The editors are pleased to present this second collection of papers from the Linguistics Department at the University of Kansas. In preparing this issue, we have been aided in many ways by members of the faculty and by our department secretary, Ruth Hillers. We wish to express our appreciation for their kind assistance. We are also grateful to Jeanette Gunn for her work on the cover page.
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Speech Style Shifting in Young Children's Speech
Linda Paul

Abstract

The phenomenon of style shifting or code switching was studied by pairing two 5-year-olds in conversation with an adult, a peer, a peer with language problems, a younger child, and a doll. Fifteen minute play sessions were tape-recorded. No adult (except in the adult-child condition) was present during the session. Analysis of the transcripts was according to rate and frequency measures, grammatical complexity, atten-
tional utterances, clarification devices, and conversational categories.

The data, in agreement with previous research (Gleason, 1973; Shatz and Gelman, 1973; Sachs and Devin, 1976), indicated that young children do adjust their speech to the listener. The hypothesis that speech to adults and peers would be similar was substantiated, for the most part. Speech to younger children and language delayed peers contained a higher number of imperatives, repetitions, and attentional utterances. Contrary to the notion that children simply pick up on a general adult "baby talk style," both children in this study used a particular modeling technique ("say--") which had been previously used in their preschool classroom by their teachers as a means of facilitating speech in the language delayed chil-
dren. The children did not talk to the doll in the doll-child condition.
A child's acquisition of language can be studied from a variety of perspectives. Recently, however, research interest seems to be converging on the study of the child's social, functional use of language. This area may be labeled pragmatics (Kees, in preparation). A central issue from this perspective is the role language plays in communication. A young child must learn not only to use the proper syntax and learn to express meaningful utterances, but he/she must also use language as a social interaction tool.

An essential component of verbal interaction or conversation is the interaction of the speaker with the listener. Adults adjust their speech depending on the listener and the social context of the interaction. The speech between an adult and a judge, for example, is quite different from the speech between an adult and his/her brother. The phenomenon of speech style or code shifting is not only a sociological occurrence, but is also somewhat dependent on the age and linguistic competence of the listener. There is general agreement among investigators (Brown, 1972; Snow, 1972; Phillips, 1973; Longhurst and Stepanich, 1975) that mothers simplify speech directed to children. Young children hear speech which is less complex in terms of words per minute, contains fewer disfluencies, fewer questions requiring complex answers, more pauses, more redundancies, and less complex grammatical structures. Similarly, Gleason (1973) suggests that there is a particular style of speech known as "baby talk," which is characterized by a particular kind of intonation, high pitch, use of diminutives, and use of terms of endearment. Adults, when talking to children, may also tend to use speech as a means of controlling behavior, and as a way to transmit social rules.
One is hardly surprised that adults don't typically talk to young children as they do to their peers. The young child's speech is simpler than an older listener's speech; the young child may not have the social skills of an adult. However, recent investigations of children conversing with their peers (Shutz and Gelman, 1973; Keenan, 1974; Keenan and Klein, 1975; Garvey, 1975; Sachs and Uvkin, 1976) suggest that children have a considerable degree of conversational fluency. Keenan (1974) and Keenan and Klein (1975) studied early morning, spontaneous conversations between twin boys, aged 2-9. While the boys often lacked the skill to maintain referential discourse, they quite frequently engaged in what might be labeled conversational sound play. There was low tolerance for self-directed monologues. A verbalization by one child was typically commented on by the other child. A response might consist of a repetition, a prosodic shift, a modification of the sound or constituent item or an extension or expansion of the preceding utterance. Garvey (1975) found that 3-, 4-, and 5-year-olds frequently made requests to their peer listeners and then expected some acknowledgement of their request. Young children produced direct, indirect, and inferred requests. She concluded that her evidence on requests and responses suggests that a young child is aware of the interpersonal aspect of conversation.

If one accepts the idea that young children's speech is not egocentric, and if one acknowledges the fact that young children can carry on conversations, it is not unreasonable to then look at some of the social contexts that influence child language. A logical extension of the mother/child and child/child dyad data is to look at the kind of speech
young children address to even younger children. Gleason (1973), in an
anecdotal fashion, reports that an 8-year-old used "baby talk" to a 2-
year-old but not to a 4-year-old, and that 5- and 6-year-olds used an
inaccurate kind of "baby talk" when talking to young children. Shatz
and Gelman (1973) and Sachs and Devin (1976) also report more formal in-
dicators of differences in the speech of 4- and 5-year-olds to adults, to
peers, and to 2-year-olds. For example, the speech to 2-year-olds contained
a high percentage of attentional utterances, a high number of short utter-
ances and a low number of coordinate constructions, subordinate conjunctions
and predicate complements. Speech to the 2-year-olds also contained a
high number of imperatives, more repetitions and simpler verb tenses.
The children in the Sachs and Devin (1976) study also demonstrated a "baby
talk" style when talking to dolls; i.e., they shifted their speech style
even without feedback from the listener. Speech to peers was similar to
speech to adults.

The current investigation was undertaken in hopes of further doc-
umenting speech style shifting in young children. Shatz and Gelman (1973)
presented group data while Sachs and Devin (1976) reported data on each
individual child. The present study will present individual data in regard
to potential individual differences in the language of individual speakers
(adults and children), and individual variations utilized by a speaker in
shifting his/her speech style. In addition, speech directed to language
delayed peers will also be examined. Based on the previous findings of
Gleason (1973), Shatz and Gelman (1973), and Sachs and Devin (1976), the
following hypotheses can be made:
1. The young child's speech to an adult and to a peer will be very similar.

2. The young child's speech to a younger child, a language delayed peer and a doll will be simpler and more redundant than speech to an adult or to a peer.

3. Speech to a younger child, to a language delayed peer and a doll will be similar.

Method

Subjects

Kirsten, Aged 5.2, and Mike, aged 4.10, were the target children who were paired with various aged listeners. These children attended a special preschool program for children with language problems; however, Kirsten and Mike served as the normal language models in the program. The adult listeners were two teachers from the preschool. The language delayed listeners were Barclay, aged 5.3, and Matthew, aged 3.2. These children were receiving language training. Barclay's mental age on the Peabody Picture Vocabulary test was age 4.0, and Matthew's mental age was 2.6. The young listeners were Angie, aged 2.1, and Julie, aged 1.11. (Julie is Mike's younger sister).

Setting

In each listener condition, the target child and the listener were told to play together for 15 minutes. The dyad was given a particular toy—crayons, tiles, beads, nuts and bolts, or a doll house and furniture. Except in the case of Mike and his young listener, no one except the subject was present during the session. Each session was tape-recorded.
Procedure

**Listener Conditions.** The target children were paired with each of the following listeners for a 15-minute session: (1) preschool teacher, (2) peer, (3) language-delayed peer, (4) 2-year-old child, and (5) doll. In the **doll condition,** the child was instructed to pretend that the doll was a little child. In each condition the child was told to play with the other person. Each time the child was also told that the tape-recorder was on and when the experimenter returned they could listen to some of the tape.

**Data Analysis.** The tapes were transcribed word for word by the experimenter, so that a verbatim script of each session was available. Transcription was done in regular orthographic spelling unless a phonetic description of an utterance seemed necessary. Both target child and listener verbalizations were transcribed. Verbalizations were segmented on the basis of pauses and intonation shifts.

Following transcription, utterances were categorized along the following indices:

- **Rate or Frequency measures** - number of utterances, distribution of utterance lengths, mean length of utterance (MLU), type token ratio (TTR).
- **Syntactic Complexity measures** - verb tense, mean preverb length, accessories, "to" constructions, predicate complements (e.g., "who"), prenominal adjectives, relative clauses, subordinate constructions, coordinate conjunctions. Appendix A lists definitions of each category.
- **Attentional Utterances** - occurrence of the words now, ok, wait, uh-huh, no (at the beginning or end of an utterance), hey, see, look, watch, and proper names.
Clarification measures - imperatives, questions, repetitions.

Conversational measures - contingent utterances, monologues, nonsense-sound play. A description of the criteria used for scoring each kind of utterance is in Appendix A.

For each kind of utterance, within each category, the number of occurrences in each listener condition was converted into percentages of occurrence. In addition, the reciprocal rate of occurrence for each kind of utterance was calculated by dividing the total number of utterances by the number of utterances in that particular category (Shatz and Gelman, 1973). This measure was used to show the average number of utterances occurring before an instance of a given category occurred.

Reliability

Due to time constraints, no reliability measures were calculated. Ideally, reliability on transcription accuracy and on the accuracy of categorizing utterances would be calculated.

Results

Rate or Frequency measures

In general, these measures were not very good indicators of adjustments in children's speech style. Tables 1 and 2 suggest that the most discriminating measure was the total number of utterances in each speech sample. For both Kirsten and Mike, the number of utterances directed to the doll was really very low. Mike also did not direct very many utterances to the 2-year-old. However, unlike in the other listener conditions, his mother and the experimenter were in the room while he talked to the younger child.
### Kirsten - Rate and Frequency Categories

<table>
<thead>
<tr>
<th></th>
<th># Utterances</th>
<th>Utterances &gt; 2 words</th>
<th>M.L.U.</th>
<th>T.T.R.</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Adult</td>
<td>106</td>
<td>.77</td>
<td>5.9</td>
<td>.66</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Peer</td>
<td>144</td>
<td>.78</td>
<td>5.0</td>
<td>.59</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Lang. Delayed</td>
<td>194</td>
<td>.62</td>
<td>4.9</td>
<td>.56</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To 2-year-old</td>
<td>149</td>
<td>.74</td>
<td>5.0</td>
<td>.49</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Doll</td>
<td>21</td>
<td>.33</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
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<td></td>
</tr>
</tbody>
</table>

**Table 1**

### Like - Rate and Frequency Categories

<table>
<thead>
<tr>
<th></th>
<th># Utterances</th>
<th>Utterances &gt; 2 words</th>
<th>M.L.U.</th>
<th>T.T.R.</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Adult</td>
<td>126</td>
<td>.60</td>
<td>5.8</td>
<td>.51</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Peer</td>
<td>119</td>
<td>.66</td>
<td>3.4</td>
<td>.62</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Lang. Delayed</td>
<td>114</td>
<td>.66</td>
<td>6.2</td>
<td>.73</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To 2-year-old</td>
<td>70</td>
<td>.76</td>
<td>5.1</td>
<td>.51</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Doll</td>
<td>6</td>
<td>.60</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 2**
Kirsten's NLU was highest when talking to the adult, but it still did not vary very much across listeners. Mike's lowest NLU was in talking to his peer while his highest NLU was in talking to the language delayed child. Similarly, his TTR was highest to the language delayed child while Kirsten's TTR showed only a slight variation across listeners.

When one takes into consideration the small number of doll-directed utterances, the distribution of utterance length shown in Figures 1 and 2 (pp. 94-5) does not drastically change across listeners. Mike seemed to have more 3- and 4-word utterances to his peer and to the 2-year-old and fewer 5- and 6-word utterances to the adult and to his peer. Kirsten's distribution of utterance lengths shows overlap across all listener conditions.

**Syntactic Complexity measures**

Tables 3 and 4 summarize the findings for the complexity categories.

**Kirsten - Complexity Categories**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Adult</td>
<td>1.52</td>
<td>.59</td>
<td>.45</td>
<td>.34</td>
<td>.33</td>
<td>.21</td>
<td>.06</td>
<td>.07</td>
<td>.12</td>
<td>.03</td>
<td>.13</td>
</tr>
<tr>
<td>To Peer</td>
<td>1.88</td>
<td>.62</td>
<td>.38</td>
<td>.31</td>
<td>.19</td>
<td>.10</td>
<td>.02</td>
<td>.06</td>
<td>.07</td>
<td>.008</td>
<td>.02</td>
</tr>
<tr>
<td>To Language Delayed</td>
<td>1.29</td>
<td>.84</td>
<td>.16</td>
<td>.12</td>
<td>.27</td>
<td>.10</td>
<td>.02</td>
<td>.02</td>
<td>.04</td>
<td>.03</td>
<td>.16</td>
</tr>
<tr>
<td>To 2-year-old</td>
<td>1.54</td>
<td>.70</td>
<td>.22</td>
<td>.02</td>
<td>.16</td>
<td>.10</td>
<td>.009</td>
<td>.009</td>
<td>.03</td>
<td>.03</td>
<td>.04</td>
</tr>
</tbody>
</table>

1. Mean number length
2. Verbs - present tense
3. Verbs - other senses
4. Pronouns - personal

*Based on utterances three words and up.

Table 3
## Mike - Complexity Categories

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Adult</td>
<td>2.06</td>
<td>.62</td>
<td>.38</td>
<td>.13</td>
<td>.11</td>
<td>.01</td>
<td>.04</td>
<td>.03</td>
<td>.11</td>
<td>.03</td>
<td>.08</td>
</tr>
<tr>
<td>To Peer</td>
<td>1.37</td>
<td>.60</td>
<td>.33</td>
<td>.17</td>
<td>.41</td>
<td>.03</td>
<td>.04</td>
<td>.06</td>
<td>.13</td>
<td>.00</td>
<td>.05</td>
</tr>
<tr>
<td>To Language Delayed</td>
<td>1.78</td>
<td>.75</td>
<td>.25</td>
<td>.02</td>
<td>.47</td>
<td>.10</td>
<td>.05</td>
<td>.05</td>
<td>.08</td>
<td>.05</td>
<td>.04</td>
</tr>
<tr>
<td>To 2-year-old</td>
<td>1.94</td>
<td>.78</td>
<td>.28</td>
<td>.10</td>
<td>.51</td>
<td>.04</td>
<td>.02</td>
<td>.06</td>
<td>.11</td>
<td>.04</td>
<td></td>
</tr>
</tbody>
</table>

1. Mean verb length  
2. Verbs - present tense  
3. Verbs - other tenses  
4. Pronominal adjectives  
5. Accessories  
6. "To" constructions  
7. Predicate complements  
8. Relative clauses  
9. Subordinate constructions  
10. Coordination conjunctions  
11. Coordinate conjunctions

*Based on utterances three words and up.

### Table 4

For Kirsten, mean preverb length was lowest when talking to the language delayed child, while for Mike it was lowest when talking to his peer. Verb tenses were similar across listeners for Mike, but Kirsten tended to use more present tense verbs when talking to the language delayed child and the 2-year-old.

Kirsten used few pronominal adjectives when talking to the language delayed child and the 2-year-old. Mike used few pronominal adjectives when talking to the adult and the language delayed child. Kirsten used more adjectives overall. Differences in adjective use might reflect the differences in play activities.

The occurrence of accessories was fairly low when Kirsten was talking to her peer and to the 2-year-old. Mike, on the other hand, had a high rate of using accessories in all listener conditions.
Mike's use of "to" constructions was generally lower than Kirsten's.
She had the highest occurrence of this category when she was talking to
the adult.

Neither child used very many predicate complements, subordinate
constructions or coordinate conjunctions. Based on the reciprocal rate
of occurrence, subordinate constructions were most infrequent when talking
to peers as were coordinate conjunctions in the peer condition for Kirsten.

Mike tended to use more relative clauses than did Kirsten. Her
highest use of relative clauses was to adults while Mike's use of relative
clauses was not greatly different across listener conditions.

Attention categories

The data presented in Tables 5 and 6 indicates that the highest
number of attentional utterances were directed to the 2-year-olds. In
particular, Mike and Kirsten tended to use proper names when talking to
the younger child.

<table>
<thead>
<tr>
<th></th>
<th>Overall</th>
<th>Now, wait ok, uh</th>
<th>No</th>
<th>Hey</th>
<th>See, look</th>
<th>Proper names</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Adult</td>
<td>.26</td>
<td>.04</td>
<td>.02</td>
<td>.04</td>
<td>.06</td>
<td>.11</td>
</tr>
<tr>
<td></td>
<td>3.8</td>
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<td>53</td>
<td>26.5</td>
<td>17.7</td>
<td>8.9</td>
</tr>
<tr>
<td>To Peer</td>
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<td>.007</td>
<td>.03</td>
<td>.006</td>
<td>.10</td>
<td>.03</td>
</tr>
<tr>
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<td>144</td>
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</tr>
<tr>
<td>To Language</td>
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<td>.01</td>
<td>.11</td>
<td>.06</td>
</tr>
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<td>Delayed</td>
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<td>62.4</td>
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<tr>
<td>To 2-year-old</td>
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<td>.02</td>
<td>.01</td>
<td>.007</td>
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</tr>
<tr>
<td></td>
<td>3.0</td>
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<td>74.5</td>
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<td>37.3</td>
<td>3.5</td>
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</table>

Table 5
### Mike - Attention Categories

<table>
<thead>
<tr>
<th></th>
<th>Overall</th>
<th>Now, wait</th>
<th>No</th>
<th>Hey</th>
<th>See, look watch</th>
<th>Proper names</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Adult</td>
<td>.15</td>
<td>.13</td>
<td>.03</td>
<td>.03</td>
<td>.05</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>6.6</td>
<td>7.4</td>
<td>31.6</td>
<td>31.5</td>
<td>2.1</td>
<td>63</td>
</tr>
<tr>
<td>To Peer</td>
<td>.26</td>
<td>.08</td>
<td>.03</td>
<td>.03</td>
<td>.08</td>
<td>.05</td>
</tr>
<tr>
<td></td>
<td>3.8</td>
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<td>29.9</td>
<td>39.7</td>
<td>13.2</td>
<td>13.2</td>
</tr>
<tr>
<td>To Language Delayed</td>
<td>.28</td>
<td>.06</td>
<td>.04</td>
<td>.04</td>
<td>.04</td>
<td>.09</td>
</tr>
<tr>
<td></td>
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<td>16.3</td>
<td>29.5</td>
<td>22.8</td>
<td>7.6</td>
<td>11.4</td>
</tr>
<tr>
<td>To 2-year-old</td>
<td>.63</td>
<td>.04</td>
<td>.01</td>
<td>.07</td>
<td>.13</td>
<td>.37</td>
</tr>
<tr>
<td></td>
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<td>23.3</td>
<td>70</td>
<td>14</td>
<td>7.8</td>
<td>23</td>
</tr>
</tbody>
</table>

**Table 6**

### Clarification measures

Tables 7 and 8 indicate somewhat differing distributions of these kinds of utterances for Mike and Kirsten. Mike used a high number of imperatives when talking to the language delayed child and when talking to the 2-year-old while Kirsten had a high rate of using imperatives only when talking to the language delayed child.

### Kirsten - Clarification and Conversation Categories

<table>
<thead>
<tr>
<th></th>
<th>Imperatives</th>
<th>Questions</th>
<th>Repetitions</th>
<th>Contingent</th>
<th>Monologue</th>
<th>Nonsense</th>
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<tbody>
<tr>
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<td>.12</td>
<td>.19</td>
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<td>.08</td>
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<td></td>
<td>27.3</td>
<td>8.2</td>
<td>6.3</td>
<td>2.7</td>
<td>11.8</td>
<td>—</td>
</tr>
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<td>To Peer</td>
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<td>.17</td>
<td>.10</td>
<td>.27</td>
<td>.09</td>
<td>—</td>
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<td>6.9</td>
<td>9.6</td>
<td>4.6</td>
<td>14.4</td>
<td>—</td>
</tr>
<tr>
<td>To Language Delayed</td>
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<td>.14</td>
<td>.30</td>
<td>.05</td>
<td>.14</td>
<td>.02</td>
</tr>
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<tr>
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<td>2.8</td>
<td>7.8</td>
<td>12.4</td>
<td>8.3</td>
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*Based on utterances 3 words and up.

**Table 7**
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<th>Mike - Clarification and Conversation Categories</th>
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<tr>
<td></td>
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<td>To Adult</td>
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<td>To Peer</td>
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<td>To Language Delayed</td>
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<td>To 2-year-old</td>
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*Based on utterances 3 words and up.

Table 8

Mike tended to direct a high number of questions to his peer while Kirsten directed the highest number of questions to the 2-year-old. Breaking down questions into "wh" questions, yes-no questions, tag questions, and miscellaneous questions did not indicate any clear differences across listeners.

Repetitions occurred frequently when Mike and Kirsten were talking to the 2-year-old. Kirsten also frequently repeated utterances to the language delayed child.

Conversational measures

As is shown in Tables 7 and 8, both children had low rates of contingent utterances when talking to the language delayed child and to the 2-year-old. The highest number of contingent utterances was directed to the adult listener.
Mike did not use many monologue type utterances nor did he use any nonsense utterances. Kirsten used monologues, particularly when talking to the language delayed child. She used nonsense utterances when talking to the 2-year-old.

Discussion

The data from the present study indicates, in agreement with previous research (Gleason, 1973; Shatz and Gelman, 1973; Sachs and Devlin, 1976), that young children do adjust their speech to the listener. The hypothesis that speech to adults and peers would be similar was substantiated for the most part. Speech to 2-year-olds and language delayed children contained a higher number of imperatives, repetitions, and attentional type utterances. The children did not role-play talking to the doll as if it were a baby.

Reviewing each child's data reveals some individual differences in style shifting. Part of this variation reflects the child's particular speech style. Mike tends to use accessories like "look" and "well". Kirsten tends to use adjectives. Kirsten and Mike also have slightly different styles of talking to adults and peers. While Kirsten's speech to the adult and to the peer was very similar, Mike simplified his speech when talking to his peer. His lowest MLU, lowest mean preverb length, and highest number of questions were directed to his peer.

Individual variations in style shifting could also reflect variations in the speech of the listener. Kirsten's language delayed peer, Matthew, was very quiet, not uttering a word for the first 10 minutes of the session.
Angia, her 2-year-old listener, was very responsive and talkative. Mike’s language delayed peer, Barclay, was talkative and responsive while his 2-year-old, Julie, was uncooperative; she practically ignored him. It is not surprising that Kirsten used a high number of imperatives, repetitions, and monologues when talking to the language delayed child but not to the 2-year-old child. And, Mike’s speech to the responsive language delayed child was more complex than his speech to the uncooperative 2-year-old. Perhaps these variations in speech would have been eliminated if the listeners had been held constant in each condition.

However, in many respects, Kirsten was much more effective in her communications to the language delayed child and to the 2-year-old child. The topic of her speech was really geared to her listener. With the language delayed child, she worked hard at showing him the toys, encouraging him to play and trying to get him to talk. Her speech to the 2-year-old contained many word play type dialogues and maintained the attention of the child. Mike’s speech to the language delayed child consisted mainly of instructions for nonverbal behavior. In his interaction with the 2-year-old, Mike was more involved with the materials than he was with the other child. He seemed to talk for the benefit of the adults present, and his mother prompted him to talk to the 2-year-old.

In previous research (Shatz and Gelman, 1973), it was noted that one children commented on the linguistic inadequacies of the 2-year-old listeners. However, in the present study, the children tended to comment on the linguistic inadequacies of the language delayed children (as is noted in Appendix B). It was as if they expected 2-year-olds not to talk very well, but they noted deficiencies in their peers.
Both Mike and Kirsten tried a very specific approach to getting the 2-year-old and the language delayed child respectively, to talk. They named for verbalizations, using the phrase, "say ___." And as is noted in Appendix B, they sometimes even praised the child for responding, and then gave the child the named referent. This procedure had previously been used by their preschool teachers in the classroom. The children's use of the procedure would suggest that adult talk to younger and less competent children really serves as a model for children to follow when talking to younger children. This copying of the adult models might suggest that children potentially have an important input into other children's language development. For example, Kirsten and Mike could be recruited as peer language trainers for children in their preschool class.

The present study merely touches on the pragmatic aspects of children's conversational skills. Tape-recording conversations, transcribing both target child and listener verbalizations and in the future collecting contextual notes would allow for an analysis of the more functional, social characteristics of the conversations. Measures such as imperatives, contingent utterances, sound play and monologues represent some pragmatic type categories. A more extensive analysis of these kinds of categories might reveal some more speech style differences in the language of young children. Consideration of the listener feedback and input also needs to be included in conversational analysis. Differences in speech to different listeners would seem to depend on the responsiveness of the listener, the linguistic abilities of the listener, and the communication constraints of the situation. Speech between children when there is no adult present
is different than speech between children when an adult is there acting as a proctor. The present investigation, though representing a restricted sample in terms of size, documents speech style shifting in children as young as 4-years-old. Individual variations in speech style are indicated, but in general young children do simplify speech to younger and/or less competent children, and they speak similarly to peers and adults.

Footnote

1. The top figure in each block represents the percentage of occurrence while the bottom figure in each box is the reciprocal rate of occurrence.
References


Appendix A: Analysis Categories (Adapted from Shatz and Gelman, 1973; and Sachs and Devin, 1976)

**Utterance** - grouping of an individual word or group of words as separated by intonation shifts, a pause, or the start of an utterance by another speaker.

**Mean length of utterance (MLU)** - average length of utterances in a 100 word sample.

**Type token ratio (TTR)** - ratio of the number of different words (types) to the total number of words (tokens) in a 100 word sample.

**Verb tense** - present tense or another tense.

**Mean preverb length** - average number of words before the main verb in all clauses.

**Predominant adjectives** - adjective preceding a noun; number, quantifiers and descriptive adjectives.

**Accessories** - words or phrases set off by a pause at the end or beginning of an utterance (e.g., right, yes, no, look).

"To" constructions - "to" followed by a verb, except those following a "wh" complementizer.

**Predicate complements** - sentential complements introduced by "that" after the main verb.

**Predicate complements** - sentential complements introduced by interrogatives after the verb or indirect object noun phrase of a main sentence.

**Relative clauses** - sentence embedded in a noun phrase.

**Subordinate constructions** - uses of when, where, while, and if to join a clause to a sentence.
Coordinate conjunctions - cojoining of utterances by the particles and, but, so, and because.

Attentional utterances - use of the words hey, see, watch, no, now, ok, uh huh, and proper names.

Imperatives - demand for verbal or nonverbal response.

Question - utterance with rising intonation at the end and/or including "Why" words, yes-no questions and tag questions.

Repetitions - exact or modified repetition of the preceding utterance.

Contingent utterances - utterance following a listener utterance and maintaining the semantic flow.

Monologues - 3 to 7 utterances in a sequence without a response by the listener.

Nonsense-word play - made up words and/or the use of words with no apparent semantic intent.
Appendix 8: Excerpts from transcripts

Comments on the speech of the listener:

Mike to the language delayed child
"You don't talk like me, do you?"

Kirsten to the language delayed child (repeated several times)
"How come you won't talk?"
"How come you don't talk very much?"

Attempts to get the listener to talk:

Mike to the 2-year-old:
"Hey, Julie, say the man is in Julie Julie say the man is in the box"
"Julie Julie say hey Julie say the man is in the chimney/ she just doesn't she just doesn't wanta talk"

Kirsten to the language delayed child:
"Can you say sewing machine? say sewing machine/how come you won't say sewing machine?"
"Say green chair say the whole sentence/(Matthew 'whole')/green chair/(Matthew "green chair")/good you get the green chair ok"

Unawareness of the tape-recorder:

Mike to peer:
"un could we sneak a little bit of cereal though/ we'll sneak some"

Kirsten to peer:
"don't get any more of that cereal cause someone might sneak in here and they'll see you/don't sneak any more ok/ that's enough sneaking things Mike"