The question asked in this paper is whether children below the age of puberty who acquire a second language within the cultural context of that language acquire it in anything resembling the same developmental order that native speakers of the language acquire it. A seven-year-old Japanese boy's development in English negation structure provides the basis for a comparison with negation usage by peer-group native speakers. The study reveals similarities between the development of both and suggests a strong influence by the peer-group native speakers on the speech of the second language learner. The implication is that any English-as-a-second-language classes involving children below the age of puberty should have maximum peer involvement, peer interaction, and teacher involvement. (VM)
To: Principals
From: Jack Milon, TESOL Coordinator, Hawaii District
Subject: A REPORT ON THE DEVELOPMENT OF NEGATION IN ENGLISH BY A SECOND LANGUAGE LEARNER--SOME IMPLICATIONS (1972 TESOL Convention, Washington, D.C.)

May 31, 1972

The research which this paper reports on was conducted in order to get some information on a very important question: Do children below the age of puberty who acquire a second language within the cultural context of that language acquire it in anything resembling the same developmental order that native speakers of the language acquire it? It should be obvious from the phrasing of the question that it is based on the work of Eric Lenneberg and various responses to his work.

The subject whose speech is being reported on is a Japanese immigrant who arrived in Hawaii four months before taping began. At the time he arrived, in August of 1970, he had just turned seven years old. He had had no instruction in English before coming to Hawaii. When I first met the subject, whose name is Ken, he was either unwilling or unable to communicate in English with his teachers, his fellow students, or myself. That was in September, 1970.

All of the data from Ken were taken from approximately nine hours of video tape recordings which were made between November, 1970 and June, 1971. These recordings were made at weekly intervals. Each taping session lasted approximately twenty minutes.

Ken attended daily ESL classes for a half an hour a day during the year. The daily classes were conducted without the use of drills or structured exercises of any kind. The classes consisted of playing card or board games or discussing whatever topics the children brought up. There was no attempt to manipulate, introduce, or control structural, lexical, or phonological elements.

The school that Ken and the other three children who took part in the taping sessions attend is situated in a low income area. Most of the children
at the school speak a variety of Hawaiian Creole. It was assumed—and the assumption has proven to be true—that because of peer influence Ken would learn either Hawaiian Creole or a mixture of Hawaii Creole and Standard English as his first dialect. Some of the relevant differences between Standard English and Hawaiian Creole will be discussed below. For more thorough treatments see the bibliography by Reinecke and Tsuzaki.

A great deal of attention has been paid recently to the proper techniques for eliciting data from children. Inappropriate elicitation procedures can invalidate data. Houston and Labov have shown that many children, especially dialect speakers, either refuse to speak or else make dramatic style shifts in the presence of teachers and other authority figures. When the presence of an interviewer/observer is necessary, the elicitation of narratives is considered one good technique. Since this study was concerned with the developmental aspects of Ken's speech, it would have been utterly pointless to wait until he was capable of producing narratives.

In one sense it is hard to imagine a more unnatural elicitation environment than a television studio. However, I think the tapes themselves demonstrate that with the proper combination of circumstances a television studio can be the scene of uninhibited, natural language exchange among young informants. The advantage of a visual record is that it makes it possible to make many decisions about linguistic usage with great accuracy that would have had to remain ambiguous if there had been only an acoustic record. I believe that there is evidence on the tapes (pushing, running, fighting, hiding behind curtains and under the table, etc.) to show that the children were not intimidated by their surroundings after the first few sessions.

Much of the research and thought which has been devoted to language acquisition has been concentrated on native language acquisition. The subjects in such research are obviously below the age of puberty. Most of the work which has been done in the acquisition of non-native language has been done at universities by people connected with universities who use university students as subjects. These subjects are usually well above the age of puberty. This combination of situations is unfortunate.

Lenneberg's work has both resulted from and created controversy about the similarity of first and second language acquisition. Unfortunately, the discussions arising from this controversy have often been carried on along rather misleading lines. Too often a false dichotomy is set up and the terms of the discussion become: Does a person learning a second language learn it in the same way that native speakers learn it?

Because of the interests of the participants in the discussions the actual issue often becomes: Does a young adult from a different culture learn English in the same way that native speakers (i.e. - infants) learn it?
To: Principals  
From: Jack Ninon  
Subject: A REPORT ON THE DEVELOPMENT OF NEGATION IN ENGLISH BY A SECOND LANGUAGE LEARNER--SOME IMPLICATIONS  

May 31, 1972

The attempts to find an answer to this question will no doubt be of interest but I suggest that there are logically prior questions that must be answered.

Persons responsible for the teaching of second languages are, and should be, interested in the attempts to determine whether there is a biological or neurological basis for distinguishing between language acquisition before and after puberty. But it seems to me that one of the logically prior questions, and one which linguists as well as physiologists should contribute to, is whether there is any similarity between how native speakers and non-native speakers--both below the age of puberty--acquire the same language.

The work being reported on in this paper is the beginning of an attempt to answer the latter question. I have compared the development of the system of negation in Ken's speech with the system of negation as it developed in the speech of three native English speakers as described by Edward Klima and Ursula Bellugi-Klima in "Syntactic Regularities in the Speech of Children." The hypothesis is that there will be demonstrable similarities in the developmental systems because in both cases (first and second language acquisition in pre-puberty) there are language consistent heuristics for acquisition which may be universals.

The data which Klima and Bellugi presented are from three native English speaking children who were 18, 26, and 27 months old at the beginning of their study. Each of the three stages into which they have divided the data represents several thousand child utterances: "...the first stage is from the first month of study for each child; the last is from the month in which the mean utterance lengths approach 4.0 for each of the three children; and the second stage is between the two."

The data for Ken are much more limited, covering only 244 negative utterances. Of these, 38 are in stage I, 90 are in stage II, and 116 are in stage III. The criteria for assignment of Ken's data to stages is external rather than internal. The stage I cut off point is when Ken first embeds a negative morpheme, thus producing an utterance which cannot be characterized by Klima and Bellugi's stage I rule. The stage II cut off point is the first appearance of an overt tense marker in Ken's data, producing an utterance which cannot be characterized by Klima and Bellugi's stage II rule.

Klima and Bellugi represent the stage I negation system as no or not followed by nucleus or nucleus followed by no, where nucleus represents anything else that was said.

In the first five sessions Ken used 38 negative utterances. Of these, 9 are I don't know's, 28 are describable by Klima and Bellugi's stage I rule, and one is a possible anomaly.
There is internal evidence that all occurrences of *I don't know* should be treated as holophrastics at this point, i.e. as single negative lexical items, rather than as negative sentences:

a. They are the only utterances in stage I in which the negative element does not occur in utterance initial position.

b. They are the only non-imperative occurrences of the unit *don't* until May 4, well into stage III.

Ken used *I don't know* frequently all during the sessions. Even in stage III, 10% of his negative utterances were *I don't know*s. One expects non-native speakers to discover certain very useful phrases and borrow them in their entirety. The use of them does not imply a general control of the syntactic process involved.

All but one of the remaining negative utterances conform to the Klima and Bellugi description of stage I negatives in first language acquisition.

Ken's stage II utterances included:

/aim nat klaim/ -- I'm not climb.
/don tek It/ -- Don't take it.
/yu no kεn go/ -- You no can go.
/hi no wan' It/ -- He no want it.
/ai no mo faiv/ -- I no more five.

The crucial characteristic of Ken's utterances in stage II is the presence of the negative within the utterance. Other characteristic features are the productive use of the negative form /no mo/, the use of negative imperatives, and the use of negative auxiliaries. There are 90 negative utterances in stage II, i.e., between the appearance of the first embedded negative (/aim nat klaim/) and the appearance of the first overt tense marker (/ai neva sɔ yɔrz/>.

At this point some of the differences between standard English and Hawaiian Creole should be noted. /no mo/ is a statement of non-existence without any implication of previous existence. Thus, /ai no mo es/ does not imply that the speaker once had any. It should not be equated with standard English, "I don't have any more aces," or "I don't have an ace anymore." /no kεn/ is a common Hawaiian Creole equivalent of standard English *can not*. The morpheme /neva/ combines with an uninflected verb stem to form past tense negatives. Thus, Hawaiian Creole /ai neva si/ is equivalent to standard English "I didn't see it." Hawaiian Creole /ai neva win/ is equivalent to standard English "I didn't win."
In Ken's speech, as in the Klima and Bellugi data:

"There are a number of sentences with neg (no or not) followed by a predicate. There is a limited class of subjects in this set. The negative imperative has appeared...There is at this stage an affirmative imperative as well...There are hardly any sentences with indefinite pronouns or determiners, but there are by now personal and impersonal pronouns, possessive pronouns, articles, and adjectives."

Ken's speech corresponds with that of Klima and Bellugi's subjects in almost every detail they mention except for the auxiliary system. They state that, "...it is a fact that the auxiliary verbs do not occur in questions or declarative utterances at this stage." At this stage Ken's speech does exhibit un-negated auxiliaries.

RULE

\[ S \rightarrow \text{Nominal} - (\text{Aux}^{\text{neg}}) - (\text{Main Verb}) \]

\[ \text{Aux}^{\text{neg}} \rightarrow (\text{Neg}^{\text{neg}}) \]

\[ (\text{V}^{\text{neg}}) \]

\[ \text{Neg} \rightarrow (\text{no}) \]

\[ (\text{not}) \]

\[ \text{V}^{\text{neg}} \rightarrow (\text{can't}) \]

\[ (\text{don't}) \]

\[ V^{\text{neg}} \text{ is restricted to non-progressive verbs.} \]

The above rule is Klima and Bellugi's rule for stage II. Except for the addition of /no mo/ as a possible expansion of Neg and the substitution of /no kēn/ for can not, the rule would cover all but two of Ken's 90 negative utterances in this stage.

Of the two utterances not conforming to the Klima/Bellugi rule one, /o no yu don'/ is most probably a borrowing and should probably be treated as a lexical item. The other utterance is /kā't no mo he'a/. Repeated viewings of the video tape have convinced me that the semantic intent of the utterance could best be rendered into standard English as, "His hair is not
long enough to cut any shorter." I see no way to analyze the sentence. It seems to point out the gap in second language learners between cognitive development and linguistic control.

Some of Ken's utterances from stage III are:

/nə' onli de ɛnɪ nambɔ/ Not only the any number.
/ai nəva ɔs yərz/ I never saw yours.
/yu no go win/ You no go win.
/yu beta don' ple/ You better don't play.
/hi ga' faiv hi kən go muv a hi no mo faiv so hi kən na'/ He got five he can go move, but he no more five so he can not.

This is Klima and Bellugi's stage III rule:

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RULE
S ➝ Nominal - Aux - (Main Verb
   Aux ➝ Tense - v^aux - (Neg)
   v^aux ➝ (do
         (Modal
         (be
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Klima and Bellugi state that the data which they use in stage III is "...from the month in which the mean utterance lengths approach 4.0 for each of the three children...." However, an examination of the text and a comparison of the stage II and stage III rules show that the two major differences between stages II and III are that tense is now marked in Aux and the modals both increase in number and appear in both affirmative and interrogative utterances as well as negatives.

The data give very strong evidence that the thrust of Ken's developing linguistic competence is in exactly these directions.

A number of changes take place in Ken's auxiliary system in stage III:

a. go and never, which are overt tense markers in the Hawaiian Creole auxiliary system, appear for the first time.

b. don't appears in non-imperative sentences for the first time.
c. do occurs for the first time.

d. can not appears along with no can for the first time. This is clearly a new stage. Of Ken's 115 negative utterances in stage III, 24% cannot be described by the stage I or stage II rules.

This study demonstrates that a single second-language learner of a specific age, from a specific language background has developed the first phases of a single syntactic subsystem of English in a manner closely paralleling the development of the same subsystem by three native speakers. I believe that the evidence is very strong, but it is also seriously limited--the eight hours of data provide only 244 negative utterances.

Perhaps it is impossible to draw any implications from such isolated, restricted data. Obviously the speech of more immigrant children speaking different languages must be investigated, more data must be collected, and a pattern must be established or disproven before any profound implications for either language acquisition theory or the teaching of second languages can be established. On the other hand, the correlation between the subject's developmental pattern and that of Klima and Bellugi's subjects is so striking that it invites speculation.

There is no known way to significantly accelerate the acquisition of native languages. This is one of the justifications for the belief that native language acquisition takes place in the most efficient possible manner considering the quality and quantity of the input and feedback available to the learner. One of the assumptions involved is that, as part of the general evolutionary process, the human intelligence has developed some system of learning heuristics which maximizes the efficiency of the language acquisition process.

One of the implications of the work of Eric Lenneberg is that native-like language learning ability could in principle remain a human characteristic up to the age of puberty. The subject of this study is well below the age of puberty. The evidence suggests that he has made use of what are assumed to be a universal set of language learning heuristics to acquire English in a manner closely analogous to the manner in which he would have acquired it as a native speaker.

The data show that adults, specifically teachers, have had very little effect on the subject's emerging language system. His dialect is now basically Hawaiian Creole. All of his teachers use standard English in his presence. None of them uses Hawaiian Creole constructions which Ken has learned to control such as no more, never as a negative past tense marker, no can as a substitute for can not, go as a future tense marker, etc. Ken learned the language of his peers from his peers.
One of the implications of this study therefore is that any TESOL classes involving children below the age of puberty should have maximal peer involvement and minimal teacher involvement. When teaching is taking place within the culture of the language the TESOL teacher’s role would not be to instruct, model, provide feedback, etc. It would be to insure interaction among the second language students in the class and the native speakers in the class. There would be no such thing at this age level as a class composed only of a given number of foreign language learners and a teacher. Every second language class would contain a number of native speaking peers of the second language learners.

If further research shows that a child who is learning a second language in the culture of that language, without instruction from a teacher, discovers the same heuristics and algorithms used by native speakers, then, since these are the most efficient ones available, any interference by the teacher can only detract from the efficiency of the learning process.