This is a report of the results of an investigation of a test of plurality and past tense in standard English (SE). This research replicated Gleason's 1957-58 study in Fesctcn. The subjects were 27 speakers of Hawaiian Creole English (HCE) in a kindergarten class in Honolulu. The results showed that the children produced very few SE plural and past tense forms. Several interpretations of the results are given. First, HCE speaking children do not possess the categories of either past tense or plurality. Secondy, the experiment failed not the children, who in other settings, produce plural forms. With regard to past tense formation, there was probably interference from a Creole rule. In addition, the test situation may have been threatening to the child for cultural reasons. Finally, the test and the testing situation may have been adequate, but the complex language situation in Hawaii may tend to delay complete language development. It is concluded that the same test is not always appropriate in all cultures and that such an investigation can produce damaging results if it is not interpreted properly.

(Author/AMH)
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The Acquisition of Plurality and Tense By Pidgin-Speaking Children

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The Kamehameha Early Education Program.

The Kamehameha Early Education Program (KEEP) is a research and development program of The Kamehameha Schools/Bernice P. Bishop Estate. The mission of KEEP is the development, demonstration, and dissemination of methods for improving the education of Hawaiian and Part-Hawaiian children. These activities are conducted at the Ka Na'i Pono Research and Demonstration School, and in public classrooms in cooperation with the State Department of Education. KEEP projects and activities involve many aspects of the educational process, including teacher training, curriculum development, and child motivation, language, and cognition. More detailed descriptions of KEEP's history and operations are presented in Technical Reports #1-4.
Abstract

This paper reports an investigation of a test of plurality and past tense in standard English (SE). The subjects were in a kindergarten class, and were speakers of Hawaii Creole English (HCE). The test used was a replica of one used in Boston. The results of the test administration showed that the HCE-speaking children produced very few SE plural forms and past tense forms. To conclude, however, that the subjects have no competence in these two areas of SE is inaccurate. To a large degree, the test design and the test situation contributed to the HCE-speaking subjects' results. It is hypothesized that the cultural differences between HCE-speaking children in Honolulu and SE-speaking children in Boston are responsible for the situation.
Hawaii abounds in misconceptions about local speech, or Pidgin, as it is commonly called. It is not unusual to hear educators and laymen alike claiming that Pidgin is broken speech, or poor English, and that Pidgin has no grammar or that it has no rules. For a long time, the State Department of Education had as one of its goals the eradication of Pidgin from the speech of local students.

Part of our work at the Kamehameha Early Education Program (KEEP) is the separation of fact from fiction with regard to Pidgin. We are attempting to provide answers to such question as, "Are Pidgin-speaking children adversely affected by their speech in school?" "Is it true that speaking Pidgin causes reading disabilities?" "Should standard English be taught as a second language or dialect to local students?" In an effort to assess the linguistic competence of Pidgin-speaking children, we investigated whether or not the kindergartens students at KEEP, most of whom speak Pidgin, possess the rules which govern the formation of past tense and plurality in standard English (SE).

1This is a revised edition of a talk given to the Hawaii Psychological Association in Honolulu, May, 1972.

2Pidgin will be used throughout this article as a cover term for the actual linguistic situation which is somewhat more complex than the term Pidgin denotes. Day (1973a) posits the existence of a post-creole continuum which is in the process of decreolizing. The continuum, often referred to as Hawaii Creole English, is composed of a series of overlapping systems, ranging from a linguistic system which is very different from standard English to one which differs only slightly from standard English.
Plurality and Tense in SE

Our investigation replicated an investigation carried out in 1957-58 in the greater Boston area by Jean Berko Gleason. She wanted to discover if kindergarten and first grade children possessed the rules for the formation of plurality, past tense, diminutive, compounded, or derived words, derived adjectives, third person singular habitual, singular and plural possessive, comparative and superlative adjectives, progressive, and compound words (1971: 156-57). In current linguistic jargon, she wanted to learn if her subjects had internalized the rules relating to these phenomena.

Gleason's experiment has become a classic. To make sure that the subjects had internalized the rules and were not merely repeating previously learned forms, she used nonsense words, much like the words that Lewis Carroll used in Alice in Wonderland. Based on English phonology, they sounded like words which could really be English, but had never made it. Gleason reasoned that if the children were able to produce a correct plural form, for example, for a word they had never heard before, then it could be safely concluded that the children indeed possessed a productive rule for plural formation.

Gleason's procedure for getting the children to produce the appropriate responses without asking them directly was as follows: on plural formation, for example, she showed the children make-believe objects. She said, "This is a wug. Now there is another one. There are two of them. There are two ______." (1971:155). For past tense formation, she would show the subjects a picture of a man performing a certain action, and would say, for example, "Here is a man that knows how to rick. He is ricking. He did the same thing yesterday. What did he do yesterday? Yesterday he ______." (1971:156).

Gleason's investigation convincingly demonstrated that both kindergarten
and first grade children had internalized the morphological rules for which she was looking. There was a slight difference between the two grades, with the first grade children showing slightly more forms than the kindergarten children, but both groups indeed possessed the rules.

Plurality and Tense in Pidgin

In order to replicate the conditions under which Gleason ran her investigation, our test was administered by Evelyn Crow, a graduate student in the Department of English as a Second Language, University of Hawaii. Thus the relationship between the investigator and the subjects was the same in both cases: an unfamiliar adult female. This report will focus only on the results which we obtained at KEEP as they pertain to the formation of past tense and plurality.

Results for past tense formation. There were eight items relating to past tense, six of which were nonsense words: spowed, ricked, motted, bodded, glinged (or glang), and binged. The two SE words were rang and melted. There were only three correct responses for the nonsense words, and they were all for ricked; there was only one correct SE response, and that was for melted. That is, twenty-seven children took the test and there were eight test items for past tense formation, making a total possible number of correct responses of 216. Our Pidgin-speaking kindergarten subjects displayed four correct responses, as a group. These four correct responses did not come from any one particular child, but from four different children. Thus we can claim that not one child out of the twenty-seven showed any control of the SE morphological rules for past tense formation.

Results for plural formation. There were ten items relating to plurality, nine of which were nonsense words: wugs, gutches, kazhes, tors, luns, nizes, craz, tasses, and heafs. The one SE word was glasses. There was only one
There were two correct responses to glasses. Twenty-seven children took the test and there were ten test items for plural formation, making a total possible number of correct responses of 270. Our Pidgin-speaking kindergarten subjects displayed three correct responses, as a group. Again, these three responses came from different children. Therefore, we can claim that not one child out of the twenty-seven showed any control of the SE morphological rule for the formation of plurality.

Further, not only did the children not display any control over or knowledge of the appropriate SE rules, they also did not use any Pidgin forms! We know that past tense in Pidgin, for example, is formed by placing the past tense morpheme, *wen*, before the simple form of the verb. Thus, the past tense Pidgin equivalent of the SE sentence, *I hit the man*, is *I wen hit da man*. However, not one of the KEEP kindergarten children ever produced a response such as *Yesterday he wen rick*.

**Interpretations of Responses**

There are several possible interpretations of these results. Let us begin with the most obvious one first. For some reason, the KEEP children and, by generalization, since we have no reason to believe that these children are not typical of other Pidgin-speaking children, Pidgin-speaking children in Hawaii do not possess the categories of either past tense or plurality. Since they did not display any grasp of the rules involved in forming past tense in either SE or Pidgin, the children must be lacking this grammatical concept. Thus they are deficient; not only are they deficient in SE, but in Pidgin also! This interpretation would have significant implications for the curriculum of the public schools. Given these two major deficiencies, Pidgin-speaking children should be subjected to an intensive program of instruction.
in English as a second language or dialect. This program would have to be given when a child enters school in order to overcome his/her handicap as soon as possible.

A second interpretation of the test results takes a completely different point of view. It is that the experiment failed, not the children. Even though Gleason's test was successful with middle class children in the Boston area, it did not succeed in assessing the linguistic competence of the Hawaiian children in Kalihi, Honolulu. That is, the Hawaiian children did not perform despite independent evidence of competence, a finding also reported by Gallimore and Tharp (1974). Our multiple tape recordings of the same twenty-seven children under different circumstances producing past tenses and plural forms, in both SE and Pidgin, support this interpretation. The argument against it is that the examples which we recorded could be merely instances of learned forms, and the proof that the children have not internalized the rules is that they were unable to produce new forms, to apply the rules, on the Gleason test.

The reply to this argument is that included on the Gleason test, as noted earlier, are several SE words. For plurality, it is *glasses*. Given the widespread use of this word, one could assume that at least, say, 25% of the children would have learned this plural form and should have produced it on the test. Only one child did, however, thereby giving support to the interpretation that the test or the testing situation is at fault and not the children. That is, we have independent knowledge that the subjects can produce SE plural forms. Since the subjects did not show any evidence of this knowledge, it could be concluded that the circumstances were not appropriate for displaying this knowledge.

In further support of this interpretation, consider the following

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10
observations about Pidgin grammar. The first is that the sentence on the text which calls for the plural form contains a numerical quantifier: two. There are two book. It is possible that in Pidgin the addition of a plural morpheme is redundant in this construction. It might be appropriate to say two book, for example. Thus, it would also be appropriate to say two wug. Or it might be that there are phonological constraints on plural formation which the test items favor. Thus the Pidgin-speaking children, following the rules of Pidgin grammar, would not use a plural form.

Now consider past tense formation. Day (1973b) demonstrated that there is a rule at work in Pidgin called tense neutralization. Briefly, this rule says that if there are two or more markers of past tense in an utterance, then at least one of them can be omitted. Thus in the sentence Yesterday he ricked, there are two past tense markers—yesterday and -ed, the past tense morpheme. Given tense neutralization, the past tense morpheme, the second one, can be correctly omitted in Pidgin. Thus we would get the appropriate Pidgin response, Yesterday he rick.

In addition to the type of reply in which there is no past tense morpheme, kindergarten children also frequently replied using the progressive, -ing form. For example, a child would reply He motting instead of the expected He motted. The basis for this reply can be found in the question. Let us look at it again: The examiner says

Here is a man that knows how to mott.
He is motting.
He did the same thing yesterday.
What did he do yesterday?
Yesterday he _____________.

The second line contains an -ing form. It is expected, however, that the child will focus on or be cued by the did in the third line and the did in the fourth line. There is, though, nothing to prevent the child from picking up
on the -ing form. In her experiment, Gleason mentions that some of her subjects also replied with the progressive, and that children doing so would have to be prompted to try again. When so prompted, her subjects usually responded with the appropriate forms. Our children when prompted, would either continue to use the -ing form or would switch to the simple form, such as rick. This latter response, as we have seen, is correct according to the rules of Pidgin grammar.

It should be pointed out that often the VEP kindergarten children used the -ing form without the auxiliary be. If a subject were to use the -ing form, in SE one would have to say, for example, Yesterday he was ricking. The equivalent pidgin reply to this is Yesterday he ricking. The was can be omitted because of the preceding past tense adverb yesterday, because of tense neutralization.

A final bit of support for the accuracy of the interpretation that the Pidgin-speaking children are not deficient may be found in the nature of the test situation itself. What we have is a dyadic interaction between an adult and a child. One could speculate that perhaps there is something in the children's culture which does not lend itself to performing well under this condition. The adult-child situation could be too threatening to the child.

A third interpretation of the test results could be that the test is indeed adequate, and that the conditions under which it is administered are also adequate, but that the complex language situation in Hawaii tends to delay complete language development. It has been demonstrated elsewhere that in bilingual situations the children lag somewhat behind monolingual children in the acquisition of both languages. In Hawaii, it might be the case that Pidgin-speaking children are also in a bilingual environment, with SE and Pidgin competing for development and acquisition. It must be noted that this
interpretation does not automatically rule out the second interpretation discussed above. Both are possible, and likely, and together would help in explaining the test results.

Conclusion

What we have attempted to demonstrate is that it is not always appropriate to use the same test instrument in cross-cultural studies. An excellent test in white middle class culture in the Boston area apparently failed in Pidgin-speaking Honolulu. It can also be felt that our work has also demonstrated that not only can a test such as Gleason's fail, but it can even produce damaging results if those who are interpreting them do not understand the culture and the speech code of the subjects.
REFERENCES CITED

