A study required children to tell and to dictate stories that were real and make believe, all about the same basic topic, as part of things people do when they "write a story." A further purpose was to explore the reading knowledge of children who are just beginning to read. Children's reading attempts for these stories were used to evaluate their emergent reading ability in order to test whether there was a relationship between emergent reading ability and the structural "well-formedness" of the stories. Three language productions were obtained: a told story, a dictated story, and a handwritten story. The transcriptions were scored according to (1) the completeness of context (degree of specificity), (2) adapted production story grammar (structural complexity), and (3) emergent reading ability. The contextual analysis gave support to the claim that children will produce real stories that are more scriptlike and predictable, whereas they will elaborate more upon make-believe stories. There was also some indication that the make-believe stories contained more of the elements of a well-formed story. Furthermore, these elements were more highly specified, or more understandable to a nonpresent audience. When overall structural complexity was judged, however, there were no differences for topic (real versus make-believe) or for mode (told versus dictated), nor was there a regression of emergent reading abilities upon structure. (HOD)
Real Versus Make-Believe Differences
In Told and Dictated Stories by Kindergarten Children

Elizabeth Sulzby
Northwestern University

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Real Versus Make-Believe Differences
in Told and Dictated Stories by Kindergarten Children

Elizabeth Sulzby
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This report focuses upon differences in the structure of children's stories, depending on whether the composition mode of the story is telling or dictating and upon whether the topic of the story is treated as real or make-believe. This investigation is part of a larger project titled "Beginning Readers' Developing Knowledges About Written Language." In the BRDKAWL project six kinds of language samples were collected and compared. The language samples were conversation, storytelling, dictation, handwritten composition, re-reading, and editing. The selection of these kinds of language was designed to vary from interactive, face-to-face speech to decontextualized texts able to be understood by a non-present audience; in other words, the samples represented oral and written language differences.

A further purpose of the BRDKAWL project is to describe the knowledges about written language that children have during the transition from pre-reading to reading. The six kinds of language samples in this study were deemed to be relevant to such a description. In particular, dictated stories or accounts were of interest because of their use in early instruction.

Dictations are frequently recommended and used as instructional
materials in beginning reading instruction. Within formulations of
the language experience-approach, dictated stories or accounts are
presumed to be appropriate in terms of their relation to the child's
current knowledges about language. Stauffer (1980) argued that
children's own language about their own real-life experiences is the
most appropriate early reading material; the syntax, semantics, and content
of such language is "controlled," or suited to the child who produced it.
Hendersol (Note 1) has observed that the differences between
children's dictations and their conversations about a stimulus for
dictation can be observed for signs of how close children are to being
able to read. King and Rentel (1981) and Sulzby (1981 and in press)
have begun to gather descriptive and experimental documentation of
some of the differences between conversation, storytelling, and
dictation, and some of the relationships between those differences and
children's reading development.

If a child cannot yet read, it would seem reasonable that s/he
would not differentiate between storytelling and dictation; in other
words, storytelling and story dictation would sound alike to a
listener. In fact, Sulzby (in press) has found that kindergarten
children signal differences between told and dictated stories in their
speech. They used prosody and pauses to signal these differences
which seemed to be keyed by awareness of the needs of the scribe.
Furthermore, she found that the mode adaptations that children made orally
were related to the degree of emergent reading ability for children at
the extremes of the distribution.
One purpose of this paper is to investigate the written form of
told and dictated stories. Can differences still be detected when these stories are transcribed and the cues of prosody and pausing
removed? It is possible that children may make distinctions in features such as prosody but lack knowledge of textual features needed for written forms of language. Written language needs to be decontextualized so that a non-present, non-interactive reader can understand the message. Children may treat both told and dictated stories as contingent entities in which a listener is privy either to contextual information or may ask questions for clarification. Or they may treat the told story as more contingent than the dictated story; in this case, they should be more specific in giving information in the dictated story. One way of detecting the degree of decontextualization would be to analyze the answers to who, where, what, when, why, and how questions that a reader would be able to derive from the written transcripts of children's stories.

The second purpose of this paper is to investigate story topic differences. The issue is whether real stories coming from a child's actual experiences differ in some relevant way from make-believe stories. To address this issue, however, it is important to know that the knowledge base from which the child creates such real and make-believe versions is comparable.

Two ways in which stories can differ should be distinguished: differences related to the quality of story qua story and differences related to the story as potential reading material. While these two
are not strictly separated in this study, the reasoning concerning the relevant kinds of differences should be examined.

The quality of the structure of stories qua story has describable effects upon how stories will be recalled by children (Mandler & Johnson, 1977; Stein & Glenn, 1979). Empirical findings have also been reported from which it might be inferred that there could be real and make-believe differences in the story productions, as opposed to recall, of young children. These production studies focus upon story qua story and not as sources of potential reading material. The qualitative differences in story structure should yield stories that vary in ease of children's remembering them if we reason by extension from the comprehension or recall studies but there is no empirical evidence addressed to this question.

The differences in the quality of the stories produced qua story are based upon comparisons between studies and may be due to differences in sampling and elicitation methodology. For example, Menig-Peterson and McCabe (in press) found that samples of real-life narratives of young children were more well-formed and structurally more complex than were Glenn and Stein's (1978) fictional stories elicited from children of similar ages and descriptions. Sutton-Smith's (1981) corpus contains multiple stories collected from children but his technique was so naturalistic that comparisons cannot be made with assurance, particularly since the children were not queried about their associated intentions to portray reality or fiction. Similarly, Goldman (in press) specified that children were to make up a story in a condition that seems to call for make-believe tales; however, when she elicited real-life experiences in a second condition,
she did not specify that the children were still telling stories. Her procedures would, however, allow for differences to be inferred about the structure of the knowledge base used by children to access information for describing the knowledge from the real or make-believe vantage points. No published study that I am aware of has yet tested real-versus make-believe effects upon stories collected from the same children.

In speculating about how children might differentiate between reality and fantasy in creating stories, Sulzby (1979) suggested that children might be so aware of what has actually happened to them in real-life that stories they tell about these events become less complex and more script-like and that children would be more free to construct a well-formed and more complex story if the topic were make-believe. Menig-Peterson and McCabe (in press) found children able to tell quite complex real-life stories but the researchers selected the three longest narratives produced by each child and did not establish a control over topic. Additionally, they did not use an elicitation procedure that specified that the child was to tell a story; rather, the child was telling about an event in a conversational setting with the focus upon the interaction between examiner and child and not upon the quality of the story. When children produce stories in a school setting as dictations to be later read, the focus is placed upon the story as product and not upon the interaction between teller and listener.
The studies cited above were used to compare real and make-believe differences in stories qua story. There are no empirical comparisons using children's real and make-believe stories as reading materials. Theorists disagree about the possible effects. Stauffer (1980) has defended the superiority of real topics as stimuli. Holdaway (1979) has suggested that these "stories" or accounts are composed of less memorable language than are, for contrast, children's storybooks written by adult authors. Sulzby (1981) has discussed differential supports and constraints of different text types for beginners but did not include real and make-believe differences within the same child's composition in the analysis.

The speculations about the advantages of fictional, or make-believe, narratives as stories include these arguments: stories about make-believe events may be more vivid and memorable to the young child; the child may elaborate make-believe events more than real-life events which may be recited in script-like fashion; and the make-believe stories may be better formed in the story grammar sense. In this paper, these speculations will be narrowed to two issues having to do with the characteristics needed to comprehend written text: that the text is specific enough for another person to understand and that the text is well-formed enough to effectively support memory for the given text.

In this study, children were asked to tell and to dictate stories that were real and make-believe, all about the same basic topic, as part of things people do when they "write a story." A within-subjects
design was chosen since the further focus was to explore the
knowledges of children who are just beginning to read. Children's
reading attempts for these stories were used to evaluate their
emergent reading ability in order to test whether there was a
relationship between emergent reading ability and the structural
well-formedness of the stories. Stories were compared to see whether
either mode or topic would lead to different degrees of specification
or suiting the story to the needs of the reader.
Method

Subjects

Twenty-four children (13 girls, 11 boys) from one kindergarten classroom in an upper-middleclass community north of Chicago, Illinois, were the subjects. The students' mean age in October, 1979, was 5-4 (range, 4-11 to 5-10). The classroom was selected for a longitudinal study of beginning reading and writing. One consideration in its selection was the fact that reading and writing were not taught as a planned part of the curriculum. Additionally, the literacy culture of the community was describable and classroom membership tended to be stable.

Data Collection

This was the second study in which these children had participated. The children's preliminary knowledge about real and make-believe topics and about the specific topic of learning to ride a big wheel had been assessed in an interview study called, "General Knowledges About Written Language." Data for the current study were collected from mid-October until mid-December with approximately one month between the two sessions for each child.

For each session, one of two examiners took each child to a quiet spot where the child was put at ease, re-acquainted with the tape-recorder and other procedures, and then asked to do three things that people can do "to write a story." The children were assured that the examiner knew that they did not yet know how to write like a grown-up but that they knew much about reading and writing already. Children were also told that the examiner would help them.

For each of the two sessions, three language productions were obtained: a told story, a dictated story, and a handwritten story.
Re-reading and editing tasks were part of the two written productions. Orders were counterbalanced and assigned to subjects at random. Twelve orders were used with two children in each cell and orders remaining the same between the two sessions. These orders resulted from the six orders of telling, dictating, and writing, with the two orders of real and make-believe varied with the production orders. Appropriate transitions were provided for each order assigned. Abbreviated versions of the directions are given below.

**General Directions**

I want you to write a story for me. We will do it this way. Now I know you don't really know how to write like a grown-up yet, but you know a lot about writing. I'll help you. (Story directions)

**Telling**

One of the things people do to write a story is to tell it to someone from the beginning to the end, to be sure they have it the way they want it to be. That's what I want you to do now. Tell me your story, your whole story from beginning to end... (Story directions)

**Dictation**

One of the things people can do to write a story is to let someone else write it down for them. That's like having a secretary. We call it dictating when you tell your story and someone else writes it down for you. I want you to dictate your story for me this time... (Story directions)

**Writing**

Sometimes when people write a story they do the writing on paper all by themselves. Even little boys and girls can write their own stories. You can write your own story for me your own way. It doesn't have to be just like grown-up writing. You can just do it your own way. Now I want you to write your story... (Story directions)

**Story dialogue**

I want you to tell me your story (dictate your story to me, write me your story) and it's a real (make-believe) story about you (little prince/princess charming) and now you (1st/3rd) learned how to ride a big wheel. "About how you (1st/3rd) learned to ride a big wheel, what made you (her/him) want to do it, and now you (1st/3rd) did it."
Transcriptions

Total sessions were tape-recorded and subsequently transcribed. Each examiner double-checked the transcriptions then coordinated all observational notes and children's handwritten and dictated stories with the transcriptions. These assembled documents served as the protocols used in scoring. After completion, forty-four percent of the tapes were checked against the protocols by a trained assistant. (It should be noted that there were thus two versions of the dictation: the oral version taken from the audiotape and the version written by the scribe. Differences between these two versions were used in judging the stability of the composition for the child.)

Scoring

Three different scoring systems were used. The first was a "completeness of context" analysis, adapted from Menig-Peterson and McCabe (1978). The second was an adaptation of the production story grammar as proposed by Stein and Glenn (1981, Notes 3). The final scoring system was used to assess children's emergent reading abilities. This system is described in Sulzby (1981 and in press) and has been further validated as described in Otto and Sulzby (1981, Note 2). These systems are described briefly below; complete details are available in Sulzby (1981).

Completeness of context. The completeness of context analysis was designed to determine to what degree children specify information for their listeners or readers that will answer the traditional questions: who, what, when, where, how, and why. The scoring system was adapted to the content of the stimulus used in this study, learning to ride a big wheel (or other vehicle) either as a fictional or real account.

The range of
possible scores for the specification of each kind of question is
given below, comparing the original range used by Menig-Peterson and
McCabe (1978) and revisions used in this study.

<table>
<thead>
<tr>
<th>Question</th>
<th>Menig-Peterson and McCabe (1978)</th>
<th>Sulzby</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHO</td>
<td>0-3</td>
<td>0-3</td>
</tr>
<tr>
<td>WHERE</td>
<td>0-3</td>
<td>0-1*</td>
</tr>
<tr>
<td>WHAT</td>
<td>0-2</td>
<td>0-3*</td>
</tr>
<tr>
<td>WHEN</td>
<td>0-2</td>
<td>0-2</td>
</tr>
<tr>
<td>HOW</td>
<td>0-2</td>
<td>0-2</td>
</tr>
<tr>
<td>WHY</td>
<td>0-1</td>
<td>0-1</td>
</tr>
</tbody>
</table>

Who scoring

"Who" specification addresses the issue
whether or not the child lets the
audience know who the participants
in the story are. The scoring ranges
from 0 for no specification of
participants to 3 for full specification.

0 = No mention of participants.
1 = Participants referred to only
   by pronouns or other indefinite
   reference.
2 = Relational but non-specific
   person words; names without
   relations.
3 = Clear relations with identifiable
   specification within the context.
either through "fictionalization" or full specification.

**Where scoring**

"Where" specification places a narrative in space. Menig-Peterson and McCabe's narratives required a more extensive 0-3 scoring. Content analysis revealed that these children rarely specified location and that a simple 0-1 scoring for presence or absence of location was sufficient.

**What scoring**

"What" scoring applies to objects mentioned in the story. This scoring was expanded from 0-2 used by Menig-Peterson and McCabe to 0-3 by splitting the highest category in two parts; this was partially necessary because of the prior specification of "big wheel."

0 = No reference to objects by name.
1 = Reference to "big wheel" only as "it" or "something."
2 = Either "big wheel" is named or at least two other objects must be named, one of which must not be a part of "big wheel."
3 = "Big wheel" is named plus at least
When scoring

"When" places the narrative in the history of the author. Direct time placement is combined in this scoring with literary conventions about time reference. This scoring excludes references to "when" that implies causation or "why" relations.

0 = No time reference except tense
or signalling of "first... then" relation of events.

1 = General time reference, such as "one day," "when X," or "for two days."

2 = Specific time reference or literary conventions about time such as "when I was four years old," or "once upon a time."

Why scoring

The "why" scoring answers the question "why did the action take place."

The scoring used by Menig-Peterson and McCabe is suited for this study because it simply acknowledges the presence or absence of causal relations. The child
was given credit for including causal relations whether or not the child explicitly mentioned causal relations or implied them. The implication must, however, be cued by words in the text.

- 0 = No causal relationship stated or implied.
- 1 = Causal relationship stated or implied.

How scoring

The "how" category describes the action that takes place in a narrative. While the scoring was adjusted to be more specific about the semantic content of the elicited action, learning to ride a big wheel, the 0-2 levels of scoring are numerically the same as and semantically analogous to the original scoring system.

0 = Confusing to the listener or audience. Alternately, the "how" of the action may be totally missing or may include no reference to learning or planful action related to learning: "I learned how."
1 = The "how" is incomplete or lacks important information. The child may give parts of actions without clear specification of what the action is or the child may give a fairly complete explanation of how the action took place but presents it in a confusing manner.

2 = This category is a complete specification of the action. To be complete, the story has to state or clearly imply the requested goal "learning to ride a big wheel," give actions that make sense in the context, and give some notion of the finale of the actions congruent to the goal and plan.

Scoring for completeness of context was done by two raters. One person scored all the children's stories for all six categories. That scorer trained a second rater on the first twelve children's stories in each category, then the second rater completed the scoring independently. The percentage of agreement ranged from 88% for "why" to 96% for both "where" and "how." Disagreements were due to errors in not following the criteria except for "why" in which some disagreements arose over implied causal relationships. This analysis was only used for 19 children, those with complete sets of data (four stories).
Adapted production story grammar. The written version of the
told and dictated stories were scored for structural complexity by
using an adaptation of the production story grammar, as described by
Stein and Glenn (1981) and as modified to fit this corpus. Two
modifications were necessary. This corpus included children who
refused to produce a story as well as children who produced what Stein
and Glenn call "no structure" pieces consisting of either one
statement or one statement and its paraphrase. The second
modification was to include structures in which the verbs signalled
that the narrative was more like a plan or a hypothetical statement of
a story that could be told than it was an actual story. These
narratives were called "procedural" and could easily be placed within
the categories.

Stories were placed into eight categories, with two subdivisions,
pre-episodic and episodic. The pre-episodic structures consisted of
five categories:

(1) No story
(2) No structure
(3) Descriptive sequence
(4) Action sequence
(5) Reactive sequence

The episodic structures were comprised of the following four classes
of narrative:

(6) Incomplete episode
(7) Simple episode
(8) Complete episode
(9) Multi-episode
The scoring was done by one examiner with extensive experience with story grammar scoring. As a check upon the scoring, 20% of the stories were used to train a second scorer who then independently scored an additional 25% of the stories. The two examiners agreed about the overall structure of all but one of the stories. That disagreement was due to whether or not a result could be inferred from the child's wording.

Scores from zero to eight were assigned with zero being given for "no story," proceeding through eight for multi-episodic stories. Assigning such numbers is not part of the Stein and Glenn procedure but was used for ease of statistical analysis. The scores of zero through eight can be considered an ordinal scale, even though there is some question about the reactive sequence (see Menig-Peterson and McCabe, in press).

**Emergent reading ability judgments.** The third and final scoring was for degree of emergent reading ability. Assessments were obtained for each child from the dictated and handwritten stories produced by that child and from the child's behavior in attempting to re-read each type of story. Four sources were involved in each judgment: dictated story; re-reading of dictated story; handwritten story; re-reading of handwritten story. A seven-point scale described in Sulzby (in press) and shown here as Table 1 was used to describe the nature of the written productions and the degree of matching voice and eyes to print. Two independent judges scored all protocols, with 96% agreement.

| Table 1 About Emergent Reading Ability |
The scale description employs the term "story" because children were asked to "write a story." The only measure of structure embedded within the scale is the difference between scores 1-2 and 3-7. Scores 1-2 were assigned for attempts in which the children did not produce unitized discourses or "text." Scores 3-7 were given in situations in which the child did produce connected discourse; however, these scores have no relation to any judgment about the structural complexity of the "story," or text.

The scale for emergent reading ability judgments compares the nature of the composed unit with the child's ability to reproduce that unit in a reading attempt; in effect, it includes the child's ability to recall the story along with the child's attentiveness to cues from the written form. It treats memory for text as one aspect of reading that emerges into comprehension of written text. This scale is also treated as ordinal.

Results

Completeness of Context

The completeness of context scoring was used to compare overall differences in specification of information and also differences in specificity in addressing each of six questions: who, where, when, what, why, and how. Table 2 presents results of a repeated-measures analysis of variance and Table 3 presents the mean scores for each question for the two modes of telling and dictating and for the two topic treatments, real and make-believe. It should be remembered that the six scoring procedures were not standardized to the same metric and that the scoring system was adapted for this study. Table 3 presents comparison scores for age groups taken from the data of Menig-Peterson and McCabe (1978).
Table 2

Specification of Context with Topic, Mode, and Measures as Within-Subjects Repetitions

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among Individuals</td>
<td>18</td>
<td>184.26</td>
<td>10.24</td>
<td>16.56**</td>
</tr>
<tr>
<td>Within Individuals</td>
<td>437</td>
<td>270.11</td>
<td>.62</td>
<td></td>
</tr>
<tr>
<td>Measures</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RMB (Topic)</td>
<td>5</td>
<td>218.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TD (Mode)</td>
<td>1</td>
<td>.97</td>
<td>.97</td>
<td>9.76**</td>
</tr>
<tr>
<td>M X RMB</td>
<td>5</td>
<td>7.22</td>
<td>1.44</td>
<td>14.56**</td>
</tr>
<tr>
<td>M X TD</td>
<td>5</td>
<td>.91</td>
<td>.18</td>
<td>1.85</td>
</tr>
<tr>
<td>RMB X TD</td>
<td>1</td>
<td>.05</td>
<td>.05</td>
<td>&lt;1</td>
</tr>
<tr>
<td>M X RMB X TD</td>
<td>5</td>
<td>.98</td>
<td>.20</td>
<td>1.99</td>
</tr>
<tr>
<td>Remainder</td>
<td>414</td>
<td>41.01</td>
<td>.10</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>455</td>
<td>454.37</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

***p < .01

There were significant individual differences in the specificity of context by these five-year-old children. This finding is not surprising and confirms other reports in the literature about the variation found among children at this age level. These differences must be held in mind as we analyze the differences within individuals.

In the analysis of completeness of context, the mode distinctions of telling versus dictating did not result in a significant factor. Children did not differ significantly in how specific they were in providing essential information for their audience in told mode as opposed
to an oral mode. The topic was held constant in this comparison, so it would appear that children held their basic information the same across the two modes.

A further question was whether children always provide basic context-setting information in the same degree of specificity if other factors, like topic, are varied. The topic variation, real versus make-believe, did produce significant differences, both overall and in interaction with the six measures of context specification. (The overall significance of differences among measures was not tested due to the fact that the same metric was not used across the six measures.)

The interaction of measures by topic (real and make-believe) is shown as a graph in Figure 1 but the reader must remember that only the difference between pairs of means is comparable; relative size of the means from category to category is not interpretable.

Figure 1
Completeness of Context

```
- MB
--- Real
```

0 1 2 3
Who Where When What Why How
Table 3

Means for Completeness of Context

<table>
<thead>
<tr>
<th>Category</th>
<th>Real</th>
<th>Make-Believe</th>
<th>Told</th>
<th>Dictated</th>
<th>Average</th>
<th>*Menig-Peterson and McCabe's age-group scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>who</td>
<td>1.74</td>
<td>2.08</td>
<td>1.87</td>
<td>1.95</td>
<td>1.91</td>
<td>(1.89, 3½-4½)</td>
</tr>
<tr>
<td>where</td>
<td>.24</td>
<td>.29</td>
<td>.24</td>
<td>.27</td>
<td>.26</td>
<td>(1.62, **3½-4½)</td>
</tr>
<tr>
<td>when</td>
<td>.84</td>
<td>.66</td>
<td>.79</td>
<td>.71</td>
<td>.75</td>
<td>( .60, 8½-9½)</td>
</tr>
<tr>
<td>what</td>
<td>2.32</td>
<td>2.05</td>
<td>2.21</td>
<td>2.16</td>
<td>2.18</td>
<td>(1.66, **3½-4½)</td>
</tr>
<tr>
<td>why</td>
<td>.55</td>
<td>.71</td>
<td>.71</td>
<td>.56</td>
<td>.63</td>
<td>( .71, 4½-5½;</td>
</tr>
<tr>
<td>how</td>
<td>.76</td>
<td>1.21</td>
<td>.95</td>
<td>1.02</td>
<td>.99</td>
<td>(1.72, 3½-4½)</td>
</tr>
</tbody>
</table>

*Scoring system adapted and different elicitation procedures used in these studies.

**These scores are not comparable. Converted to proportions, where average for this study is 26%; for Menig-Peterson and McCabe, 54% for 3½-4½'s. The Sulzby what average is 73% and the Menig-Peterson et al scoring for 3½-4½'s is 83% of their possible score.

The real and make-believe stories generated by these five-year-old children differed overall in how completely the child specified information to answer the basic who, where, when, what, why, and how questions. From the graph of the means (Figure 1), it appears that the make-believe stories tended to provide more specific information about the who, why, and how in the story. Make-believe stories were also slightly more specific about location, where, but so few children
specified location at all that these differences should probably be disregarded. The real stories, on the other hand, were more specific in explaining what the object was and when the event took place.

Table 3 gives means for all categories of completeness of context for this study, real and make-believe, told and dictated, as well as the average for each question. Additionally, it furnishes comparison scores and proportions of age groups from Menig-Peterson and McCabe’s (1978) data that are most similar to these data. It can be seen that the five-year-old children in the current study were able to specify information when asked to tell or dictate as part of writing a story, but that generally their specification was low. For five categories, their specifications were more like that of younger children who were narrating real-life events in a conversational setting. Only one category, when the event happened, was particularly advanced when compared with Menig-Peterson and McCabe’s sample, and this advantage held across all conditions.

**Structural Complexity and Emergent Reading Ability**

Results from the adapted production story grammar analysis were used to address issues having to do with overall structural complexity of the stories and the possible relation of that complexity to emergent reading ability. Table 4 gives the frequency of the various story structures across sessions.

The distribution of story structures indicates that these stories tend to be less complex than those elicited by the story starter method of Glein and Stein (1978) and even less complex than the narratives elicited by Menig-Peterson and McCabe (in press).
Table 4

Frequency of Story Structures

<table>
<thead>
<tr>
<th>Structure</th>
<th>Told Session 1</th>
<th>Dictated Session 1</th>
<th>Told Session 2</th>
<th>Dictated Session 2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Story</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>No Structure</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Descriptive Sequence</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2*</td>
<td>4</td>
</tr>
<tr>
<td>Action Sequence</td>
<td>4*</td>
<td>3*</td>
<td>11</td>
<td>7</td>
<td>25</td>
</tr>
<tr>
<td>Reactive Sequence</td>
<td>4</td>
<td>6</td>
<td>4</td>
<td>8</td>
<td>22</td>
</tr>
<tr>
<td>Incomplete Episode</td>
<td>2*</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Simple Episode</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Complete Episode</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Multi-episode</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>96</td>
</tr>
</tbody>
</table>

*Contains one "procedural" narrative.*
Scores for structural complexity taken from the adapted story grammar system were analyzed using a subjects-by-measures design. Scores from the Emergent Reading Abilities Judgment (Sulzby 1981 and in press) were used as a covariate and the regression was not significant. No significant portion of the structural complexity scores is explained by the emergent reading ability scores ($F = 1$). Additionally, there were no significant main effects or first order interactions (see Table 5).

### Table 5

**Topic and Node Effects on Structural Complexity**

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among individuals</td>
<td>23</td>
<td>15.02</td>
</tr>
<tr>
<td>Within individuals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mode(DT)</td>
<td>1</td>
<td>.26</td>
</tr>
<tr>
<td>Topic(RHB)</td>
<td>1</td>
<td>.26</td>
</tr>
<tr>
<td>DT X RHB</td>
<td>1</td>
<td>.51</td>
</tr>
<tr>
<td>Residual</td>
<td>69</td>
<td>2.33</td>
</tr>
<tr>
<td>DT/S</td>
<td>23</td>
<td>3.91**</td>
</tr>
<tr>
<td>RHB/S</td>
<td>23</td>
<td>1.69</td>
</tr>
<tr>
<td>Remainder</td>
<td>23</td>
<td>1.38</td>
</tr>
<tr>
<td>Total</td>
<td>95</td>
<td></td>
</tr>
</tbody>
</table>

**This mean square was the only one of these data to produce a significant (p<.01) $F$-ratio.
From these data, it appears that there was no main effect upon structural complexity as measured by the story grammar. However, individual variation appears to be significant and to be related to the mode variable. The interaction of told and dictated by individuals can be interpreted to indicate that some children would have equivalent complexity on told and dictated stories; some would be higher on told and others higher upon dictated.

The importance of the mode by subjects interaction is dependent upon the quality of the data, of course. Using the techniques derived from the theory of generalizability (Cronbach, Gleser, Nanda, & Rajaratnam, 1972, p. 23ff.), the reliability of the four different scores for this sample of individuals was calculated to be .85. From these calculations, there is some reassurance that the measurements used have a relatively acceptable level of internal consistency.

A graph of individual scores revealed two clusters of children, one group in which the told stories were superior to the dictated and vice versa. There was a mix of children high and low in emergent reading abilities in both groups (as, indeed, the lack of a regression effect for emergent reading abilities would have indicated).
Discussion

The completeness of context analysis revealed differences in specification of information according to topic (real versus make-believe) but not according to mode (told versus dictated). When asked to tell and dictate as part of writing a story, these kindergarten children did not differ in specificity of information, or decontextualization. There were differences in decontextualization, however, dependent upon whether the topic, learning to ride a big wheel, was related from a real or a make-believe vantage point. Make-believe stories were more decontextualized; children specified information more completely for the make-believe version of learning to ride a big wheel. This was not the case, however, for all items which could be specified.

The interaction between the type of question (who, where, when, what why, and how) and the topic (real and make-believe) indicates that children were more specific about those items that comprise the heart of a complete narrative, as described by the story grammar theorists (Mandler & Johnson, 1977; Rumelhart, 1977; Stein & Glenn, 1979). Make-believe stories were more specific about who, why, how, and where information, even with a scoring system adapted to the specific content and directions used in the study. (Because location was mentioned so little, where will be ignored in this discussion.) The who scoring includes the introduction of a protagonist and other relevant actors; the how is scored on the basis of specification of a goal, an attempt, and an outcome; why indicates that the narrative signals causal relations between at least some of its parts. The items in which real stories
were better specified seem to be more closely tied to items that young children might find important and easily accessible from memory. These are items that a non-present audience might not care to know unless the story were more elaborate about those items in which the make-believe specification was superior. Real stories told what and when; usually this was the specification of the key object, the big wheel, and the age of the child when s/he learned to ride.

These data seem to give some support to the claim that children will produce real stories that are more scriptlike and predictable, whereas they will elaborate more upon make-believe stories. While the completeness of context analysis was not designed to examine story structure but focused upon discrete kinds of information, there is some indication that the make-believe stories contained more of the elements of a well-formed story. Furthermore, these elements were more highly specified, or more understandable to a non-present audience.

The completeness of context analysis may furnish evidence of the developing model of the author/reader relationship of these children. It provides some indirect suggestion that children's productions vary in relation to whether or not the child intends to produce a realistic or a fantasy version build from the same knowledge base. These children are at an age when the ability to create an autonomous fantasy world in play has been documented (Scarlett & Wolf, 1979). It is not clear that there is any understanding on the part of the child of specific needs of an audience in relation to these vantage points, even though there is increasing evidence that children are able to adapt to the needs of their audience in oral language situations (Menig-Peterson & McCabe, 1978).
The above discussion has focused upon the children as a group. It must be remembered that there was significant individual variation among the children, both in completeness of context and in the analysis of structural complexity which will be discussed below. That variation was not attributable to any of the within-child variables in the completeness of context analysis but within-child differences were found by the measure of structural complexity of the adapted story grammar.

Descriptive findings from the production story grammar indicate that the children produced structures that covered the entire range described by Glenn and Stein (1978) and Stein and Glenn (1981, Note 2). When these stories are compared with those produced in oral language studies that focus upon stories for their own sake, rather than as written forms, it is clear that these children produced stories that are structurally less complex. It is highly likely that adding the consideration of "writing" to story production calls upon different knowledges or considerations that increase processing demands. These increased demands may result in less well-formed stories.

While the children produced stories that run the gamut of structures posited by the production story grammar, their stories did not differ structurally according to mode or topic as a main effect. The only significant difference was the interaction between mode and individuals.

It had been speculated that structural complexity would be related to how close a child was to being able to read independently. While this may be the case for individual children, this analysis was
not specific enough to reveal a pattern. Some children who were nearly able to read independently produced well-formed, episodic stories, but others produced brief, sparse pieces. That same kind of variation could be seen by examining examples at the other end of the distribution. Children's emergent reading abilities as measured by the Sulzby (in press) scale did not contribute significantly to the scores of structural complexity. Furthermore, even though there was the interaction between mode (told and dictated) and individuals, examination of the raw data again revealed no pattern of reading abilities. For some high and for some low children, the told story was structurally more complex than the dictated story and vice versa.

The fact that differences were found with the more specific analysis and were not detected with the more inclusive analysis is intriguing, particularly paired with the content of the items in which make-believe stories were superior in specification of information. It is possible that a more precise adaptation of the production story grammar would be more revealing. Perhaps the longitudinal study of beginning reading and writing can suggest fruitful directions for such adaptations.
### Table 1**
Emergent Reading Ability Judgments
"Reading Judgments"

<table>
<thead>
<tr>
<th>Score assigned</th>
<th>Behaviors observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No dictated nor handwritten stories: hence, no attempts to re-read. Child refuses to pretend-read or pretend-write.</td>
</tr>
<tr>
<td>2</td>
<td>No handwritten stories produced, but some primitive evidence of reading and writing. Dictation is clearly composed of conversational characteristics. Writings are either not re-read or re-read very little.</td>
</tr>
<tr>
<td>(For 3-7, stories are produced.)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Eyes are not on print. Child says written story &quot;doesn't say anything&quot; or, for dictated story, &quot;I can't read.&quot;</td>
</tr>
<tr>
<td>4</td>
<td>Eyes are not on print, but child attempts to re-read. The story thus recited is similar to original but not stable.*</td>
</tr>
<tr>
<td>5</td>
<td>Eyes are not on print, but child attempts to re-read. Story thus recited is stable.*</td>
</tr>
<tr>
<td>6</td>
<td>Eyes are on print, but the child is clearly not tracking print. Story recited is stable.* (Child may be able to track print with aid of examiner but not independently. Print can be pretend-cursive, etc., if the story clearly accompanied the composition either in this task or preceding task.)</td>
</tr>
<tr>
<td>7</td>
<td>Child's eyes are tracking print, matching voice to print, &quot;actually reading,&quot; independently, with attention to meaning.</td>
</tr>
</tbody>
</table>

* Stable refers to clause-level units. If a story is stable no clauses have been added, omitted, or placed out of sequence.

** Data from a follow-up study, Otto and Sulzby (1981, Note 1), indicate that there is an alternate form of "5" in which the eyes are on print but the story recited is similar but not stable.* Scoring of these data are not affected by that alternate.
Footnotes

The research reported herein was sponsored primarily by the Research Foundation of the National Council of Teachers of English. Additional support was furnished by the National Institute of Education (NIE-G-80-0176). The opinions expressed do not necessarily reflect the position, policy, or endorsement of the supporting agencies. Comments and questions about the content may be addressed to the author, Dr. Elizabeth Sulzby, School of Education, Northwestern University, 2003 Sheridan Road, Evanston, Illinois 60201.

1 The author expresses appreciation to Dr. Margaret Policastro for assistance in data collection and to Dr. Norman Bowers for statistical advice. Thanks are due to Susan Anderson, Beverly Cox, Beverly Otto, and Harriet Rabenovets for assistance in scoring and analysis and to the school, teacher, and students who must remain anonymous.

2 I have discussed such a study with one other researcher and have conducted a follow-up study with data in the process of being analyzed.

3 Since these data were collected in 1979-80, we have conducted a full-year study which includes documentation of the curriculum in the classroom. Thus we have evidence that reading and writing are not taught in a formal manner; the tasks that are closest to formal instruction are storybook reading which goes on throughout the year and a unit on the post-office, around Valentine's Day.
Reference Notes

1. Henderson, E. H. Personal communication, April, 1981. Henderson said that his practice in using the language-experience approach instructionally was to explore a stimulus with the children, allow the children to talk about the stimulus with it still in view, then remove it for the dictation. My inference is that this procedure allows a gradual decontextualization within the situation.


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