people go in a car), there's very little to suggest a connection between a television and a bag, and that innovation came first. This proves that *duwev* had all but lost its meaning as "bag" and had merely become "thing", and functioned similarly to the "-er/or" suffix in English (e.g.: "to radiate">"radiator"; "to freeze">"freezer"). This change is something like the change of English "sh*t" to *sit* in Tok Pisin[5] .

[5] John McWhorter, 2001.

3.3.4 *Inflectional Morphology: There Is None*

That's the simple answer: There is none. They never once distinguished between the past, present, future or irrealis tenses. Every so often someone would try, usually in the beginning of a story by saying something like "one day", but once they saw they could convey the meaning just as easily without having to think, they gladly did it the easy way. There are a couple ways to account for this. One might say that they were all just lazy and didn't care enough, and that if there had been any real incentive involved, they eventually, grudgingly, would have come up with something that re-sembled a tense system. This might very well be true, but that would be ignoring the mighty role of the substrate language: English. The English tense system, whether anyone will admit it or not, is dying. It's dying only in speech, but it's dying, nonethe-less. I'll digress briefly to give my account of this.

In casual speech (and this means *all* speech unless one is giving a speech), the present tense is used to express the past and the future. The future came first with the help of the verb "to go", so when, for example, the Southern California English speaker of today says something like "I'm'a go ta store; you comin'?", we know it evolved from "I'm gonna go to the store" which evolved from "I am going to go to the store". The phrase "I am going" is quite noticeably a present tense verb. Nevertheless, it expresses the future. It was only a matter of time before this spread to the past. So now, in casual

speech, it's more than common, even if one starts out in the past tense, to resume in the present. Example:

"So what did you do yesterday, Dave?"

"I went to pick up a present for my girlfriend."

"Oh? How'd that go?"

"Okay, so I go to the mall, right, and, of course, there's this enormous line of people stretching out of every store that I could possibly want to visit. So I get in one of those lines, and…"

In this exchange (which is 100% normal), one will note the switch to not only the present tense to indicate the past, but the little used present indicative tense, which was slain by the present progressive tense in the department of what is labeled as "the present tense". How I think it came about was as follows: (i) In story telling situations, one often uses the imperfect, which is, for example, "he was going", "he was eating", etc.; (ii) this imperfect tense, in speech, is often reduced: "he's going", "he's eating", etc., where there's a short, almost imperceptible schwa in between the end of the word "he" and the beginning of the [z] to differentiate the "he was" "he's" from the "he is" "he's"; (iii) this is reinterpreted as actually being the "he is" "he's" since the schwa is often lost in fast speech; (iv) from this point, the semantic shift has already occurred, and the switch from progressive to indicative can occur. Thus, the narrative tense is born.

What I mean to prove with all this is that the omission of overt past tense marking is *not* a sign of laziness on the part of my subjects, but, rather, the natural form, since, in most casual speech, and always in narrative tone, there is no overt marking of the past tense in modern English (American English, anyway). Since no overt tense marking was needed, no overt marking appeared, and my subjects understood each other the same way they do in English: by intonation. Generally when the present or future tense was needed, there was a break between the subject and the verb, and the first syllable of the verb drew emphasized stress. In narrative tone, the distinction was less marked, and the sentence portrayed a falling intonation pattern.

One obstacle to tense markers arising, however, was the fact that Language X was merely a list of words and not a real language. Generally, tense markers in pidgins arise from other expressions in the superstrate language[6] . In Tok Pisin, for example, the past tense marker *bin* clearly came from the English word "been", which can be associated with the past tense in English, as with "Where have you been?" The future marker, *bai*, derived from *baimbai*, came from English "by and by", which can be used as a future marker, even though it's not terribly common in Modern English. In this project, however, the only full language they were hearing was English, which they were not allowed to use. And, of course, their substrate language was English as well, so they wouldn't be able to take something from their L1 and use it as a tense marker.

[6] John McWhorter, 2001.

Thus, it's highly unlikely that a tense marker would have developed after any given period of time.

There is one other bit of inflectional morphology that occasionally popped up, and that's the plural marker. There is no official plural marker, but an impromptu plural marker became *be*, the word for "two". Generally, the marking of the plural was considered unimportant, but when they felt it necessary, they inserted *be*. In the sentence "Bob put his two feet into a bag", *Bob sambu zali (be) kuz (is) duwev*, the number two is used because the natural plural of one foot is two feet. It's in parentheses, along with *is*, because they were revisions, meaning somebody said the sentence without the words in parentheses, and someone else added the words right afterwards. In most cases, the nouns that were pluralized had natural number plurals associated with them, and thus, my subjects used the number words. Later on, though, since *be* was the most common word used to pluralize nouns, since most of the nouns pluralized had two as their natural plurals, *be* became used as a general plural, though only to get the point across. *Be* never lost its status as "two"; people just understood that it had been used to indicate the plural before, and so assumed that it could be again, even if the natural plural wasn't "two", and "two" wasn't what was meant to be indicated. Once, the word for "twenty", *zo*, was used to indicate the plural. It was used to describe a whole bunch of fish, and the phrase was *Zo zo zo kusi*, "twenty twenty twenty fish". In general, though, plurality was not considered important enough to give weight (or voice) to.

3.4.1 *Syntax*

In this section I'll be mainly talking about some word order issues, the genitive, conjunctions/relative clauses and prepositions.

3.4.2 *Word Order: Order Word*

The word order employed by my subjects mirrored English exactly: SVO. It seems unlikely that anything else would happen in the elementary stages of any pidgin, since the first attempts at communication would likely be either imitation or code switching, such that the one attempting to communicate, for example, learns the words for "I", "eat" and "food", and then simply puts them into the slots in which they belong in his/her own language. There were a few variations, though.

In noun/adjective phrases, the order was completely arbitrary. Note the following uses of "big man" in this utterance (*epsiz* is "big"; *sangi* is "man"): *Barnacle osim* sangi epsiz. Epsiz sangi *pek azub*. Epsiz sangi *gen elif*. *Barnacle gen keza iso* sangi epsiz *pek azub*. Here one sees a 50/50 split as to whether the noun or the adjective comes first. Adjective initial phrase order would be what was expected, since that's the way it is in English. A couple things can account for the switch, though. All six of my subjects took either Spanish or French in high school, and so all of them are familiar with adjectives following the nouns they modify. What's more, few have had

significant contact with non-Romance languages. Thus, if they thought of Language X as some sort of a "foreign language", they might most easily associate it with one of the Romance languages, in which it's common to follow the modified noun with its modifier. In addition to this, the construction of the adjective itself favors initial stress with its initial vowel and final consonant. The stress pattern of each form would be as follows (accent ague=stress; accent grave=unstressed): épsìz sángì; sàngì épsìz. (By the way: I'm basing this solely on what I heard my subjects say, not on any kind of rule, by any means.) In the second version there's only one stressed segment, and so the adjective phrase feels more like a solitary unit, whereas in the first version, there are two stressed segments, and it's more difficult to have them feel like they go together. Plus, in general, if one puts the adjective first, there will be two consonants that fall next to each other. In this case they happen to be the same manner of articulation and in the same place of articulation, but that isn't always the case. If one puts the adjective after the noun, though, the noun is generally going to end in an [i], since most of the nouns that got modified were animate nouns, and the adjective is either going to begin with [e] or [je]. While it's unpredictable what kind of a consonant cluster you're going to get if you put the adjective first, the vowel/glide/vowel part is very predictable if you put the adjective second.

Another variation came with questions. In English, the noun and its auxiliary are inverted in questions: "Are you going to the store?" "Yes, I am going to the store." The

same is also true of French, which two of the speakers were very familiar with. Unlike French[7] , however, English requires some sort of an auxiliary verb to come be-fore the noun, and not the main verb ("Go you to the store?" is not something a Modern English speaker would say if s/he didn't wish to sound archaic). In Language X there are, of course, no auxiliaries, and so it could be argued that the subjects merely copied English question order as nearly as they could, picking up directly after the missing auxiliary. Example question: *Yani sanya "tali"?* (Meaning "Do you have 'sister'?" They were playing Go Fish, and the cards were labeled with Language X words, so they would ask for a particular word–in this case, *tali*.) The only thing that would be missing in this question for it to be good, standard English would be the "do". However, even that's unnecessary, since now in speech one can drop any and all auxiliaries in questions and still be understood: "Where you going? You going to the game?" "No, I'm going to the library to learn more about Sranan. You going?" Thus, this type of varied word order can still be explained by the substrate influence of English.

3.4.3 *The Mysteries of the Genitive*

I mentioned in the word order section that adjective/noun order in noun phrases was relatively free. This was not entirely true. In cases of possession, the possessing noun always came before the possessed noun. This was seen more often with the

[7] This is changing, with the "Est-ce que" question form becoming more and more common.

pronouns: *zali kuz* (his foot); *ani giskwe* (my stick); *sangi meb* (the man's leg). Some other interesting things happened, though, in terms of possession. As shown above, *sanya*, meaning "to hold", came to be used for the verb "to have". It pretty much got used in every way "to have" is used in English (except for the perfect, of course), but then came this particular sentence: *Sangi epsiz ya giskwe is sangi meb*. What this comes out to is "man big with stick at man leg", and what it means is "The big man had a stick in his leg". The fact that "sangi" is used rather than "zali" in "sangi meb" leads me to believe that Cindy was the one who said this, though I can't tell for certain[8] . At any rate, here in English we would use the word "to have", though the semantics differ, and in the Language X sentence, the speaker evidently was sensitive to this semantic disparity. The man certainly doesn't consciously, or, rather, willingly possess the stick if it's stuck into his leg and hurting him, and so the speaker highlighted this by saying the stick was *with* him and not being possessed by him. This came as a bit of a surprise, since, on the whole, the preposition *ya* was vastly unpopular, for whatever reason. This wasn't the only instance in which it was used for possession, though. In the following insults, *ya* is used to indicate possession of a body part: *Yani demi ya etas giskwe. Yani demi ya won even.* (Interlinear: You person with small stick. You person with heart afraid.) What these were meant to mean is "You small-penised person" and "You fearing-heart

[8] See my section on gesture, and why videotape is more reliable than audio tape.

person", or something equivalent. There's one more issue with possession, but it shall have to wait until I get to the section on relative clauses.

3.4.4 *Relative Clauses and Conjunctions*

There were no conjunctions to begin with in Language X, and I was quite interested to see how far they'd get without conjunctions. As it turns out, not very. On the very first day a word for "and" popped up, mainly as a continuation of the previous syllable: *dangi i bashi* (husband and wife). It didn't stick, though, and it was soon forgotten. Then, however, as we began to focus more on story-telling, the word "and" became more and more necessary. They could get by without "but" and "however" and "if" (e.g.: *Sangi zava David losa elif shiles sanya egzam melay.* "Guy named David drinks alcohol [because] [he] had a bad day." Here, there was a space between "elif shiles" and "sanya", and there was renewed stress placed on the first syllable of "sanya", indicating a new but related thought), but "and" was another matter entirely. The form eventually and unconsciously decided upon was /e/, realized as [E], [e], [i] and [ej], by turns–more often than not [E]. Initially it was used for conjoinment of two noun phrases (I found one instance of *ya* used in this manner, but discovered later that it was my usage): *Papi, mashi e landi* (father, mother and child). Soon, however, it was used everywhere: *Blandi glasa David e Blandi meva David* (The dog bit David and [then] the dog ate David). There was one usage of *ya* for an "and"-like construction, and that occurred in the sentence:

Pistachio ya David meva coconut (Pistachio and David ate the coconut). In this sentence, the idea was that they shared the coconut together, so they really felt that *ya* was needed as opposed to plain old *e*.

I've already mentioned one instance of a relative clause–the one which began with "because". Other than that one sentence, most places where a relative clause could have appeared, one did not. Generally my subjects gave simple, declarative sentences, one right after the other. There was one interesting sentence, however, given by Cindy: *Yani landi sanya mashi blandi* (you child have mother dog). What she was trying to convey was the insult, "You son of a b——h". What she said, however, was "You child who has a mother-dog", or a dog for a mother. This was the only time any type of construction like this was used and should probably be considered an isolated inci-dent, since it wasn't spontaneous.

3.4.5 *Prepositions*

There are only two: *is* which I defined for them as "at" and *ya* which I defined for them as "with". As has already been mentioned, *ya* got the short end of the stick, and was used mainly by Kurt, who was as fond of it as I was. I could actually make a pretty short catalog of every instance in which *ya* was used, but I won't. In speech it was only used in the sense of "with", such as *Ani atsash yebish beves atsash ya yani ta baks mashi*, which comes out to, "I dance the dirty meat dance with your four-breasted mother",

word-for-word. It was used quite a bit when I had them translate a quote by Doris Lessing, but with that they prepared their phrase beforehand and presented it later. Pretty much all of them, in various ways, used *ya* when translating the phrase "think for yourself": *omem yani ya yani*; *omem ya yani demi*; *omem ya yani*. Here it takes over the benefactive role. It would have been interesting to see whether this would have held up, but the occasion never arose. The most common benefactive situation that came up was with *livu* "to give", but in all cases they duplicated English word order: *Zali livu David blandi* (she gives David a dog). The preposition had a highly restricted usage and was directly associated with the English definition.

Unlike *ya*, *is*, the other preposition defined as "at", had an extremely broad usage, and was used quite frequently. The one way it was almost never used, though, was as it was defined–that is, the simple locative adverb "at". There are four phrases where the meaning of "at" could be construed. One is simply the phrase *Is yenev Bob*, that being "at Bob's place". Here is where one would think the word would be used the most, but this type of fronting is rare, and it was prompted, since they were trans-lating the sentence "at Bob's place", not coming up with their own. The next came when they translated the phrase "when he…", which they translated as *Is lay zali…* (at [the] time he…). This was just about the only time when they used a combination to express one of the WH words. The third was the phrase "They eat at Denny's", and here there was pretty much no other way of wording it. The last would be conveyed using the word

"on" in English: *David osim mape is ginges* ("David sees a tree on the land"). This phrase is rather awkward when it stands on its own, though, and the last two words were added primarily to indicate that David was swimming in the ocean when he saw a tree on an island. The rest of the usages vary, though they all seem to involve movement or agency of some kind:

a) *Zali hosi alos* is *zali* ("his brother says *to* him"–metaphorical extension)

b) *Zali bacha ekop kuz* is *zali duwev* ("he takes new feet *out of* his bag"–movement out of, exlative)

c) *Zali sambu busi* is *zali meb* ("he puts them *onto* his legs"–movement onto with the idea of attachment)

d) *Epsiz kusi agan* is *kwame* ("the big fish comes *to* the moon"–movement towards, allative)

e) *Kwame ayas* is *ginges* ("the moon crashes *to* the ground"–movement towards with the idea of concussion)

f) *Busi alank* is *shiles* ("they sit [down] *in* the sea"–submersive movement into, inlative)

g) *David aluv* is *shiles* ("David swims *in/through* the sea"–movement through)

h) *Sangi vaza meva beves* is *shazes* ("The man burns the food-meat [turkey] *into* fire"–metaphorical; change in status)

i) *Sangi epsiz ya giskwe* is *sangi meb* ("The big man has a stick *in* his leg"–indicates finished motion, breaking of the skin–they didn't mean that there had been some sort of stick surgically implanted into his leg, and such a meaning would never have been construed)

j) *Barnacle keza iso sanya giskwe* is *epsiz sangi meb* ("Barnacle knows how to get the stick *out of* the big man's leg–the opposite of insertion)

k) *Barnacle ayas* is *indo* ("Barnacle goes *to* the left"–directed movement)

l) *Laura osas* is *David* ("Laura laughs *at* David"–malefactive)

m) *Laura vaza* is *shazes* ("Laura burns *within* the fire" or "Laura's burned *by* the fire"–oblique/middle voice)

Some of these may not seem related, but I think they are. The proof is a bit roundabout in coming, though. In letters *a*, *b*, *c*, *h*, *i*, *j*, *l* and *m*, the word *is* is used because it seems as if some sort of word *has* to go there or the meaning wouldn't be clear. A few examples: **Laura vaza ø shazes* ("Laura burns the fire"?); **Sangi epsiz ya giskwe ø sangi meb* ("The big man with a stick man-leg"?); **Sangi vaza meva beves ø shazes* ("The man burns the food fire"?). However, this was their judgment of the meanings. In letters *a*, *b*, *c* and *l* I'll argue that they used *is* only because in the sister phrase in English there is some sort of preposition. The phrase in *a* is the beginning of a quote and not a stand-alone sentence. I translated the verb as "to say", and so, no doubt, they thought

of it as the Language X version of "say", and not just talking in general, which is what I intended. For, while you'd have to say in English "He says *to* him", you could simply say "He tells him", with no preposition. Thus, I'll posit that they used *is* because they were accessing the English category of how they thought the word should be used, and not the semantic category of speaking. In *l* we see a similar situation. There need not be some obligatory preposition in the idea of one person laughing *at* another, but there happens to be in English, so *is* is used. The usages in *b* and *c* are a different matter, though. The ideas expressed are "pulling *x* out of *y*" and "putting *x* onto *y*". If two arguments are used with the ideas of "pulling" and "putting", it seems to me that the natural association would be just those used: pulling something out of or away from something else and putting something onto something else. It would seem that an extra preposition would be needed to convey something like "putting *x* into *y*" and "pulling *x* close to *y*". So, if a language has only one preposition, I would have supposed that they'd used it only where necessary, and thus, only in the most special-ized locations. Thus, I would expect a sentence like *Zali bacha ekop kuz zali duwev* or *Zali sambu busi zali meb*. These, however, prove ungrammatical, and I believe it's because of the substrate influence of English.

The rest of the examples require a bit of explanation. Examples *d*, *e*, *f*, *g* and *k* all involve some sort of volitional movement in relation to something else. In order to

understand why these particular phrases required *is* an examination of the word *ayas*, "to go" will be necessary.

I catalogued every instance of the usage of the word *ayas*, and I discovered something rather surprising. With only one argument, the verb *ayas* means "to go away" or "to leave": *Zo zo zo kusi ayas* ("Many fish go [mass exodus]"); *Bob ayas elas vala* (Bob go far fly: "Bob runs away really fast"–*elas* and *vala* are used as intensifiers); *Heni ayas* ("The rabbit leaves"). With two arguments, *ayas* means "to go into", when the second argument is an established, recognized, bordered area: *Zali ayas gale* ("He goes [in]to the forest"); *Bob ayas duwev* ("Bob goes into a bag"); *Pa melay heni ayas Taxidermy* ("One day, the rabbit went [in]to a Taxidermy") *Heni ayas Germany* ("The rabbit goes to Germany"); *Heni okesh ayas Las Vegas* ("The rabbit wants to go to Las Vegas"); *Ebwiz sangi omem zali ayas Las Vegas* ("The fat man thinks he's going to Las Vegas"? [It's possible the speaker misunderstood the context, since the fat man was thinking about how one gets to Las Vegas. The usage stands, though]); *(Busi) ayas shifto gale* ("They go [in]to the Black Forest" [the speaker originally said *ayani* meaning "you all" and then corrected her mistake]); *Veni lusa heni ayas duwev* ("The bird puts the rabbit in[to] a bag"); *Ani ayas yenev* ("I go [in]to a building"). This last sentence was uttered recently when I asked Peyton, days after the conclusion of the experiment, how he'd say "I go to the building". He replied with that sentence and said it was pretty obvious. Yet why no *is*? When I was prompting them, if I didn't give immediate feedback, a silence would

ensue, and someone would usually say *is* afterwards, as if it were an answer that I was looking for–and, most likely at that time, I was. Nevertheless, in these specialized circumstances, using *is* seemed counterintuitive to them, and they would always use *ayas* by itself first. In examining these examples, you can see that each thing that the subject goes to can be something that one is in: A country, a building, a city, a bag, a Taxidermy (in this case, it was in response to Bugs Bunny running into a room that said "Taxidermy" on it) or a forest. Because of this, *is* is unnecessary. There are other cases where it would be necessary, though, and would distinguish meaning. In the sentence *Kusi ayas is mape* (fish go at tree), the fish are jumping towards the tree. The sentence *Kusi ayas mape* would still be grammatical, but it would mean something like, "The fish go into the tree" or "the fish climb the tree".

Further evidence of this can be seen in the metaphorical extensions of *ayas*. In the sentence *David ayas heches plinye*, Mary was trying to convey the meaning "David (after completely combusting) turns into dust which fertilizes the ground which gives birth to a flower" (it took a picture on her part to get the meaning across, but this really was what she meant to say). The metaphor she was accessing was the "Inward move-ment is change" metaphor. So, she was thinking "David turns into a dust which turns into a flower", and so she used *ayas*, trying to convey the idea of inward movement which would give rise to change. Another metaphorical extension was the insult *Ayas aslan*, which is simply, "Go die". While this could be a word-for-word translation on the

speaker's part, it's another illustration of the "inward movement is change" metaphor. *Ayas* really did mean for them "to go into", not just "to go" when it was used with multiple arguments.

This brings us all the way back to examples *d*, *e*, *f*, *g* and *k*. The problem with deciding that *ayas* only takes care of inward movement is that people are still going places, even if they're not going into places. So, in examples *e* and *k*, the word *ayas* is used with *is*. In *e*, the moon is crashing into the ground, but it's not really going *into* it (it's rather interesting that the speaker noticed the semantic difference between the two usages of "into" and wasn't hung up on the English category of "into"). The phrase *kwame ayas ginges* would mean something like "The moon goes underground". In order for the collision idea to be conveyed *is* is needed. In *k*, Barnacle's running to the left. In Modern English, if someone's going to his/her left, it'd be more common to say "S/he's going left", and thus would be simpler than the Language X sample shown. This would be one example in the argument against the theory that my subjects were trying to communicate in the simplest way possible. But anyway, since *indo*–the adverb meaning "left"–isn't a defined place, the rule would predict that *is* should be used, and it is. In *d*, *f* and *g*, *ayas* isn't used, and, for reasons beyond my comprehension, this fact was apparently important to my subjects. Any other motion verb never obeyed the rules of *ayas* even if the motion was similar. Thus, *agan* doesn't mean "to come into" with two arguments, and any time it was used with two arguments, *is* was used before the

second. In cases like these, *is* really resembled *long* from Tok Pisin, since it governed any object that was relationally involved in some sort of movement in verbs other than *ayas*.

There's one last comment that I'd like to make on *ayas* that has absolutely nothing to do with prepositions. There was one instance of serial verb usage and it occurred only with *ayas*. Since there was only one, the occurrence could be written off as a fluke. I think, though, that it was far from a fluke, and would be repeated every single time such an idea needed to be expressed. It just so happens that the only idea the serial verb construction expressed was the idea of "*x* moving *y* into *z*". This is a rather specialized usage, so it shouldn't be hard to see how it would come up only rarely. The only time it was used was the bird putting the bunny in the bag, as listed above (*Veni lusa heni ayas duwev*). I was so amazed by this unexpected development that I tried to get a repetition the next week. I'm afraid my sentence was a bit confusing, though, and was not understood. The idea was this: A guy named Bob meets a woman whom he likes but who does not like him. In order to woo her, he takes off his feet, puts them into a bag and then takes out new feet and puts them on and starts to dance. This, of course, pleases the woman, and so they get together. This sequence of events seemed perfectly logical and commonplace to me when I dreamt it up the night before, but when I proposed it to my subjects, they really couldn't make heads or tails of it. Thus, they translated the sentence "Bob puts his feet into a bag" as *Bob sambu zali be kuz duwev*.

What I think they thought I was trying to convey was Bob stepping into a bag, not actually physically detaching his feet. Thus, the idea wasn't agentive movement of one thing into something else, but just Bob stepping into something. This is unfortunate, since the serial verb construction remains an isolated incident (I gave up looking for it after this since there were plenty of other interesting things to test out). Semantically, I say that it was probably used because *ayas* was associated with the English preposition "into", and *is* was thought of as more of a stative preposition. I maintain that it would probably be used again.

3.5.1 *Semantics*

The semantics of *ayas* have already been discussed, and it was one of the largest semantic mysteries in Language X, and in addition to that, there have already been some comments about derivational morphology. Outside of that, though, there was not much deviation from the definitions I gave to each of the words, which, to me, was rather disappointing. I told them all at the very beginning, and periodically throughout the course of the project, that the respective definitions I wrote down for the words should be thought of as general, overarching categories rather than exact definitions. Nevertheless, they tended to stick to the definitions. The only place where there was significant metaphorical play was in the realm of sexuality, and before I get into that, I'd like to put up the following disclaimer.

3.5.2 *Disclaimer in Regards to Sexuality*

My project consisted of meeting with six college students, three female and three male, and getting them to communicate using made-up words with no overt grammar. While my subjects knew this was a serious project on my part, they used the hour each week to have fun and goof off, which is fine, because they goofed off in Language X. As such, one of their favorite subjects was sex (this was enhanced by the fact that we met from eight to nine at night, which I've been known to refer to as "The Giggle Hour"). They had the most fun and said the most interesting things when they were talking about sex. That said, one of my subjects felt that the sexual banter was inappropriate, since s/he viewed any sexual joke as a form of aggression. This person felt it important that the complaint be lodged, and so, here it is.

3.5.3 *Sex*

My subjects had a plethora of sexual terms they pretty much coined on the fly. Any object that could be construed as sexual became so by adding the word *elif* "happy" to the front of it. Thus, *elif* became sort of a taboo classifier. The first terms showed up in the second week: *elif giskwe* ("happy stick"–penis) and *elif plinye* ("happy flower"–vagina). And so, there came pick-up lines like *Yani okesh nal ani elif giskwe* (You want tongue I happy stick) and *Ani sambu ani posh is yani eslim kwame* (I put I hand at

you smooth moon–"Let me put my hand on your smooth bottom"), where basically they carried over the metaphors already in place in English. They would sit there for twenty minutes at a time just making up sex jokes–they really would. The interesting thing that came of it was that when you combined *elif* with *shiles*, you got "alcohol". Alcohol doesn't have anything to do with sex, and certainly didn't in the context, but the idea that it was the version of the thing described (water) that couldn't be enjoyed in public, or at least wasn't as socially acceptable. So, a possible new derivation might be something like *elif moshi* ("happy woman") for "prostitute".

4 *Gesture and Supragesture*

One probably would not encounter a discussion of gesture in a book on a pidgin or creole. I believe, however, that it's extremely important not only in day-to-day, natural language communication, but also in situations where a common language isn't shared. In Language X there was an exorbitant amount of gesturing accompanying each statement. Not surprisingly, there was more in the beginning than there was at the end. However, it's not the level of natural gesture that I'm talking about (e.g., moving one's hand down when one is making a point or stating a fact), but what I call supragesture. Supragesture is the animated, excited gesturing one uses in place of actual language, especially when one can't think of the appropriate language to express one's idea.

One of the most common supragestures I came across was what I call the "like, you know what I mean" gesture. This typically involved a number of movements: (1) Nodding the head, (2) Smiling, (3) Moving the hands in a circular motion away from the body, (4) Leaning forward. This gesture accompanied, for example, the sentence *Sangi ayas wet kuz yenev*. What this was trying to describe was a man falling off a building. The way it was actually said was as follows: "*Sangi ayas*…like, *wet kuz*…*yenev*". The ellipses show a pause where the speaker became most active. It also accompanied a furrowing of the brow of myself and my other subjects who were trying to understand what the heck "man go head foot building" could possibly mean. In this case, the gesture failed, since what the gesture is really supposed to accomplish is it's supposed to indicate to the listener that they really understand what's being said, and if they just think about it quickly, they'll get it, at which time they can say, "Ohhhhhhhhhhh, yeah, I get it", and the speaker can stop struggling. Other times it works–sometimes so well that the speaker and listener don't even have to speak. This, however, didn't happen in any of the Language X sessions.

Another common gesture is the "help" gesture. It's similar to the "like, you know what I mean" gesture, except that only one hand is propelled, and it's pointed towards a particular person–the person who the speakers wants to help him/her. In Language X, the helper was almost always Peyton, and the one gesturing was more often than not Cindy. This, however, is something I don't have an example of. I have

an example for the previous gesture because I remember that specific incident. This latter, though, I can't remember a specific incident, so, having used a tape recorder only, I can't list an example; this is merely the impression I got. This is why, in the future, a video recorder should be used at all times–that is, if the experiment is to be done right. Gesture is tremendously important, and there's no way to get it saved with a video camera. The fact that people's voices–especially guys'–tend to sound the same if you're not that familiar with the individuals speaking is also a problem when using a tape recorder, since there are times when you can't tell who is speaking. It isn't always important, but sometimes it is, and it'd just be nice to have a video camera at every session.

5 *Language X Has No Copula*

Language X has no copula: *Sangi e Barnacle elif* (Man and Barnacle happy: "The man and Barnacle are happy").

6 *Theorizing: So, What's the Point?*

I'd like to spend the rest of this paper talking about what I think this experiment means to the study of pidgins and creoles.

First off, I'd like to restate all the differences this experiment has between the actual creation of most pidgins and creoles:

(1) Language X speakers were not my slaves or servants.

(2) My subjects and I shared a common language.

(3) My subjects didn't feel coerced into speaking Language X (for the most part).

(4) We were not trying to accomplish a task, like plowing a field or mining.

(5) The superstrate language wasn't a complete language.

(6) This really wasn't a contact situation.

That said, I still think this experiment was important.

As I said in the very first paragraph, there is no significant documentation of what the various pidgins and creoles were like in the first twenty years of their creation, let alone the first few months. Fifty years is practically a lifetime, and yet those are the earliest records we have, which themselves aren't exactly anything like "A Complete Grammar and Examination of the Pidgin Spoken by the Slaves on My Plantation"[9]. Who knows how on earth these people communicated in the first few months of their cohabitation? By now, it's impossible to tell. This is where my experiment comes in.

In an actual contact situation, the subordinate group probably wouldn't try to learn the language of the dominant group right away. I would think there would be little communication at all in the typical plantation situation: The master barking out

[9] Not a real book.

orders in his native tongue and the slaves not understanding until someone got down and showed them exactly what they wanted them to do. It would seem to me that communication would be undesirable and avoided altogether at first. When it finally did get going, it would probably be with code switching or imitation, as I said. And, of course, there would be large amounts of gesturing and exemplifying, demonstration. The mode of communication that would develop wouldn't even be pidgin, or even a jargon. It would just be whatever worked to get by with each particular situation. The rules would change constantly, and the only correct form would be the form that conveys the correct information or produces the intended result. This is pretty much what happened in my experiment from week to week. There was no discussion or talk; just communication. As soon as one person conveyed the idea that they wanted to convey, they were done. So, some of the ways my subjects expressed ideas may be closer to many pidgins in their earliest stages.

An interesting experiment which would require both Bill Gates and Donald Trump as its sponsors would be to keep one of the experiments I listed going for about fifty or sixty years. In other words, to create a pidgin. If, after sixty, seventy, maybe a hundred years, the language that developed looked like other pidgins and creoles at their seventy year mark, then whatever the language originally looked like might closely approximate the early stages of the pidgins and creoles of the world. It's highly unlikely that this would ever come to be, but it's worth mentioning.

I think one of the things this experiment exemplifies is the switch from what I call Hemingway to Fitzgerald language usage. In the beginning, my subjects merely tried to convey their idea in as quick and cheap a way as possible, much like Ernest Hemingway does with his short, jerky, to-the-point prose. Later on, they were still in it to get the job done, so to speak, but rather than trying to utilize what was quickest or what was easiest, they started to look for what was best, just like F. Scott Fitzgerald, whose books are about the same length as Hemingway's, but whose sentences do a lot more. It was when they stepped up to Fitzgeraldian communication that the various rules with *ayas* and *is* arose, and I've no doubt such rules would have continued to arise. I think the reason that the switch eventually occurs has to do with pride, and the fact that it's not empowering to be able to say any old thing and have it mean whatever you want. It's as if the rules–*any* rules–are a sign of advancement.

The long and short of it is this: I did see Language X becoming a pidgin and doing pidgin-like things. Perhaps a better word is *feel*. As I was looking through my pages of notes to find examples of things, I would notice that, every time I found a counterexample to some rule that I had proposed, it usually showed up in my speech. A quick example: In the middle of a story (we took turns speaking), I said *Laura ayas is kwame* (Laura go at moon). This totally breaks the rule I proposed, since the moon is a specified place. Yet, it's not as if they were going to correct me. They understood what I meant; it's just something they wouldn't say. And so it was at places like this where I

noticed that what I perceived to be Language X was not what they perceived it to be. It hadn't gotten to the point where they would see it as a language and start to correct *my* grammar, though I've no doubt that if it would have kept going, it would've come to that. Based on what I've seen throughout the course of this experiment, I'd like to posit a hierarchy of development from pidgin to creole:

1.) *Bare Communication*: Speakers of the substrate language slowly learn a few words or fixed expressions of the superstrate language. To communicate, they put words from the superstrate language into the grammar of their own language. There are no rules. Whether the correct idea is conveyed is the basis for determining correct or appropriate usage.

2.) *Pidginization*: Substrate speakers begin to systematize the language they speak. A few general rules which don't so much necessarily correspond to any rules in the substrate or superstrate languages, but *feel* right begin to take shape. These "rules", however, are totally mutable, since the emphasis is still placed on information conveyance. So, it doesn't matter if every speaker uses every rule every single time; it's just a pattern that seems to simmer under the surface.

3.) *Pidgin Birth*: A pidgin is born. All the rules that had been growing come to fruition in this stage. However, there aren't many rules, and there doesn't

necessarily have to be a rule for everything in the pidgin; just a few rules that speakers recognize as being valid. There may still be some misuse, and possibly competition between various types of rules pertaining to the same thing. The language is still used only for communication, and so the vocabulary is small. It's now simply a system for communication that can be used reliably.

4.) *Creolization*: The language becomes a language, used not just for communication, but for leisure and art, as well. The vocabulary expands, rules are finalized, the language is standardized. From this point on, the changes that the language will undergo are the same changes that every language undergoes.

I won't go so far as to put a timeline on this, but I would guess that a pidgin moves from stage 1 to stage 2 rather quickly, given how soon rules developed in Language X, even though it was only spoken for one hour once a week. This, however, would be largely dependent on the need for communication, though, and the importance placed on it. Though we only met for an hour once a week, it was clear that we were coming together to speak the language and to do nothing else, and so there was more emphasis placed on speaking and innovation, and systematicity more quickly became a necessity for them. That said, I'd never claim that Language X got beyond stage 2. I believe the

jump from stage 2 to stage 3 would take much longer, especially with the random communication that would occur on a plantation (one slave speaks to the master once during the week and uses some construction, but no one else hears it, and by the time he has the opportunity to use that construction again, maybe he's forgotten it, maybe another strategy has developed, etc.). And, of course, the jump from stage 3 to stage 4 is the longest jump of all.

7 *Concluding Remarks*

On the whole, I think this experiment was a rousing success, despite the fact that one of the sessions was canceled and two or three weeks of tape were, for all intents and purposes, lost. I think if I were to attempt this experiment again I would be more aware of what to do and what not to do. I'd like to thank my sponsor, Prof. John McWhorter, who provided me with the opportunity and gave me advice and much encouragement. The experience is one I'll never forget, and I'm grateful to have been able to take part in it.

Ani okesh yani sanya eyan melay!

Language X Word List (This is what each subject had to work with):

English-Language X

afraid even
all.....eyos
animal lavi
at.....is

back (body part) losh
bad.....egzam
belly yof
big.....epsiz
bird veni
to bite.....glasa
black shifto
blood.....pifes
to blow (breath) asaf
blue.....ishlo
bone len
breast, chest.....baks
to breathe ahosh
brother.....hosi
to burn vaza

child landi
clothing.....yonzev
cloud fuve
cold.....enish
to come agan
to cook.....zela
correct enats
to count.....andal
to cut daya

to dance atsash
day.....melay
to die aslan

Language X-English

abim to lie (prostrate, not "fib")
ablag.....to vomit
achak to fall
achul.....to work
agach to turn (e.g., to turn around)
agan.....to come (movement only)
ahosh to breathe
alank.....to sit
alos to say
aluv.....to swim
andal to count (as in "one, two…")
ani.....I
apan to stand
asaf.....to blow (using your lungs)
ashas to sleep
aslan.....to die
atsash to dance
ayak.....to win
ayan to play
ayani.....you (plural), you all, y'all
ayas to go, to move, to walk
ayaz.....to sing
aywa yes, yeah
azub.....to urinate, to relieve oneself

bacha to pull
baks.....breast, chest
bande star
bashi.....wife
be two
beves.....meat
bezda to scratch (e.g., to relieve itching)
blandi.....dog
blaza to fight

dirty.....yebish
dog blandi
to drink.....losa
dry efes
dull.....ebez
dust heches

ear zay
earth.....ginges
to eat meva
egg.....wome
eight ge
eye.....pek

to fall achak
far.....elas
fast efis
fat.....ebwiz
father paki
few.....enek
to fight blaza
fire.....shazes
fish kusi
five.....de
flower plinye
to fly.....vala
fog hoshes
foot.....kuz
four ta
fruit.....hashe
full esuf

to give livu
to go/move.....ayas
good eyan
grass.....seles
green hino

hair mayes

bleza.....to kill
bos tail
busi.....they

chaga to hit
chises.....salt

dangi husband
daya.....to cut
de five
demi.....person
dol mouth

ebez dull
ebiz.....warm
ebwiz fat
edaf.....many
efes dry
efis.....fast
egal other
eglash.....slow
egosh old
egwish.....thick
egzam bad
ehin.....this
ekop new
eksin.....thin
ekwim wet
elas.....far
elif happy
elik.....wide
emi what
emits.....some
enats correct
enek.....few
enen near
engid.....heavy
enish cold
eniz.....straight

hand.....posh
happy elif
he.....zali
head wet
to hear.....oniz
heart won
heavy.....engid
here isnap
to hit.....chaga
to hold sanya
hot.....ezats
how iso
husband.....dangi

I ani
ice.....sayes
it zali

to kill bleza
knee.....fun
to know (facts) keza

lake yande
to laugh.....osas
left (side) indo
leg.....meb
to lie (down) abim
to like/love/enjoy...owis
to live owem
long.....evag

man sangi
many.....edaf
meat beves
moon.....kwame
mother mashi
mountain.....gibe
mouth dol

epsiz big
eslim.....smooth
eslit narrow
esuf.....full
etas small
evag.....long
even afraid
eyan.....good
eyos all
ezats.....hot
eziz sharp

folay year
fone.....stone
fun knee
fuve.....cloud
fuyes wind

gale forest, woods
ge.....eight
gen no, not
gibe.....mountain
ginges earth, soil
giskwe.....stick, wood, branch
glasa to bite
gwega.....to tie (together, for example)

ha nine
hashe.....fruit
heches dust
hezes.....sand
hino green
hoshes.....fog
hosi brother
huches.....smoke
huwes snow

ifay there
indo.....left (side)

to name zava
narrow.....eslit
near enen
neck.....shed
new ekop
night.....molay
nine ha
nose.....yas
no, not gen

to obtain lusa
old.....egosh
one pa
one hundred.....zuyu
other egal

person demi
place/building.....yenev
to play ayan
to pull.....bacha
to push tusha
to put/place.....sambu

rain sezes
reason/purpose.....yom
red zeso
right (side).....inko
river yole
road/path.....konev
rope lesev
to rub.....vamba

salt chises
sand.....hezes
to say alos
to scratch.....bezda
sea spuse
to see.....osim
seven ka

inko right (side)
is.....at
ishlo blue
isnap.....here
iso how

ka seven
keza.....to know (facts, information)
klasa to throw
konev.....road, path, street, thoroughfare
kusi fish
kuz.....foot
kwame moon

landi child
lavi.....animal
lay time
lekso.....white
len bone
lesev.....rope, cord, twine, string
livu to give
losa.....to drink
losh back (where your spine is)
lusa.....to obtain

macha to shoot
mape.....tree
mashi mother
mayes.....hair
meb leg
melay.....day
mesha to wash
meva.....to eat
mi three
misha.....to squeeze
miyes skin
molay.....night
moshi woman
mubo.....yellow

to sew (w/needle)....slesa
sharp eziz
she.....zali
to shoot macha
to sing.....ayaz
sister tali
to sit.....alank
six ni
skin.....miyes
sky vales
to sleep.....ashas
slow eglash
small.....etas
to smell onet
smoke.....huches
smooth eslim
snow.....huwes
some emits
to split.....skaza
to squeeze misha
to stab/pierce.....zitsa
to stand apan
star.....bande
stick giskwe
straight eniz
straight eniz
sun.....zeye
to swim aluv

tail bos
ten.....sa
there ifay
they.....busi
thick egwish
thin.....eksin
to think omem
this.....ehin
three mi
to throw klasa

mup tooth

nal tongue
ni.....six

okesh to want, to need, to desire
omem.....to think, to cogitate
onet to smell
oniz.....to hear
osas to laugh
osim.....to see
owem to live
owis.....to like, to love, to enjoy

pa one
paki.....father
pek eye
pifes.....blood
plinye flower
posh.....hand

sa ten
sambu.....to put, to place, to position
sangi man
sanya.....to hold
sayes ice
seles.....grass
sezes rain
shazes.....fire
shed neck
sheka.....to wipe
shifto black
shiles.....water
skaza to split (in two, for example)
slesa.....to sew (w/needle and thread)
spuse sea

ta four
tali.....sister

to tie (together).....gwega
time.....lay
tongue nal
tooth.....mup
tree mape
to turn (oneself).....agach
twenty zo
two.....be

to urinate azub

to vomit ablag

to want/need okesh
warm.....ebiz
to wash mesha
water.....shiles
we wani
wet.....ekwim
what emi
white.....lekso
wide elik
wife.....bashi
to win ayak
wind.....fuyes
to wipe sheka
with.....ya
woman moshi
woods/forest.....gale
to work achul

year folay
yellow.....mubo
yes aywa
you (sg.).....yani
you (pl.) ayani

tusha to push

vala to fly
vales.....sky
vamba to rub
vaza.....to burn
veni bird

wani we
wet.....head
wome egg
won.....heart

ya with
yande.....lake
yani you (singular)
yas.....nose
yebish dirty
yenev.....place, building, room
yof belly
yole.....river
yom reason, purpose
yonzev.....clothing

zali he, she *and* it
zava.....to name, to call
zay ear
zela.....to cook
zeso red
zeye.....sun
zitsa to stab, to pierce
zo.....twenty
zuyu one hundred

**stress ideally is on the last syllable*

Pronunciation:

This was designed to be easy to pronounce for English speakers. Nevertheless, here's a pronounciation guide:

a="a" in "father"; e="e" in "get" or the "a" in "gate" (either way); i="ea" in "seat"; o="o" in "vote"; u="oo" in "boot"; z="z" in "zoo"; g="g" in "gate" *not* "giant"; sh="sh" in "shoe"; s= "ss" in "boss"; ch="ch" in "chimp"; y="y" in "yet"; ay="i" in "kite"; the rest should be pretty self-explanatory.