Adult perception of children's speech*

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The utterances of six preschool children were recorded and used as stimuli in a perception task. The parents of the recorded children and adults with no recent exposure to children listened to the utterances and judged the meaning of the stimuli. Parents were more proficient than nonparents, and this difference was not limited to the parents' superior knowledge of their own children's idiolects. It was argued that there is a sense in which adults with an extensive exposure to children's language may be considered to be bilinguals.

One of the most consistent themes that reoccurs in reviews of language development research (e.g., Brown, 1970; McNeill, 1970; Menyuk, 1971) is that the language of children is essentially different from the language of adults and that there are considerable regularities in the child's language development. These observations have been made on all aspects of language. One syntactic example of this claim is found in Klima & Bellugi's (1966) Stage 3 in the development of the negation and question. The auxiliary emerges in this stage independent of its former link with the negation. The interrogative transformation which involves a permutation of the auxiliary occurs in the yes/no question in a manner which is similar to the adult usage, e.g., "Does the kitty stand up," but the same transformation does not occur in the Wh question, e.g., "What he can ride in." Similar support for the above claim is found in phonological (Jakobson & Halle, 1956) and semantic (Bever, 1971) research. The present research is based on the premise that if the child is speaking a language which differs from the adult's language, and the adult can understand what the child says, then the adult shares a bilingual relationship with the child. This argument is confirmed if parents are better able to understand the utterances of children than persons without recent contact with children.

METHOD

The Ss were 12 parents, 6 mothers and 6 fathers, from the University of Nebraska—Lincoln community and 12 college students who were enrolled in introductory psychology classes and who had not had any recent contact with young children. The speech of six children was tape-recorded. One child came from each of the six mother-father pairs who were Ss in the experiment. The taping sessions for each child averaged about 4 h. Ten single-word and 10 multiple-word

utterances were chosen for each child based on the clarity of the recording. The meaning of each utterance was determined by the context in which it occurred, and when the context was insufficient, the child was questioned. Only utterances for which a meaning had clearly been determined were used. A random sequence was determined for the 120 selected utterances, and the utterances were transferred directly to an experimental tape. The experimental utterances were spaced 9 sec apart.

The 120 stimuli were presented one at a time to an individual adult S. The Ss were told that the utterances of several children would be played and that their task was to report the meaning of what they heard. The Ss were told not to try to mimic the utterances, and it was again emphasized that S was to convey to E the meaning of the utterances. The Ss were asked to give their responses in 9 sec, but told that they could have more time if necessary. The utterances were never repeated for S. Two tape recorders were used, one to present the stimuli and one to record Ss' responses.

After the experiment was completed, E transcribed Ss' responses. One graduate student and three undergraduate psychology students rated the extent to which the 24 Ss reported the correct meaning of the 120 utterances on a 10-point scale. Interrater reliability ranged from $r = .91$ to $.94$. There were two dependent variables: the number of words correct and the average rated meaning.

RESULTS

All of the relevant comparisons (see Table 1) were significant on both

dependent variables: parents were superior to nonparents [$t(22) = 5.06$, $p < .001$, on ratings and $t(22) = 3.24$, $p < .001$, on words]; mothers did better than fathers [$t(10) = 3.17$, $p < .01$, on ratings and $t(10) = 3.11$, $p < .01$, on words (not a male-female artifact)]; parents were better able to understand their own children than other children [$t(11) = 7.43$, $p < .001$, on ratings and $t(11) = 7.41$, $p < .001$, on words]. The comparison of parents vs nonparents is complicated by the fact that one-sixth of the parents' responses were based on utterances of their own children. The parents' responses on other children were compared with those of nonparents, and parents maintained a significant advantage [$t(22) = 1.72$, $p < .05$]. Table 1 shows that the most accurate performance achieved by parents on their own children reached only 55.5%. This is undoubtedly a low estimate of parents' capacity to understand their children because both linguistic and nonlinguistic context were eliminated in this study.

DISCUSSION

These results support the hypothesis that the child's language is essentially different from that of the adult. The child's language, like the language of a linguistic community, is a language that must be learned. In this experiment, the parents demonstrate that they have learned enough about children's language in general to exceed the performance of nonparents who lack experience with the language. The parent is better able to understand his (or her) own child than other children. This may indicate that the language of each child is marked by unique features. It is also possible that the children were in different stages of development and parents were responding to regularities at those stages. The corpus was not large enough, nor the analysis extensive enough, to establish stages of development. The greater experience that mothers have with the language of children was manifest in their superior performance as compared to fathers. This research demonstrates, in addition to these facts about children's language, a technique that can be used to determine what parents know about their children's language which

Table 1
Average Number of Words Correctly Reported and Average Meaning Ratings for Parent and Nonparent Ss

			Meaning Ratings			
			Own	Other		
Parent	3.32	Mother	3.71	5.18	Nonparent	2.25
		Father	2.85	2.99		
			Words Reported			
			Own	Other		
Parent	127.67	Mother	147.50	55.5%*	Nonparent	96.33
		Father	107.83	30.6%		

*Percent based on the number of words from a parent's child

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differentiates them from other adults who have not had recent contact with this linguistic community. Further research is needed to discover the relative contribution of phonological, syntactic, and semantic aspects of children's language to the parent-child bilingual relationship.

REFERENCES

BEVER, T. G. The cognitive basis for

linguistic structures. In J. R. Hayes (Ed.), *Cognition and the development of language*. New York: Wiley, 1970. Pp. 279-362.

BROWN, R. *Psycholinguistics*. New York: Free Press, 1970.

JAKOBSON, J., & HALLE, M. *Fundamentals of language*. The Hague: Mouton, 1956.

KLIMA, E. S., & BELLUGI, U. Syntactic regularities in the speech of children. In J. Lyons and R. Wales (Eds.), *Psycholinguistic papers*. Edinburgh:

Edinburgh University Press, 1966. Pp. 183-207.

MCNEILL, D. *The acquisition of language*. New York: Harper & Row, 1970.

MENYUK, P. *The acquisition and development of language*. Englewood Cliffs, N.J.: Prentice-Hall, 1971.