AN INVESTIGATION OF PHYSICAL SETTING IN NARRATIVE DISCOURSE, AND ITS INFLUENCE ON THE READING COMPREHENSION AND READING INTEREST OF ELEMENTARY STUDENTS

by

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B.A., The University of British Columbia, 1972
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A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF EDUCATION

in

THE FACULTY OF GRADUATE STUDIES

Department of Language Education

We accept this thesis as conforming to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA

December 1981

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ABSTRACT

The purpose of this study was to determine the extent to which the variable, physical setting, in narrative prose influenced the silent reading comprehension and expressed interest of sixth grade students when they read such narrative prose.

Six stories, each with three treatment levels, were written. The treatment levels were: local physical setting, foreign physical setting, and non-specific physical setting. Each story was designed to control relevant qualitative and quantitative variables and difficulty level. Cloze tests were constructed over all the story versions to measure silent reading comprehension. Semantic Differential Scales were constructed to measure expressed interest in the stories.

Three hundred and forty-four grade six students in Vancouver, B.C., from diverse socio-economic areas, read a randomized selection of the stories and completed the matching Cloze tests and a Semantic Differential for each story read. The Gates-MacGinitie Comprehension test was administered to the students and the scores were used to divide the subjects into three reading ability groups.

Data were analyzed using a fixed effects 2x3x3 fully crossed factorial design with repeated measures over the six stories. Scheffé tests for multiple comparisons were used to determine differences among groups. Pearson Products-moment correlations were calculated to determine relationships between the two dependent variables.
Reading comprehension was found to be significantly influenced by the physical setting in a story. The Cloze scores on the locally-set stories were reliably higher than the Cloze scores on both the foreign set stories, and on the non-specific set stories.

Cloze scores on the non-specific set stories were reliably higher than on the foreign set stories. There was however, no significant difference on the comprehension scores between specific set and non-specific set stories. Interest was not significantly influenced by the setting of the stories, but was influenced by story difficulty, easy stories being significantly preferred over the harder stories for all reading groups. Although there was a significant relationship between comprehension and expressed interest, the relationship was not significantly influenced by the setting of the story.
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ACKNOWLEDGMENT

I would like to thank the members of my committee for their help in the preparation of this dissertation. In particular I would like to thank my research supervisor, Tony Westermark, for his guidance throughout the study; Jane Catterson for her help in improving the review of the literature; Wendy Sutton for her suggestions in the area of children's literature; and Steve Foster for his help with the design and statistical analysis.
CHAPTER I

THE PROBLEM

The ability to comprehend material read, and to enjoy reading are two basic goals of a school instructional programme. The forces that influence each of the two factors, reading comprehension and reading interest, are, however, not easy to identify and so not easy to provide for in a school programme, either separately or in concert. Moreover, the two factors, comprehension and interest, interact in such a complex relationship that it has so far appeared almost impossible to state whether having an interest in what is to be read leads to improved comprehension or whether comprehension itself leads to increased interest—or further—if both statements are valid under differing reading conditions.

Some studies have ignored the interest factor and focussed on reading comprehension alone. At one time most research was of a practical nature and was developed around a product or "skills" model of comprehension. Some research was done using a traditional processing model but this emphasized mainly the perceptual, storage, and retrieval processes. Recently, cognitive psychologists have proposed an alternative processing model called a "schema" model, which concentrates on the knowledge structures a reader brings to the processing of text. The term schema was introduced into the literature by Bartlett (1932) and has generally been defined as a pre-existing knowledge structure that can be brought to a text to enable a reader to comprehend.
A schema is considered to be composed of a hierarchy of schemata embedded within other schemata. A person's schema for something like "tooth" for example, is thought to be part of the larger schema for "mouth" which in turn is part of the still larger schema for "face" and so on.

The fundamental assumption of schema theory is that printed text does not in itself carry meaning, but carries instructions for the construction of meaning. Simply stated, schema theory assumes that every reader brings to any given text a variety of schema, knowledge structures, which have been developed through experience. These schema are available to the reader to serve as cognitive templates against which incoming data can be matched and comprehended.

According to schema theory, interpreting a text message would be a matter of matching the information in any message to available cognitive templates. Information that does not match pre-existing schemata is either not understood or considered unimportant or irrelevant. Schema theory proposes then, that readers comprehend best when incoming data from the text match their existing schemata well, and that discourse structure schemata (phonology, syntax, and rhetoric) are probably needed as much as discourse content schemata (concepts) in the comprehension process.

Some research has been done on such content schemata as point-of-view (Pichert & Anderson, 1976) and topic content (Gordon et al., 1978; Brown et al., 1977) with the schema theory confirmed. That is, it was found that pre-existing schema were used to organize and interpret the textual message. Other research, although not done under the general rubric of schema theory research, has examined the effects of protagonist (Klein, 1968) and figurative language (Cunningham, 1976). Both have found that the content variables examined had a significant effect on comprehension. One content
variable, physical setting, has not been examined, although schema theory would indicate that physical setting might be of great importance in a reader's understanding of a text. If, for instance, the reader were able to match the setting in a narrative to a pre-existing schema for setting then understanding of the narrative might be enhanced. There appears to be a need for such research to add to the knowledge already available on the content schemas that have significance for reading comprehension. Such research might also have significance for the factor cited above as the second goal of a reading programme, namely interest in reading.

Although schema theorists have not attempted any studies on the significance of specific schema for interest, it would seem to assume that readers' pre-existing knowledge structures might affect interest in reading as much as they might affect reading comprehension. Guthrie (1981) has suggested that interest is likely to affect the acquisition of background knowledge, which may then facilitate comprehension. It seems logical that the reciprocal claim might be made, that knowledge influences reading comprehension which in turn affects reading interest. Research studies that have examined both reading interest and reading comprehension have all attempted to determine whether comprehension is influenced by reading interest. A consensus would suggest that topic interest does significantly facilitate comprehension. However, no research has attempted to determine why children comprehend more of high interest material than they do of low interest material.

The information already available on the effects of content variables and reading interest suggest that children prefer stories in which there is much action, dialogue, a suspenseful plot, and characters with which they can identify (Simpson & Soares, 1965).
A few studies have included some examination of the effect of physical setting on reading interest and all have concluded that "definiteness" of setting is unimportant in determining reading interest. However, all of these studies examined the factor of setting as a minor focus in their research. The one study (Johns, 1970) which suggests that "definiteness" of setting has a significant effect on reading interest could be considered to be flawed by methodological problems. In any case, no study has been done that was designed to examine in depth the effect of the variable, physical setting, especially the concept of familiarity of setting.

There appears to be limited research on the effect of familiarity of physical setting on either reading comprehension or reading interest. A carefully designed research study should attempt to examine the content variable, physical setting, in narrative discourse in terms of its possible effects on both children's reading comprehension and reading interest.

Need for the Study

The study as designed should have implications for educational practice and educational theory.

If teachers are to provide instruction that produces readers who both understand their reading and enjoy it, they need more specific information about the factors that may influence such understanding and enjoyment. This study explores one of these factors, namely, physical setting, and it is anticipated that the results will make a contribution to the future design of reading materials for children, as well as to the development of educational curriculum.

If it can be shown that by reading stories with local physical settings, elementary children can improve their reading comprehension and
increase their reading interest, then this information would provide a reason for significant changes in the provision of reading materials for children.

A great many curriculum decisions are made on non-empirical evidence. Historically, Canadian reading educators have been in a dilemma about whether or not to broaden reading curriculum by ordering from international sources or to use national and locally developed materials. Results from this study will provide empirical data on the effects on children's reading comprehension and reading interests when reading locally-set material and foreign-set material.

On a theoretical level, the information gained in this study will add to the body of existing empirical knowledge in the field of schema theory and reading comprehension; in particular this study will yield information concerning the strength of the relationship between pre-existing schema and reading comprehension, as well as expanding the area of schema research (which has so far been confined to reading comprehension) into the field of reading interest.

**Problem**

The purpose of the study was to determine the extent to which the variable, physical setting, in narrative prose influenced the silent reading comprehension and expressed interest of sixth grade students when they read such narrative prose.

Specifically, the researcher sought to measure sixth grade children's silent reading comprehension of and expressed interest in matched stories with local physical settings, stories with foreign physical settings, and stories with non-specific physical settings.
The study also sought to determine whether or not there was a relationship between grade six children's silent reading comprehension of the stories and their expressed interest in the stories, and the extent to which an interaction between content difficulty of the stories and the physical setting variable influenced grade six children's silent reading comprehension and expressed reading interest.

Research Questions

Two questions of the study were related specifically to reading comprehension.

1. Is reading comprehension of sixth grade children influenced by the physical setting in a story?

2. To what extent is the reading comprehension of sixth grade children influenced by the difficulty of the story?

Three questions were concerned specifically with reading interest.

1. To what extent is the interest of sixth grade children influenced by the physical setting in a story?

2. To what extent is the interest of sixth grade children influenced by the difficulty of a story?

3. To what extent is interest of sixth grade children influenced by their reading ability?

Three questions were concerned with the interactions of reading ability, content difficulty, and physical setting.

1. Is the reading comprehension of sixth grade children influenced by the interaction of content difficulty, and the physical setting in the story?

2. Is the reading interest of sixth grade children influenced by the interaction of their reading ability and the physical setting in a story?
3. Is the reading interest of sixth grade children influenced by the interaction of the content difficulty and the physical setting in a story?

One question was concerned with the relationship between reading comprehension and reading interest.

1. What is the relationship between comprehension and interest of stories with local physical settings, foreign physical settings, and non-specific physical settings?

**Procedures**

For the study, the following procedures were developed and carried out.

**Materials**

Reading and testing materials designed for this study consisted of a short practice-Cloze paragraph, six short stories with three alternate versions (local setting, foreign settings, and non-specific setting); Cloze tests constructed from each alternate story version to measure comprehension, two Semantic Differential Scales to measure expressed interest, and the Gates-MacGinitie Reading Comprehension Test.

**Stories.** The six stories were designed to control for relevant qualitative and quantitative variables, systematically varying the independent variables, physical setting, and difficulty level. Six stories each with three treatment levels were written. Three stories were written at grade 'four' readability and three were written at grade eight readability. The stories were all written to approximate the first chapter of a mystery novel.

**Cloze tests.** Seventh word deletion Cloze tests were constructed over all the story versions to measure silent reading comprehension.
Semantic Differential scales. Two evaluative scales were constructed to measure expressed reading interest in the stories.

Gates MacGinitie Reading Comprehension Test. The comprehension test was administered to all subjects. Individual scores obtained were ranked and grouped to divide the sample into three reading ability groups.

Subjects

The subjects for the study were selected from the Vancouver Public School District. Thirteen sixth grade classes were selected from seven schools that agreed to participate in the study. There was a mix of low, middle, and high socio-economic subjects. Of the 344 students selected for the study, 83 subjects were eliminated from the data analysis due to incomplete data and for statistical purposes. Complete data were available and analyzed for 261 subjects.

Collection of Data

All testing was carried out during October and November, 1979.

Prior to the collection of the data, the 18 versions of the stories and the 18 Cloze tests constructed from these versions were divided into three separate packages and colour coded for ease of distribution. There were six stories in each group (three easy stories and three difficult stories); moreover, each of the three setting treatments was represented twice (once in the easy set of three, and once in the difficult set of three).

Each class received a randomized selection of the three packages. The children read one story at a time and then completed the Semantic Differential Scales and the Cloze test.

The Gates MacGinitie Comprehension Test was administered by the classroom teachers, either before or after the rest of the data collection.
Design

The research design was a $2 \times 3 \times 3$ fully crossed factorial design for repeated measures over story.

Treatment of Data

The scores for the Cloze tests, the Semantic Differential Scales, and the Gates MacGinitie Reading Test were analyzed using factorial Analysis of Variance procedures. Scheffé tests for multiple comparisons were used to determine differences between groups. Pearson Product-Moment correlations were calculated to determine relationships between the two dependent variables.

Limitations

There were considered to be four limitations to the study.

1. The investigation was limited to 13 Vancouver grade six classes. Thus generalization of the findings may be limited; however, the methodology could be used with other groups to check the generalizability of findings.

2. Data were discarded both when students failed to complete the experimental materials, and randomly to equalize cells for the analysis of data.

3. The interest measure used to collect "expressed interest" data was a forced choice instrument and thus results may be applicable only to the stories read.

4. The comprehension measure, the Cloze procedure, is considered by some authorities to be an artificial process and may have produced reading behaviour that was different from independent reading behaviour. (This limitation of the comprehension measure would, however, probably
be less of a limitation than those caused by other current comprehen-
sion measures [Rankin, 1978]).

Definitions

For the study five definitions were developed.

1. Comprehension was defined as the number of words correctly replaced
   in Cloze tests of the stories read silently.

2. Expressed interest was defined as order preference for, or liking for,
   stories silently read as measured by a Semantic Differential with two
   evaluative scales.

3. Physical setting was defined as geographical description, place, and
   time for a story.

4. Schema was defined as a pre-existing knowledge structure that a reader
   brings to a text and uses to interpret and comprehend that text.

5. Reading ability was defined as low, average, or high ability; place-
   ment depending on a student's scores on the Gates-MacGinitie Comprehen-
sion Test.

Organization of the Report

The report is organized as follows:

Chapter 1: Introduction
Chapter 2: Review of Related Literature
Chapter 3: Plan and Design of the Study
Chapter 4: Analysis of Data
Chapter 5: Summary and Conclusions

Summary

This chapter has introduced the study, given the rationale, and
defined its limitations and operational definitions.
CHAPTER II

REVIEW OF RESEARCH

The purpose of this chapter is to discuss reading research as it pertains to the problem of the study. The review is organized into four sections. Section one deals with the relationship between pre-existing schema and comprehension. Section two reviews relevant research dealing with content variables and reading interest. Section three summarizes the studies that examine the relationship between reading interest and reading comprehension. These three sections present the research with specific reference to the content of the report. The final section, section four, reviews research on the reliability and validity of the three dependent measures used in the data collection for the study.

Pre-Existing Schema, Content Variables, and Comprehension

A current theory of comprehension that seeks to provide a coherent processing model is schema theory. Schema theory, unlike traditional processing theories that emphasize perception, storage, and retrieval, concentrates on knowledge of particular domains (Iran-Nejad, 1980) and claims that the knowledge a person brings to text has an influence on what is learned and understood from exposure to text (Anderson, 1977). This knowledge is assumed to form part of abstract cognitive structures called schemas. A schema represents generic knowledge: that which is common to a number of things or situations.
Two fundamental tenets of the schema-theoretic approach to (language) comprehension are 1) that text does not in itself carry meaning, but provides directions for listeners or readers about how they should retrieve or construct the intended meaning from their own previously acquired knowledge, and 2) that text is never fully explicit, but relies on inference. Readers must "go beyond the information given" and draw the implied relationships in the absence of specific information (Anderson et al., 1977).

A number of studies have provided evidence to support the schema-theory contention that there is a relationship between pre-existing schema and the comprehension of text, and have also examined the strength of this relationship. Some of these same studies, with others, provide information about the significance of specific content variables in comprehension.

Validity of the Schema Theory Construct

A study that examined the effect of pre-existing schema for topic content on the silent reading comprehension of elementary school children was carried out by Gordon et al. (1978). Twenty-five grade two children were given a test to determine their pre-existing knowledge about spiders. Ten children with the lowest scores and ten children with the highest scores on the test were identified. The two groups, who were statistically equal in reading ability and intelligence, then read silently a selection about spiders and answered 12 comprehension questions. The group with the highest scores on the pre-test performed significantly better on the comprehension measure. The authors concluded that the pre-existing schema of the ten children had affected their reading comprehension.

It has been suggested that the reader must rely on pre-existing knowledge to fill textual gaps, to clarify vague or ambiguous textual statements, and to incorporate unfamiliar information from the text with
familiar pre-existing schema. The following three studies illustrate how pre-existing schema can facilitate comprehension by clarifying textual inferences and "filling in the gaps."

A study by Bartlett (1932) is considered to be the seminal study for the schema-theoretic model of comprehension, although he did not himself use the term "schema theory." In Bartlett's study, subjects in England were asked to read a Northwest Coast Indian folk tale, "The War of the Ghosts" and re-tell it. Distortions in the recalls consisted of more than omissions and condensations. Bartlett reported that themes were elaborated and new information introduced—information that appeared to reflect the interest biases and knowledge systems of the readers. According to Bartlett the subjects added to the material to make it more consistent with their own knowledge structures. Bartlett concluded that a lack of pre-existing schema for Indian tales gave rise to incorrect inferences and resulted in intrusions being made.

Suling and Dooling (1974) investigated the hypothesis that students reading about a famous person already possessed a schema about the person and would integrate new text information into that pre-existing schema. Conversely they hypothesized that a control group would have to build new schema for fictitious characters.

In the study, using college students as subjects, the experimental group read a biographical passage about Hitler or Helen Keller. A control group read the same passage but were told the passage was about fictitious persons (Gerald Martin and Carol Harris). The results supported the hypotheses. On a test of recognition errors the "famous person" group made more false positive recognition errors than the "fictitious person" group. The famous person group apparently assimilated any new information into their pre-existing
schema and could not distinguish the new information from the old.

Brown et al. (1977) studied the relationship between children's listening comprehension and their background knowledge structures (pre-existing schemata). Thirty students in each of grades two, four, and six, were randomly divided into three groups. Each of the groups was individually shown a book about a fictitious tribe called "Targa." The book had photographs and gave information about the tribe's way of life and environment. Two of the groups had different "Targa" books. There was an Eskimo "Targa" and an Indian "Targa" to provide orientations for the task. The third group, which was the control group, was shown a book about Spain.

A target passage called "Tor of the Targas" was written and divided into 48 pausal units. From these units 12 were rated as most important by 60 college students.

One week after the children had been shown "their" book, they listened to the target passage and then performed two tasks: they recalled the target passage orally and then answered ten questions about it. Six questions were literal, and four were critical level questions that probed ambiguous sections of the passage. After each of the "probe" questions the children were asked whether the information was in the passage or just something they knew. Results of analysis showed a main effect for age, the older children (grade six) recalling more units than the younger children (grades two and four); a main effect for orientation, the subjects receiving a relevant orientation recalling more units than those receiving the irrelevant Spanish orientation; and a main effect for importance of units recalled with students' recall increasing as a function of the importance of the 12 most highly rated idea units.
Analysis of the probe questions showed that the majority of the children believed that all the information they gave in the answers to the questions was mentioned in the passage although they had not recalled it as part of their oral recall.

The researchers concluded that there is a tendency for older children to make more use of background knowledge than younger children. They did give significantly more relevant intrusive comments; they included information from the book that was not mentioned in the target passage; and they recalled significantly more idea units than the younger children. The "extra" information reported by all the children was assumed to show how background schema can add to the sense and cohesion of what is read. The researchers also concluded that schemata provide the interpretive framework for comprehending the discourse, that the ambiguous or incomplete sections for the narrative are "filled in," and that discourse itself does not carry meaning, but carries instructions for the construction of meaning.

A series of interesting studies have shown that pre-existing knowledge schemata may function not only to influence what is recalled after reading but may function to orient readers to interpret a textual message in certain ways. Readers with different schemata may give different interpretations to the same textual passage. In a study carried out by Pichert and Anderson (1976), point-of-view was examined. The perspective from which a story is read, and how this perspective affects comprehension, was studied in some depth.

Two passages were constructed that could be read from more than one perspective. The first passage was ostensibly about boys playing hooky, but also contained a number of features of interest to a burglar and a number of features of interest to a homebuyer. The second passage about
an island was similarly constructed to be read from more than one perspective. Four raters parsed the first passage into 72 idea units and the second passage into 56 units.

Subjects were 63 undergraduates who were divided into three groups. Each group read the passage from a different perspective. For the first passage, one group was told the passage was about a potential homebuyer, the second group was told it was about a burglar, and the third group was a control group. After reading, subjects rated each idea unit on a five point scale for its importance to the story. Analysis of the results indicated a significant correlation ($r = .91$ to $.95$) between perspective of the reader and the rated importance of idea units.

For the second phase of the experiment, 113 undergraduate students were divided into two groups and randomly assigned to one of the three conditions. Each group read and recalled one passage. Results were analyzed to see if the more important idea units (as chosen by the subjects in phase one) were better recalled than the less important idea units, and whether this depended upon the perspective of the reader. There was a significant result for the importance of idea unit. The greater the importance, the better the recall. Similarly, there was a significant result for five out of six perspectives. The importance of an idea unit depended upon the perspective used in the reading. It was an idea's significance in terms of a given perspective that influenced whether or not it was recalled.

An experiment with hypotheses similar to those of the preceding study but with different procedures was designed by Anderson et al. (1977). Rather than manipulating context to bring different schemata into play when reading text, the researchers used as subjects students with different
educational backgrounds and presumably different knowledge schemata. They hypothesized that the students' pre-existing schemata would orient them to interpret the same ambiguous passages in different ways. Subjects were physical education students and music education students. They read two passages that could be interpreted in two distinct ways. The first passage could be viewed as a convict planning his escape from prison or a wrestler trying to break the hold of his opponent. The second passage could be interpreted as being about a group of people playing cards or alternately as a rehearsal of a woodwind ensemble. Answers to multiple choice questions (with distractors consistent with one or the other expected interpretation) showed that while physical education students interpreted the prison/wrestling passage as a wrestling match 64% of the time, music students gave this interpretation only 28% of the time. The card game/music passage was seen as a woodwind rehearsal interpretation 71% of the time by the music students, but only 29% of the time by the physical education students. The researchers felt that the results were consistent with a schema-base processing explanation of comprehension and concluded that pre-existing schema were used to organize and interpret the textual message.

A third dimension was added to the validation of schema theory in a series of studies by Bransford and Johnson (1973) who attempted to demonstrate that for comprehension it is not enough merely to have pre-existing schemata. They hypothesized that comprehension of a text may be impossible unless readers' schemata can be activated.

In a first experiment, 50 high school students were asked to listen to a short passage of prose, rate it on a seven point scale for ease of comprehension and to recall it in writing.
The 50 subjects were divided into five groups: a pre-context group whose subjects were given a picture illustrating the content of the passage before reading the passage; a non-context group; a partial-context group whose subjects were given a picture illustrating the content of the passage in which the objects had been rearranged; a context-after group whose subjects were given the picture after listening to the passage; and a context (2) group whose subjects heard the passage twice.

Recalls were scored according to idea units, which had been designated by the researchers a priori. (The idea units corresponded to either sentences, semantic propositions, or phrases.) Two judges scored the recall sheets against the list of idea units. Cases of disagreement were resolved by a third judge.

The pre-context group recalled significantly more of the passage than the other four groups, and also found the passage significantly easier to understand.

Since this passage was deliberately designed to be difficult to understand, the researchers repeated the experiment three times with other passages that they thought would be familiar to all the subjects.

In the second experiment, 35 college students listened to, and recalled, a passage on washing clothes. Seventeen students were not given the title before listening and 18 were given the title. The group given the title recalled significantly more than the group without the title. Since all the students presumably had pre-existing schema for "washing clothes," the researchers suggest that this schema had to be activated if comprehension was to take place and that the listeners with the context title were able to activate this pre-existing schema, while the students without the context were not.
Two further experiments designed along the same lines as the previous study obtained the same results as the second experiment.

Paris and Brooks (1976) replicated these experiments with 16 second grade and 15 fifth grade children to ascertain whether Bransford and Johnson's results might not be simply the product of normal child development. Their results, however, were similar to those of Bransford and Johnson, and they concluded that there were no developmental effects. It appeared that whatever the age, the reader must be able to gain access to his/her pre-existing schema if comprehension is to take place.

The information concerning pre-existing schema and comprehension that has been obtained from studies reviewed confirms the schema theory hypotheses. These studies demonstrate not only that the comprehension of text is facilitated by pre-existing knowledge structures, but also that these schemata must be activated in the reader if they are to be used in the comprehension process. It also appears that the use made of schema increases with age, a finding that suggests that more numerous life experiences provide increasingly stronger and therefore more usable schemata. Further, it appears that pre-existing schema affects the interpretation given a textual message, and the point-of-view from which it is read.

In sum, the research reviewed supports the fundamental tenets of schema theory—that meaning is not in the text, that text does not in itself carry meaning, but carries instructions for the construction of meaning, if a reader's schema is full and complete. The representation constructed usually includes elements not explicitly contained in the text that embellish and clarify—or may—if the schema is faulty, confuse.

The fact that no investigation to date has contradicted schema theory
suggests that schema theory provides a coherent construct within which to study comprehension, and that further investigations are warranted.

Specific Content Variables and Comprehension

The studies already reviewed support the general tenets of schema theory. Three of these same studies, with others, provide evidence indicating that specific content variables in narrative prose have a significant effect on comprehension.

Both Gordon et al. (1978), and Brown et al. (1977) cited above in the review on schema theory, examined topic content and comprehension. Gordon used knowledge about spiders, and Brown used social studies knowledge about Indian and Eskimos for their content. Both studies found that familiarity and knowledge of the topic content significantly facilitated text comprehension. Pichert and Anderson (1976) also cited above in the review on schema theory, manipulated the content variable, point-of-view. Their results indicate that comprehension is significantly affected by the perspective from which a text is read.

Two further studies examined content variables and reading comprehension. Although not done under the general rubric of schema theory research, the studies done by Klein (1968) and Cunningham (1976) nevertheless confirm the schema theory hypotheses.

Klein focussed on the occupation and gender of the protagonist in narrative prose and how this affected reading comprehension. Klein wrote six basic stories around three occupations: two stories about social workers, two about ballet dancers, and two about pilots. Each of the six stories was written in two versions, one with a female main character and one with a male. The only differences were in names and pronoun reference. All stories were controlled for readability. The subjects
were 312 grade five students who were divided into four equal groups—two of each sex. One group of each sex read six basic stories; three male versions and three female versions. The other two groups read the same stories but in the opposite sex version. Comprehension was measured using Cloze tests for each story. Changing the sex of the main character within a particular story content did not affect the scores of either sex. However, girls had significantly higher Cloze scores when reading ballet dancer content than they did for pilot content, while there was no significant difference for boys in contents.

Cunningham (1976) examined the content variable, figurative language. In this study the influence of the amount of metaphor in written text upon reading comprehension was analyzed. Subjects were 190 sixth grade children who read two passages relating the same events but differing in the amount of metaphorical language used. Comprehension was measured by means of a Cloze test. Although the passages were equated for readability, Cloze comprehension of the metaphorical passage was significantly lower than the comprehension of the non-metaphorical version. The conclusion was drawn that children find metaphorical language harder to understand than direct literal language.

The content variables examined in the studies reviewed here appear to have affected the understanding of text, either facilitating or hindering the comprehension process. The effect of the content variable, physical setting, on comprehension has, so far, not been examined empirically, although a schema-theory model of comprehension (borne out by the information gained in the reported research) would suggest that physical setting might be a factor of some importance in a reader's understanding of text. If readers were able to match the setting in a narrative to a pre-existing
schema then understanding of the narrative might be enhanced; and conversely, that if the setting could not be matched to a pre-existing schema, then understanding might be hampered.

Content Variables and Reading Interest

This section of the chapter reports research that examines content variables and reading interest.

Schema theorists have not as yet attempted any studies on the influence of specific schema for reading interest. However, a considerable amount of work has been done over the years on the content variables in narrative prose that affect children's reading interest. These studies are reviewed below and a conclusion drawn about their value in expanding the schema theory model to include interest factors.

According to the survey of research studies on reading interests compiled by Purves and Beach (1972), most reading interest surveys are based on a single dimensional factor, that of the subject matter of the book. They suggest that most studies identify differences in reading interest on a holistic basis and present a global view of reading interests. Few studies, they conclude, have probed beyond these holistic categories to discern how particular aspects of form affect interest; however these researchers have particularized discrete factors within narrative (such as style, plot, characterization, and setting) that appeal to students.

Bernstein (1955) examined student preference in style. She had 100 ninth grade students read two passages. One passage had action, suspense, clear-style, and a teen-age hero; the other passage was taken from Nathaniel Hawthorne's The House of Seven Gables which represented a literary style. Both passages were read and rated on a five point interest
scale by the subjects. The subjects were significantly more interested in the action passage than in the literary one.

Simpson and Soares (1965) carried out a study in which the content variables, plot, style, character, voice, mode, perspective, and setting were examined.

A sample of 4250 seventh, eighth, and ninth grade students read a minimum of 20 "stories" (the term "stories" also included essays and descriptions) from a pool of 862 stories and rated each story on a 27-item interest scale.

Significant differences were found for all the content variables with the exception of the "setting" variable. It was found that stories with high rated interest (as compared to stories with low rated interest) contained significantly more concrete language (as opposed to abstract), more physical action, conflict and suspense, more dialogue, greater clarity of language, and more narratives (as opposed to essays and descriptions). Stories with high interest also had more descriptions of persons and more main characters as well as more omniscient narrators (as compared to first person narrator). There were no significant differences for setting (descriptions of place).

Soares and Simpson (1968) undertook a further study to determine whether differences in liking for short stories and narrative elements in short stories existed for junior high school students when they were grouped according to intelligence (high, average, low), grade (seventh, eighth, ninth), and sex. Students were requested to rate, on the basis of liking, 60 short stories. Elements chosen for analysis were: type of conflict, type of story, content of story, theme, characteristics of the main characters, and factors of suspense and realism. The result of analysis showed
that the average group preferred a greater number of the stories than did the low group. All the groups showed a preference for realism and suspense. The high and average group liked external conflict rather than internal conflict, but the low group preferred a combination of the two. All groups selected the narrative mode over the essay and descriptive and preferred an attractive male teenager as the main character.

The effects of the story elements for all three grades were the same, and there were no differences in response attributable to gender.

A study that examined children's interest and comprehension towards the gender and occupation of the protagonist in narrative prose was carried out by Klein (1968). The comprehension section of this study has already been described in a previous section.

Klein (1968) wrote six basic stories around three occupations: two stories were about ballet dancers, two about social workers, and two about pilots. Each of the six stories was written in two versions, one with a male main character and one with a female. Interest was measured with Semantic Differential Scales and a traditional six point scale. Boys rated stories with male protagonists higher than stories with female protagonists only in the pilot occupation stories, while females rated stories with female protagonists significantly higher than stories with males for each occupation. It would seem that the female students were more concerned with gender differences in narrative than
were the males.

A study of the content variable, setting, and its effects on the reading interest of inner-city children was carried out by Emans (1968). A random sample of 11 inner-city girls and boys (non-readers in grade one) listened to six pairs of stories from multi-ethnic readers. Each pair of stories had one story about the city environment and one story from a friend-pet-family theme. Each child was asked, after each pair of stories had been read, which story he/she would like to hear again. There was a significant result in favour of the pets-family-friends over the city environment. The study was replicated and the results were the same. Emans concluded that inner-city children are more interested in listening to stories that show a suburban way of life rather than a city way of life.

This study used pairs of stories that were not controlled for tone and mood. The city stories were totally concerned with the city setting environment, but the friend-family-pet stories were concerned with relationships and feelings. Results, therefore, may be completely invalid.

The purpose of Johns' (1970) study was to explore the hypothesis that inner-city children in the intermediate grades actually prefer to read stories or books which contain illustrations, settings, and characters based on experiences to which they can relate. His sample was 597 fourth, fifth, and sixth grade children living in four large midwestern American cities. There were 199 children in each grade of the sample, and the boy/girl ratio was even. There were 515 black students and 52 white students in the sample.

In the first phase of the study, five pairs of illustrations were selected from modern realistic fiction books for children. These pairs depicted the stark crowded conditions of inner-city life, and pleasant middle-
class suburban settings. Passages from trade books were then chosen which described the settings depicted by the slides. Children viewed each pair of slides and listened to the descriptions from a tape. They then responded to three questions:

1. Which picture and description is most like the place where you live?
2. In which neighbourhood would you rather live?
3. If a story or book was written about one of these areas or neighbourhoods which would you prefer to read?

There was a significant preference for stories or books which depicted middle class settings.

In the second phase of the study a similar procedure was employed. Five descriptions depicted characters with positive self-concepts and five descriptions depicted characters with negative self-concepts. The positive self-concept character descriptions were paired with the negative ones. After listening to each taped pair of descriptions each student responded to three questions.

1. Which person sounds most like you?
2. Which person would you rather be?
3. If a book or story was to be written about one of these people, which would you prefer to read?

There was a significant preference for descriptions which depicted characters with positive self-concept.

A third phase of the experiment examined characters in positive group interactions compared with characters in negative group interactions. There was a significant preference for descriptions with characters in positive group interactions.

As a result of this research Johns concluded that city children
prefer not to read about inner-city settings, and prefer characters with positive self-concepts, and characters in positive group interactions. Johns' conclusions may all be valid; however, an inspection of the pairs of slides and descriptions used for the "setting" explorations show that a very gloomy dark side of inner-city life was compared to a bright cheerful suburbia. The passages were not controlled for either tone or mood. If the inner-city settings had been more positive and cheerful there might have been different results.

Yoder (1978) examined male and female high school students' reading interest in four narrative factors: sex of the protagonist, narration, plot portrayal, and setting.

Each of the four variables was bipolarized by a set of paired descriptors. The four factors were incorporated systematically into 32 synopses of imaginary novels.

The synopses were read aloud to 485 high school students who rated them on a five point scale. Results indicated that the sex of the protagonist influenced reading choice—boys preferred male characters and girls preferred females, a finding that agrees in general with Klein's. Male students also preferred action and descriptions of external actions rather than introspective narration, whereas for females there were no significant differences. There were no sex differences for portrayal of events, but "direct" event portrayal (as opposed to flash-back and complicated chains of events) was preferred by both sexes. There was a significant result for setting. Setting, defined as the physical and temporal boundaries of the incidents of a plot, was significant for male students who preferred open-limitless, outdoor settings. There was no significant effect for females on the setting variable.
Yoder concluded that there was a difference in the reading interests of male and female high school students in the areas of sex of the protagonist, type of narration, and setting.

A summary of the findings of the studies reviewed above leads to the conclusions 1) that some useful evidence has been gathered on the effect of specific content variables on the reading interests of particular groups of children and 2) that the schema theory model might add a useful dimension to future investigations of specific content variables and reading interests.

Without questioning the validity of existing findings it must be pointed out that on the whole the research on reading interests has been mainly of the "status study" type. Thus far, that is, the researcher has obtained the reaction of readers to narrative prose that contains "more" or "less" of the content variable being investigated and drawn conclusions about the effect on the readers' interest of the presence or absence of that content variable. Most researchers have not assessed the readers' pre-existing knowledge of each content variable studied and so there has been little attempt to discover to what extent interest is correlated with pre-existing knowledge. The findings on physical setting provide a case in point. Simpson and Soares suggest that physical setting was a less significant variable than others in their study, and Yoder concluded that boys responded to outdoor physical settings while girls had no preference. In neither study, however, was any evidence available about pre-existing schema for the physical settings used in the reading passages. It is true, of course, that in both the Johns and Emans' studies of inner city children's responses to inner city settings, that pre-existing schema might be assumed and the conclusion drawn that familiar settings have negative effects on interest. However, there is reason to suppose that the results
of both studies were influenced by factors not adequately controlled by their designs.

The existing evidence does not, in fact, allow us to draw conclusions about the effect of a child's pre-existing schema on his/her reading interest. Indeed it seems logical to assume that the readers' pre-existing knowledge structures may affect their interest in reading as much as they affect their reading comprehension. The time seems appropriate for the expansion of the schema theory model to include an interest factor and for studies that focus on the influence of such variables as pre-existing knowledge of setting on interest.

### Reading Interest and Reading Comprehension

This section of the chapter summarizes the studies that deal with the relationship between reading interest and reading comprehension.

Guthrie (1981) has suggested that interest is likely to affect the acquisition of background knowledge, which may then facilitate comprehension. It seems very logical that the converse might hold true, that knowledge influences reading comprehension which in turn affects reading interest. However, research studies that have examined the relationship between reading interest and reading comprehension have all asked whether reading comprehension is influenced by interest rather than the reciprocal question—whether reading interest is influenced by reading comprehension.

One of the first studies that examined the relationship between interest and reading comprehension was conducted by Bernstein (1955). Reference has already been made to this study in the review on reading interest and content variables.

Bernstein (1955) studied the relationship between interest in style
and comprehension. She had 100 ninth graders read two passages. One passage had action, clear-style, and a teen-age hero. The other passage was taken from Nathaniel Hawthorne's *The House of Seven Gables* and represented a literary style. Both passages (which were rewritten to be equated in difficulty) were read and rated on a five point interest scale by the subjects who then completed comprehension tests based on the passages. The subjects were significantly more interested in the action passage than in the descriptive (literary) one. Comprehension scores were also significantly higher for the action story. Results also showed that this relationship held true for all degrees of reading ability.

Schnayer (1969) investigated the relationship between topic interest and comprehension. His 578 grade six students were divided into seven ability groups determined by their scores on the *Gates Reading Survey*. Each group read 15 stories (of which the readability was two grades higher than the mean reading ability for each of the seven groups). The subjects rated the stories on a four point interest scale and answered questions of fact, sequence, and inference. Students' comprehension scores on the stories they rated as being of high interest were compared to their scores on the stories they rated low in interest. Comprehension scores on the stories they rated high in interest were significantly higher than their scores on the stories they rated low in interest, irrespective of ability group. However, comprehension scores for the below-average reading group were raised (on preferred content) significantly more than the scores for the other ability groups.

Estes and Vaughan (1973) examined the relationship between topic
interest and reading comprehension with 46 fourth graders, all average or above average readers, who were asked to choose their most liked and least liked topic from among a choice of six topics. Six passages were constructed about the six topic areas and were controlled at a 5.5 level of readability. They were controlled at a higher level than the children's average grade placement to allow the fact of interest a maximum chance of affecting comprehension.

The children read their two choices and completed a multiple choice comprehension test on the passages read. There was a significant difference between reading scores for the preferred topics and the non-preferred topic, in favour of the preferred topic.

A study similar to Estes and Vaughan was conducted by Belloni and Jongsma (1978). They selected three stories of interest to girls, three stories of interest to boys, three stories of interest to both boys and girls, and three stories of interest to neither girls nor boys. These selections were based on the research of reading interest carried out by Norvell (1973). An abstract was prepared for each of the 12 stories and the subjects were asked to choose the abstract they liked most and the one they liked least. One week after making this choice the subjects read the two complete stories and filled in Cloze tests prepared on the stories. Results showed that there was no significant difference between the scores of boys and girls. However, all students' scores were significantly higher on the high-interest passages than on the low interest passages.

Asher, Hymer, and Wigfield (1978) investigated the interaction between topic interest and reading comprehension with 75 grade five children who were reading at grade level. The children looked at 25 colour
slides and rated the slides for interest on a seven point scale. One week later the children were divided into two groups (a high interest condition and a low interest condition). Subjects in the high interest condition completed five Cloze tests that corresponded to their five highest rated slides. Those in the low interest condition completed Cloze tests that corresponded to their five lowest rated slides. The groups and order of presentation was randomly selected. Analysis of variance indicated a significant effect for interest.

The researchers in this experiment suggested that their results support the findings of previous experiments of this nature; that there is a significant relationship between reading interest and reading comprehension. Furthermore, they state that since in their experiment children were deliberately given either high interest passages or low interest passages to read, but not both, the results could not be due to a contrast between two opposites that might polarize interests as they may have done in previous studies.

A study that did not examine topic interest but focussed on the occupation and gender of the protagonist in a story, and how this affected both reading interest and reading comprehension, was carried out by Klein (1968) in a study already described.

Three pairs of stories (each pair involving a different occupation) were designed by Klein (1968). The three pairs of stories were written in two separate versions, one with a female protagonist and one with a male.
Boys rated stories with male protagonists higher than stories with female protagonists only in the pilot occupation stories, while females rated stories with female protagonists significantly higher than stories with male protagonists, for each occupation. Boys' interest ratings did not affect their comprehension, but girls' comprehension was significantly higher for preferred content. The comprehension of average readers was not significantly affected by their interest ratings, but the comprehension of below average readers was significantly higher for stories with preferred sex type content.

On the whole the studies reviewed above indicate that there is a significant relationship between expressed reading interest and reading comprehension.

The Effect of Reading Ability on Reading Interest and Reading Comprehension

Results from studies on reading interest and reading comprehension reviewed above show no consensus as to whether interest affects all reading levels equally. Bernstein (1955) found that when two passages were read, one a straightforward action passage and the other representing a literary style, subjects were not only more interested in the action passage but that they also comprehended it significantly better than they did the literary passage. This relationship between interest and comprehension held true for all degrees of reading ability.

Belloni and Jongsma (1978) found that when subjects read their "best liked" and "least liked" story from among a choice of 12, and completed Cloze tests constructed from these stories, their comprehension scores
were higher on the "best liked" stories than on the "least liked" stories, and that these findings held true for all students.

Schnayer (1969), however, found that when students were divided into seven reading ability groups and read 15 short stories, that although their reading comprehension scores on stories that they rated as being high in interest were higher than their scores on stories they rate low in interest, these results were not spread equally over all ability groups. The scores of the below-average reading groups (on preferred content) were raised significantly more than the scores for the other ability groups.

A similar finding was reported by Klein (1968) who also found that gains were substantially higher for the below-average reading group than they were for the other groups.

There is some evidence then, that below-average readers are particularly helped by the reading interest factor.

The Effect of Passage Difficulty on Reading Interest and Reading Comprehension

Although all but one (Asher, Hymel, & Wigfield, 1978) of the studies cited above that examined reading interest and reading comprehension controlled their stories for readability, none examined the effect of both easy and difficult stories on interest and comprehension. This would seem to be a useful relationship to study.

Bernstein (1955) controlled the two passages used in her study at the grade six-seven reading level, approximately three levels below the grade placement level of the subjects; however, no reason for the level of control was reported.

Estes and Vaughan (1973) asked subjects to read their "best" and "least" liked passage from among a choice of six passages. All passages
were constructed to have a readability level two grades higher than the mean reading level of the subjects in order to allow the factor of interest a stronger chance of affecting interest.

Similarly, both Schnayer and Belloni and Jongsma controlled their reading passages at two-four grade levels above the mean reading levels of their subjects.

Klein reported that the readability of the stories in his study was grade five (the grade placement level of the subjects).

Asher, Hymel and Wigfield used 25 passages from a junior encyclopedia to form Cloze tests, but the passages were not controlled for readability.

No studies have controlled their stories at both an above grade placement level and a below grade placement level. Some evidence is needed that examines the effect of passage difficulty on reading interest and reading comprehension.

Information gained from the results of the research studies that have examined the relationship between reading interest and reading comprehension indicate that there is a significant relationship between the two variables. Apparently interest in topic content of a story, interest in the sex of the protagonist, and interest in the protagonist's occupation in a story can have a significant effect on reading comprehension. In fact it can be said generally that the higher a child's interest in text material the better will be his/her comprehension.

This notion would seem to be a profitable one to pursue in future studies that examine the relationship between reading interest and reading comprehension.

In summary, the evidence presented in the preceding three sections of this chapter demonstrate that the schema theory is a viable theory,
an organizing construct that can be used as a basis for studying the comprehension process. The existing research indicates that there is a relationship between pre-existing schema and comprehension, and that pre-existing schema can facilitate or retard comprehension.

Since it seems evident that certain content variables in narrative prose may facilitate or retard reading comprehension, the conclusion was drawn that further research should be done focussing on the influence on comprehension of schema for such factors as physical setting.

The fact that specific content variables also have an impact on reading interest, and that interest and comprehension have often been shown to interact, leads to a second conclusion being drawn, that further research should be done on the influence of physical setting on interest.

A study that focussed on schemas for physical setting and used measures of both interest and comprehension should yield useful new insights into the significance of specific schemas for physical setting as a factor in both interest and comprehension. It would also add to the literature on the schema theory construct and an expansion of the model to add a new dimension.

**The Measurement of Comprehension and Interest**

The final section of this chapter reviews the literature on the reliability and validity of the two instruments chosen to measure reading comprehension and the instrument chosen to measure reading interest.

**Cloze Procedure**

The Cloze procedure was developed by Taylor in 1953. He described it as a technique for measuring the effectiveness of communication. Taylor applied the principle of the Gestalt psychology concept of "closure"
to language. He deleted every $n^{\text{th}}$ word from passages of prose and replaced the words with blanks of uniform length. The reader then, using the principle of clozure, replaced the word. Taylor concluded that the Cloze procedure depended on factors that affect comprehension, i.e., general language facility, specific knowledge, and vocabulary relevant to the passage read.

Since 1953, Cloze tests have been widely used both as a research tool and in the classroom.

Rankin (1978) examined over 600 research studies that used the Cloze procedure as a measurement tool and gave five reasons why he feels Cloze tests are a superior measure of language comprehension and measure comprehension more directly than conventional measures.

1. Cloze tests are intrinsic measures of the effectiveness of communication by sampling the degree of correspondence between a message source and a receiver.
2. Cloze measures comprehension in process not as an after product.
3. All Cloze is based on the psycholinguistic process of inference which is intrinsic to all communication.
4. Cloze tests sample the choice points for predictability within the passage in a random fashion.
5. Cloze tests can be precisely replicated. (p. 151)

Ripley (1973) also did a major survey of hundreds of Cloze research studies and reported that Cloze is a valid and reliable measure of comprehension ability.

Reliability. Reliability coefficients for the Cloze procedure have been consistently substantial. Gallant (1964) in her doctoral dissertation using Cloze as the comprehension measure for primary children found
reliability coefficients of .90 to .97, established by split-half coefficients and the use of the Spearman-Brown formula. Bormuth (1965) found reliability coefficients ranging between .76 and .94 for six Cloze tests.

A methodological study on Cloze reliability was conducted by Vaughan and Meredith (1978). They used 298 eighth grade students who read two science related selections controlled at the eighth grade level of readability. Tests were based on a 50-item, seventh word deletion pattern. Students were randomly assigned to two groups. Each group read both passages alternately and responded to the Cloze tests for the passages.

Internal consistency reliability was determined by using Cronbach's alpha. Coefficients for exact replacements and exact-replacements plus synonyms ranged from .86 to .92. Parallel form reliability was determined with Pearson product-moment correlations and these ranged from .79 to .81. The difference between internal consistency coefficients and parallel form coefficients was significant (p<.01) as determined by Fisher's Z test. This significance, the authors state, suggests that the Cloze scores may be somewhat passage dependent. However, since the parallel form coefficients are so high this is likely of minimum concern as long as there is no attempt to generalize on the basis of a single Cloze passage.

There would appear to be no change in reliability depending on the nth deletion pattern as long as four or more words are left between blanks (MacGinitie, 1961; Bormuth, 1975). Meredith and Vaughan (1978) looked at the reliability of nth word deletion Cloze tests over the reliability of random word deletion Cloze tests. They found no significant difference. Cronbach's alpha for the nth word deletions averaged at .858 and for the random deletion pattern the average was .874.

It would appear from the example of the studies on Cloze research
that the Cloze procedure has high reliability.

**Validity.** Early research on the Cloze procedure examined criterion-related validity between scores on Cloze tests and scores on standardized tests of reading comprehension.

At the primary level, Gallant (1964) found correlations ranging from .65 to .81 between Cloze passages and the Metropolitan Achievement Test. Again, at the elementary level, Ruddell (1963) found a range of correlations from .61 to .74 between Cloze and the Standard Achievement Test Paragraph Meaning. Jenkinson (1957) used high school students and found correlations of .78 and .73 on the Cooperative Reading C2. Bormuth (1969) compared Cloze test scores to validated multiple-choice tests. Pearson product-moment correlation was .946.

It has been asserted that the correlations between Cloze and other comprehension tests are due to their both measuring verbal competency. Rankin (1978), however, suggests that all comprehension tests correlate highly with verbal aptitude tests and that

the correlations between both cloze test results and conventional comprehension results on the one hand and verbal aptitude tests on the other, do not account for a large amount of the variance in common to both distributions. Therefore, cloze tests measure something more than verbal aptitude. (p. 150)

Carroll (1972) makes the criticism that Cloze scores are influenced by linguistic clues in the surrounding context of a word and do not measure general reading comprehension. MacGinitie (1961) also criticizes the validity of Cloze on similar grounds. His research findings were that the context of more than five words around a blank does not help in making the correct completion. However, studies by Darnell (1963) and Ramanauskas (1971) show that Cloze responses are sensitive to more than the fifth word constraints found by MacGinitie and do in fact tap major ideas in
a passage. MacGinitie himself also suggested that background knowledge may be likely to extend constraints.

Bormuth (1968) analyzed the principal components of the correlations among nine Cloze tests and seven multiple-choice tests. The multiple-choice tests were judged by reading experts to measure comprehension of seven skills: vocabulary, explicitly stated facts, sequence of events, main ideas, stated causal relationships, inferences, and author's purpose. All intercorrelations were high and Bormuth concluded that, "the data were interpreted as providing little grounds for claiming that Cloze tests measure anything other than what has commonly been labelled reading comprehension skills" (p. 358).

Since there is no generally accepted theory of reading comprehension, the Cloze procedure lacks construct validity—as do all reading comprehension tests. However, based on an evaluation of over 600 research studies that use the Cloze procedure, Rankin (1978) stated that the Cloze procedure has potentially better construct validity than conventional comprehension measures since it is based on a psycholinguistic theory of comprehension which makes extensive use of Smith's (1975) model of information processing and context redundancy.

The Gates-MacGinitie Reading Comprehension Test

The Gates-MacGinitie Reading Test was standardized in 1964-65. The test was normed on 40,000 students from 37 representative communities in the United States (Gates-MacGinitie, 1972).

The Comprehension Test measures the student's ability to read complete prose passages with understanding. It contains 21 passages in which a total of 52 blank spaces have been left. For each blank a choice of five completions is offered. This test is a modified form of the Cloze
procedure.

Reliability. Reliability coefficients for the Comprehension Test (Survey D, the Intermediate level) are reported for both Alternate-forms and Split-half. The Alternate-form coefficient is .83, and the Split-half, .94.

Validity. Concurrent validity coefficients are reported. The scores of grade five students on the Gates-MacGinitie test were correlated with their scores on five standardized reading tests. The median coefficient for the Comprehension Test was .80.

Semantic Differential Scales

The Semantic Differential is a method for measuring the meaning of concepts. In practice it has two applications. (1) to measure objectively the semantic properties of words and concepts in a tri-dimensional space; and more commonly and simply, (2) as an attitude scale restricting its focus to the evaluative dimension. (Isaac & Michael, 1976, p. 102)

The Semantic Differential scale was developed in 1952 by Charles Osgood. He conducted a study where he took 76 pairs of bi-polar adjectives from Roget's Thesaurus, and asked subjects to rate a series of concepts using these pairs. His analysis of the data showed that all but a small proportion of the variance could be accounted for by three components of meaning: evaluation, activity, and potency. He also found that some adjective pairs were stronger in one or other of these three components. Sets of these pairs were made up to form the Semantic Differential Scales. The SD scales have three components. They have the concept to be evaluated in terms of attitude, the bi-polar adjective pair anchoring the scale, and a series of interval positions as shown below:

The Semantic Differential is really a method for constructing an instrument rather than a fixed instrument itself, and the scale being fluid, different adjective-pairs are used for different studies (Coyne & Holzman, 1966).

Since the major dimension of meaning found by Osgood is the evaluative dimension, adjective pairs measuring the evaluative meaning of a concept can be used to estimate interest in that concept. Factor analysis done on various Semantic Differential Scales show high and restricted loadings on the evaluative scale (Osgood, Suci, & Tannenbaum, 1970). And it is the evaluative scales on which reliability and validity data are given (and the evaluative scale with which the research reported in this study is concerned).

Reliability. Tannenbaum (1953) had 135 subjects, on two occasions, separated by five weeks, judge six concepts against six evaluative scales. Test-retest coefficients ranged from .87 to .93. Divesta and Dick (1966) examined the reliability of S.D. scales under delayed and immediate test-retest conditions. Children in grade two to seven twice rated different concepts on a series of scales, a month apart from each rating. Correlations for different scales ranged from .27 to .56. Reliability coefficients were higher for the higher grades and the evaluative scales were the most reliable for all grades. When Divesta and Dick calculated group means rather than using individual subjects, their test-retest correlations ranged from .73 to .94. A review of the research on Semantic Differential reliability carried out by Heise (1970) concludes that "group means are highly reliable and stable even when the samples of subjects are as small as 30" (p. 246).

Validity. Osgood, Suci, and Tannenbaum (1970) carried out validity studies comparing Semantic Differential scale measurement with measurement
on traditional attitude scales. Each of three concepts were rated against five evaluative scales. Fifty subjects were divided into two groups. One group was given the S.D. form followed an hour later by the Thurstone Attitude Scales, and the other group did the rating in reverse order. The correlation between the S.D. scores and the Thurstone scores was significant (p<.01). The same researchers also compared S.D. evaluative scales against a Guttman type scale. The 14 item Guttman type scale related highly to scores on the S.D. evaluative scales. The rank order correlation between the two scales was again significant (p<.01). The researchers state, "the findings of both these studies support the notion that the evaluative factor of the Semantic Differential is an index of attitude" (p. 231).

In his review of S.D. studies, David Heise (1970) concludes that the results of numerous studies, "support the validity of the Semantic Differential as a technique for attitude measurement" (p. 236).

Semantic Differential Scales and Reading Interest

A review of research produced a few studies where Semantic Differential scales have been used to assess children's attitude towards reading. Klemper (1970) examined grade seven students' attitude towards reading using 15 concepts and 14 S.D. scales. Concepts represented materials (workbooks), activities (reading out loud), and persons (reading teachers). Klein (1968) used 13 S.D. scales to examine children's reading interest towards occupations and sex of a main character in stories. Klein found a significant correlation (r=.81) between a traditional rating scale and an evaluative S.D. scale (interesting-boring) and he concluded that, "S.D. scales appear to be a useful research tool to identify patterns of interest
differences between and within sexes for various types of reading content" (p. 116).

Research examined in this section of the chapter indicates that the two comprehension instruments (the Cloze procedure and the Gates-MacGinitie Reading Comprehension Test) and the reading interest instrument (the Semantic Differential Scales) chosen to collect and quantify the data for this study, have sufficient reliability and validity for the task.
CHAPTER III

METHODOLOGY

This study was designed to investigate the variables physical setting and story difficulty and their influence on reading comprehension and expressed interest. The selection of subjects is discussed, measuring instruments are described, and the collection and treatment of data is presented. The design and statistical procedures are also described.

Subjects

The subjects for the study were selected from the Vancouver Public School District. Thirteen classes were selected from seven schools that agreed to participate in the study. Two schools were located in upper socio-economic districts. Two schools were located in stable, but lower socio-economic districts. Three schools were located in transient new-immigrant areas. Three hundred and forty-four sixth grade students were selected for the study; of this number 83 were eliminated from the data analysis due to incomplete data and for statistical purposes. Complete data were available and analyzed for 261 subjects. There were 140 boys and 121 girls.

Instruments

Reading and testing materials designed or chosen for this study consisted of:

Practice Cloze Paragraph

A 123 word paragraph entitled "The Wind," was written at the grade
three levels of difficulty as ascertained by the Dale-Chall readability formula. A short Cloze test with every seventh word deleted was constructed to be used as a practice exercise to familiarize the subjects with the Cloze procedure.

The Stories

As this study was designed to investigate how physical setting affects reading comprehension and reading interest, stories with specific setting content were needed. The stories were written to systematically vary the independent variables, physical settings, and difficulty. Six stories were written for the study. Each story was written in three versions. In one version the story took place in a familiar local setting. In the second version the story took place in a well known but foreign setting that matched the Vancouver setting. In the third version of the stories the setting was minimized and non-specific.

Since the sample for this study consisted of Vancouver students and since this study hypothesized that local material is part of the students' existing schemata, one treatment level of the stories was set in the Vancouver area. Settings considered to be familiar to the majority of grade six children were used. (The Vancouver School Board authorizes set field trips for students in the intermediate grades, and the stories were written to match these field trips. All six local settings, with the exception of story four, would have been visited or passed by on official trips, and the setting of story four, the Pacific National Exhibition, is an extremely popular fair, for which all elementary children receive a free pass at the end of the school year.)

Since it was hypothesized that foreign set material is not part of the students' pre-existing schemata, one treatment level of the stories
was set in foreign locations. Settings were chosen to match the local version settings, in places that it was considered most grade six students would be aware of (such as Paris, London, New York, the Caribbean).

To further examine the specificity of setting and the role of pre-existing schemata, the third version of the stories had all the specific setting statements removed and the settings thus became generalized and appropriate to any locale (such as beach, zoo, fair).

The six story titles with their three treatment levels are presented in Table 1.

The six stories were written at two difficulty levels. Three stories were written at a grade four level and three stories were written at a grade eight level. The readability of these stories was calculated using the Dale-Chall Readability Formula. The Dale-Chall score was converted to a grade level score. The data on the readability for the three versions of each of the six stories are presented in Table 2.

The stories were written to appeal to sixth grade children. They were written to maintain the interest and motivation of the subjects throughout the study. All stories are mystery-adventure. Mystery was chosen as it is the most popular genre for both sexes in grade six (Purves & Beach, 1974; Ashley, 1971). All stories have either both male and female protagonists or a single protagonist with an either-sex name such as Pat or Terry. The stories, designed to approximate the first chapter of a mystery novel, are open ended, and comparable in length. The data are presented in Table 3.

**Cloze Tests**

Cloze tests were made for each of the story versions using the guidelines set down by Bormuth (1976). These included the following points: the first sentence of every story was left intact. Fifty deletions were
<table>
<thead>
<tr>
<th>Story</th>
<th>B1 Foreign Setting</th>
<th>B2 Local Setting</th>
<th>B3 Non-Specific Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Art Gallery</td>
<td>Mystery at the London Art Gallery</td>
<td>Mystery at the Vancouver Art Gallery</td>
<td>Mystery at the Art Gallery</td>
</tr>
<tr>
<td>2  Beach</td>
<td>Cable Beach Mystery</td>
<td>Spanish Banks Mystery</td>
<td>Beach Mystery</td>
</tr>
<tr>
<td>3  Sailing Ship</td>
<td>Mystery on the Balclutha</td>
<td>Mystery on the St. Roche</td>
<td>Mystery on the Sailing Ship</td>
</tr>
<tr>
<td>4  Amusement Park</td>
<td>Tivoli Garden Adventure</td>
<td>P.N.E. Adventure</td>
<td>Amusement Park Adventure</td>
</tr>
<tr>
<td>5  City</td>
<td>Adventure over Paris</td>
<td>Adventure over Vancouver</td>
<td>Adventure over the City</td>
</tr>
<tr>
<td>6  Zoo</td>
<td>Adventure in the Central Park Zoo</td>
<td>Adventure in the Stanley Park Zoo</td>
<td>Adventure in the Zoo</td>
</tr>
</tbody>
</table>

*Note. Stories 1, 2, and 3 are Easy Stories
Stories 4, 5, and 6 are Difficult Stories*
### Table 2

Readability of Stories by Grade Level

<table>
<thead>
<tr>
<th>Story</th>
<th>Level</th>
<th>(B_1^a)</th>
<th>(B_2^b)</th>
<th>(B_3^c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Art Gallery</td>
<td>easy</td>
<td>5(5.00)</td>
<td>5(5.19)</td>
<td>5(4.74)</td>
</tr>
<tr>
<td>2. Beach</td>
<td>easy</td>
<td>5(5.31)</td>
<td>5(5.12)</td>
<td>4(4.96)</td>
</tr>
<tr>
<td>3. Sailing Ship</td>
<td>easy</td>
<td>5(5.00)</td>
<td>5(5.00)</td>
<td>4(4.94)</td>
</tr>
<tr>
<td>4. Amusement Park</td>
<td>difficult</td>
<td>7-8(6.65)</td>
<td>7-8(6.45)</td>
<td>7-8(6.14)</td>
</tr>
<tr>
<td>5. City</td>
<td>difficult</td>
<td>8-9(7.00)</td>
<td>8-9(7.00)</td>
<td>8-9(7.00)</td>
</tr>
<tr>
<td>6. Zoo</td>
<td>difficult</td>
<td>8-9(7.00)</td>
<td>8-9(7.00)</td>
<td>7-8(6.75)</td>
</tr>
</tbody>
</table>

**Note.** Numbers in parentheses indicate Dale-Chall readability scores. Scores are converted into grade levels according to the Dale-Chall formula.

\(^a\) \(B_1\) = Local physical setting  
\(^b\) \(B_2\) = Foreign physical setting  
\(^c\) \(B_3\) = Non-specific physical setting
Table 3

Total Number of Words in the Three Treatment Levels of the Six Stories

<table>
<thead>
<tr>
<th>Story</th>
<th>B₁ᵃ</th>
<th>B₂ᵇ</th>
<th>B₃ᶜ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Art Gallery</td>
<td>456</td>
<td>458</td>
<td>358</td>
</tr>
<tr>
<td>2. Beach</td>
<td>450</td>
<td>435</td>
<td>355</td>
</tr>
<tr>
<td>3. Sailing Ship</td>
<td>472</td>
<td>472</td>
<td>430</td>
</tr>
<tr>
<td>4. Amusement Park</td>
<td>481</td>
<td>458</td>
<td>351</td>
</tr>
<tr>
<td>5. City</td>
<td>433</td>
<td>425</td>
<td>372</td>
</tr>
<tr>
<td>6. Zoo</td>
<td>447</td>
<td>419</td>
<td>388</td>
</tr>
</tbody>
</table>

ᵃB₁ = Local physical setting
ᵇB₂ = Foreign physical setting
ᶜB₃ = Non-specific physical setting
made for every test. Every \( \text{nth} \) word was deleted (in this study every seventh word was deleted). The 50 deleted words were replaced by a line of standardized length. The length chosen for this study was 15 spaces. This length was sufficient for the students to write their answers directly onto the test paper.

**Semantic Differential Scales**

An original intention for this study was to use a 12 scale Semantic Differential, utilizing potent and active factors as described by Osgood (1966). However, it became apparent in field testing that after reading each story and responding to the 50 blank Cloze test that students' motivation began to dwindle. They did not want to read another page of writing and began to respond in a careless fashion seeming not to care whether their answers were thoughtful. In the interest of motivation and accurate response, therefore, it was decided to reduce the interest instrument as much as practical.

Since the validity and reliability of the Semantic Differential Scales was carried out on evaluative scales, and since the major dimension of meaning found by Osgood was the evaluative dimension, adjective pairs measuring the evaluative meaning of a concept can be used to estimate interest in that concept. It was decided, on the basis of field testing, to reduce the length of the instrument to two evaluative scales. These scales representing evaluative factors are shown below:

LIKE: \[
(\text{Like})
\]

BORING: \[
(\text{Boring})
\]

The scales were polarized (in opposite directions) to control for same set response bias on the part of the student. Each scale was represented by lines of equal length marked off into five equal segments.
Gates MacGinitie Standardized Test

The Comprehension Test (form D) was chosen as the measure of reading comprehension that was to be used to form the three reading ability groups. Since the Gates MacGinitie Standardized Reading Test is the test administered by Vancouver elementary teachers, it was decided to use the test results collected by the classroom teachers.

Field Testing of Instruments

The purpose of this pilot study was to try out all six stories with their three versions and two difficulty levels, and to ascertain if they were matched as to interest and difficulty. Readability measures do not always predict reading difficulty. Previous research has shown that stories controlled by a readability formula can be found to be disparate when comprehension measures on these stories are examined (Klein, 1968).

Subjects were two grade six classes from Delta, a school district bordering on Vancouver. Complete data were available for 56 children.

The 18 versions of six stories were divided into three groups. Of the six stories in each group, three were easy stories and three were difficult stories. Moreover, each of the three setting versions was presented twice, once in the easy set of three and once in the difficult set of three. Each of the three groups was colour coded either red, blue, or yellow on all its forms.

Students were given one of the colour coded group of stories. They read each story silently. After each story was read they completed Cloze tests that matched the story version read. They then filled in a six point reading interest scale.

The three treatment levels were collapsed and the Cloze scores
examined. The six story means were closely equated. The three easy stories and the three hard stories had closely aligned means (Table 4).

The interest means were more disparate. One story, Sailing Ship, had a slightly lower mean than the other two easy stories. However, since it was not the difficulty of the story at fault (comprehension was not affected) and the stories were not being compared one against the other, it was not considered necessary to change the content.

**Procedures**

All testing was carried out by the researcher between October 9th and November 7th, 1979.

The researcher set up interviews with each of the seven school principals and 13 teachers to discuss the experiment and make arrangements to do the testing. At this time also, the six teachers who had not already tested their classes with the Gates MacGinitie Reading Survey, Form D, agreed to do so. The remainder had previously tested their classes within the past six weeks.

Prior to meeting with the classes, all testing material was organized for distribution. The 18 story versions were divided into three groups. Of the six stories in each group, three were easy stories and three were difficult stories. Moreover, each of the three setting versions was represented twice, once in the easy set of three and once in the difficult set of three stories (Table 5). The groups were colour coded (red group, blue group, and yellow group).

The investigator met each class on three consecutive days for periods of 40 to 50 minutes. (All testing procedures were identical for the 13 classes.)
<table>
<thead>
<tr>
<th>Stories</th>
<th>Cloze Scores</th>
<th>Interest Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Easy Stories</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Art</td>
<td>27.8</td>
<td>4.54</td>
</tr>
<tr>
<td>2. Beach</td>
<td>27.8</td>
<td>4.87</td>
</tr>
<tr>
<td>3. Field</td>
<td>27.4</td>
<td>4.34</td>
</tr>
<tr>
<td><strong>Difficult Stories</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Amusement</td>
<td>22.5</td>
<td>4.11</td>
</tr>
<tr>
<td>5. Balloon</td>
<td>22.7</td>
<td>3.94</td>
</tr>
<tr>
<td>6. Zoo</td>
<td>21.1</td>
<td>3.89</td>
</tr>
</tbody>
</table>

*Note.* The maximum score for the Cloze test is 50. The maximum score for the Interest Inventory is 5.
Table 5

Description of How the Six Stories with The Three Setting Versions and the Two Difficulty Levels Are Divided into Three Groups

<table>
<thead>
<tr>
<th>Stories</th>
<th>Red Group</th>
<th>Blue Group</th>
<th>Yellow Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy Stories</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Art</td>
<td>$B_1$</td>
<td>$B_3$</td>
<td>$B_2$</td>
</tr>
<tr>
<td>2. Beach</td>
<td>$B_2$</td>
<td>$B_1$</td>
<td>$B_3$</td>
</tr>
<tr>
<td>3. Field</td>
<td>$B_3$</td>
<td>$B_2$</td>
<td>$B_1$</td>
</tr>
<tr>
<td>Difficult Stories</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Amusement</td>
<td>$B_2$</td>
<td>$B_1$</td>
<td>$B_3$</td>
</tr>
<tr>
<td>5. Balloon</td>
<td>$B_1$</td>
<td>$B_3$</td>
<td>$B_2$</td>
</tr>
<tr>
<td>6. Zoo</td>
<td>$B_3$</td>
<td>$B_2$</td>
<td>$B_1$</td>
</tr>
</tbody>
</table>

Note. $B_1$, $B_2$, and $B_3$ refer to the three setting levels. $B_1 =$ Local setting; $B_2 =$ Foreign setting; and $B_3 =$ Non-specific setting.
On the first day the researcher was introduced to the class by the home room teacher. After the introduction the Cloze procedure was demonstrated with the use of the practice exercise "The Wind," to familiarize the children with the process. The researcher read the first sentence of the practice exercise and then asked for suggestions as to what word might make sense for the first deletion. The Cloze procedure was referred to as a "guessing quiz." The class responded orally to each of the deletions and there was discussion as to the "best" answer. The class was also told that spelling did not count and that only one word was allowed in each blank.

The Semantic Differential was then demonstrated. A sample Semantic Differential Scale was handed out and discussed. Students filled in a response to "The Wind." They were encouraged to be honest and assured that this was a personal choice interest form.

The materials were then distributed. Each class had a random selection of the three story groups. The six stories to be read were randomly distributed because there was no theoretical or practical reason to study order effects. Also it was desired that any spurious effect due to story order should be non-systematic across groups. The exception to this was the first story to be read which it was decided should be an easy story. This decision was due to information gained in the field testing of the instruments where it was apparent from classroom observation that children who read a difficult story first were less well motivated and became easily discouraged about the whole project, whereas those who started with an easy story managed to sustain interest throughout.

The story versions for each group plus their corresponding Cloze tests and the Semantic Differential Scales were distributed to the class.
Children were given large manila envelopes in which to keep all their materials.

The students read one story at a time. After they had finished reading they turned the story face-down on their desks for the researcher to collect. After each story was read the students completed a Semantic Differential and the matching Cloze test for that story. It was necessary for the researcher to collect the stories before the students attempted the interest and comprehension measures otherwise students might have used the stories as templates to fill in the Cloze tests.

On the second and third days of testing the students continued to read and respond to the stories that were in their envelopes.

Scoring and Tabulation of the Data

The Cloze Procedure

All tests were marked by hand by the researcher and volunteer assistants. Tests were marked for exact replacements of the original text (Bormuth, 1975). The singular form of the word was not accepted if the plural was correct, and no synonyms were accepted. However, mis-spelling was not penalized if the word was recognizable. Numerals were accepted and there was no penalty for lack of capitals or words entirely capitalised. No credit was given if more than one word was written even if one of the words was correct. (Two children obviously at frustration level, had resorted to filling in nonsense words or obscenities, and one perseverated throughout the entire story with one word.)

The Semantic Differential Scale

All tests were marked by hand by the researcher and volunteer assistants. The Semantic Differential had two scales with five response choices
to each. Osgood, Suci, and Tannenbaum (1970) suggest assigning weights
to each cell.

<table>
<thead>
<tr>
<th>Less Favourable Adjective</th>
<th>1 : 2 : 3 : 4 : 5 : Most Favourable Adjective</th>
</tr>
</thead>
</table>

Gates MacGinitie Reading Test

The Comprehension Test (Form D) was administered and marked by the
classroom teachers during September and October, 1979). The raw scores
were then ranked and translated into T scores (Glass & Stanley, 1970, p.
86). To obtain the three reading groups (low, average, and high) scores
were separated one half a standard deviation around the mean (Table 6).
Although this was a rather gross arbitrary division, a natural grouping
appeared at this point.

Table 6

<table>
<thead>
<tr>
<th>Groups</th>
<th>Raw Scores</th>
<th>Standard T Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>15-30</td>
<td>29-44</td>
</tr>
<tr>
<td>Average</td>
<td>31-40</td>
<td>45-55</td>
</tr>
<tr>
<td>High</td>
<td>41-52</td>
<td>56-67</td>
</tr>
</tbody>
</table>
Design

In order to test the effects of physical setting and reading difficulty levels on reading comprehension and reading interest, a fixed effects model 2x3x3 fully crossed factorial design with repeated measures over six stories was employed. The factors were as follows:

Factor A: a within subjects variable consisting of two levels of difficulty: easy and hard.

Factor B: a within subjects variable consisting of three levels of setting: foreign, local, and non-specific.

Factor C: a between subjects variable consisting of three levels of reading ability: low, average, and high.

The design of the study is presented in Table 7.

In order to test the relationship between reading comprehension and reading interest, correlational measures were employed.

Statistical Procedures

The data were processed at the University of British Columbia Computing Centre. The Biomedical Computer Program BMDP-09 was used to compute analysis of variance (ANOVA) with repeated measures over six stories.

Pearson Product-Moment correlations were performed using the University of British Columbia version of the Statistical Package for the Social Sciences (SPSS) program.

Summary

Chapter three begins with a description of the subjects and a discussion of the development of instruments used in the study. It includes a description of the pilot study followed by the procedures used in
Table 7

A Diagram of a 2x3x3 Fixed Effects Model
Fully-Crossed Factorial Design

<table>
<thead>
<tr>
<th>Difficulty</th>
<th>Easy Stories</th>
<th>Difficult Stories</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&lt;sub&gt;1&lt;/sub&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A&lt;sub&gt;2&lt;/sub&gt;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Setting</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>B&lt;sub&gt;1&lt;/sub&gt; Local</td>
<td>B&lt;sub&gt;1&lt;/sub&gt; Local</td>
</tr>
<tr>
<td>B&lt;sub&gt;2&lt;/sub&gt; Foreign</td>
<td>B&lt;sub&gt;2&lt;/sub&gt; Foreign</td>
</tr>
<tr>
<td>B&lt;sub&gt;3&lt;/sub&gt; Non-Specific</td>
<td>B&lt;sub&gt;3&lt;/sub&gt; Non-Specific</td>
</tr>
</tbody>
</table>

Reading Ability

<table>
<thead>
<tr>
<th>C&lt;sub&gt;1&lt;/sub&gt; Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&lt;sub&gt;2&lt;/sub&gt; Average</td>
</tr>
<tr>
<td>C&lt;sub&gt;3&lt;/sub&gt; High</td>
</tr>
</tbody>
</table>

Note. Letters A, B, and C refer to the three factors. A = Difficulty, B = Physical setting, C = Reading Ability. N<sub>ijk</sub> = 87.
carrying out the experimental treatment. The collection and treatment of data is discussed. The design of the study and statistical procedures concludes the chapter.
CHAPTER IV

ANALYSIS OF DATA

The purpose of this chapter is to present the analyses of data collected using the Cloze Procedure, Semantic Differential Scales, and a standardized reading test.

Final Selection of Subjects

The subjects for the study were 344 sixth grade students from Vancouver public schools. Data from 83 students were discarded. The reasons for the loss of data were due to incomplete data for 37 students, and lack of homogeneity of variance. Tests of homogeneity of variance run, prior to statistical procedures being carried out, found there was a statistically significant result. Cochran's C. and Bartlett's Box tests both found lack of homogeneity of variance (p .001). Since this violated one of the assumptions necessary for analysis of variance procedure, 46 students were randomly discarded to create equal subjects in each cell. Kirk (1968) states that:

The F distribution is robust with respect to violation of the assumption of homogeneity of population-error variances provided that the number of observations in the samples is equal. (p. 61)

A procedure was adopted whereby numbers were assigned to each subject.

A random numbers table was entered and subjects were discarded until the cells all equalled 87 (n=261).

62
Reliability

Semantic Differential Scales

Interest scores for each of the six stories were analyzed separately for reliability. The treatment levels were collapsed and a Hoyt estimate of reliability obtained taking the two scales together as the interest measure. Reliability coefficients ranged from .88 to .93 across the six stories (Table 8).

Pearson Product-moment correlation coefficients also were computed between the semantic differential scales. Coefficients ranged from .792 to .847 across the six stories (Table 9).

Research Questions and Associated Hypotheses

The research questions were addressed by testing the following null hypotheses.

Research Question 1.0

Is reading comprehension of sixth grade children influenced by the physical setting in a story?

Hypothesis 1.1

There is no statistically significant difference between Cloze scores on locally-set stories and Cloze scores on foreign-set stories.

Analysis of variance was carried out on the Cloze scores (Table 10). The complete ANOVA summary statistics for Tables 11 and 22 is found in Appendix A. Results indicated that the main effect for setting was statistically significant beyond the .001 level. \[ F(2,516) = 57.51, \ p < .001. \]

The means were inspected using the Scheffé test for multiple comparisons (Kirk, 1968, p. 91). Results showed a statistically significant difference (\( p < .001 \)), whereby the locally-set stories were comprehended
Table 8
Hoyt Reliability of Interest Scores (n=261)

<table>
<thead>
<tr>
<th>Story</th>
<th>mean</th>
<th>S.D.</th>
<th>Hoyt: Reliability Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7.67</td>
<td>2.35</td>
<td>.91</td>
</tr>
<tr>
<td>2</td>
<td>7.94</td>
<td>2.23</td>
<td>.89</td>
</tr>
<tr>
<td>3</td>
<td>7.74</td>
<td>2.36</td>
<td>.91</td>
</tr>
<tr>
<td>4</td>
<td>7.38</td>
<td>2.43</td>
<td>.88</td>
</tr>
<tr>
<td>5</td>
<td>7.61</td>
<td>2.49</td>
<td>.93</td>
</tr>
<tr>
<td>6</td>
<td>7.31</td>
<td>2.55</td>
<td>.92</td>
</tr>
</tbody>
</table>

Table 9
Correlation Coefficients Between Responses to Items One and Two of the Semantic Differential Scales (n=261)

<table>
<thead>
<tr>
<th>Story</th>
<th>Correlation Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.831</td>
</tr>
<tr>
<td>2</td>
<td>.801</td>
</tr>
<tr>
<td>3</td>
<td>.847</td>
</tr>
<tr>
<td>4</td>
<td>.792</td>
</tr>
<tr>
<td>5</td>
<td>.828</td>
</tr>
<tr>
<td>6</td>
<td>.830</td>
</tr>
<tr>
<td>Overall</td>
<td>.816</td>
</tr>
</tbody>
</table>
Table 10

Analysis of Variance of Cloze Scores on Physical Setting, and Physical Setting by Reading Ability

<table>
<thead>
<tr>
<th>Source</th>
<th>ss</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>3317.62</td>
<td>2</td>
<td>1658.81</td>
<td>57.51***</td>
</tr>
<tr>
<td>Interaction</td>
<td>159.84</td>
<td>4</td>
<td>39.96</td>
<td>1.39 N.S.</td>
</tr>
<tr>
<td>Within</td>
<td>14883.86</td>
<td>516</td>
<td>28.84</td>
<td></td>
</tr>
</tbody>
</table>

***p < .001
significantly better than the foreign stories. Therefore, the null hypothesis was rejected (Table 11).

Hypothesis 1.2

There is no statistically significant difference between Cloze scores on locally-set stories and Cloze stories on non-specifically set stories.

Results from the Scheffé test for multiple comparisons showed a statistically significant difference ($p < .05$), whereby the local-set stories were understood significantly better than the non-specific stories. Therefore, the null hypothesis was rejected (Table 11).

Hypothesis 1.3

There is no statistically significant difference between Cloze scores on foreign-set stories and Cloze scores on non-specific set stories.

The Scheffé test for multiple comparisons indicated that the non-specific set Cloze scores were statistically significantly higher than the foreign-set Cloze scores ($p < .05$). Therefore, the null hypothesis was rejected (Table 11).

Hypothesis 1.4

There is no statistically significant difference between Cloze scores on specific-set stories (local and foreign settings combined) and Cloze scores on non-specific set stories.

Results from the Scheffé test for multiple comparisons showed that the means were not statistically significantly different ($p > .05$). Therefore the null hypothesis was not rejected (Table 11).

Research Question 2.0

To what extent is the reading comprehension of sixth grade children affected by the difficulty of a story?

Hypothesis 2.1

There is no statistically significant difference between Cloze scores
Table II
Scheffé's S Test for Comparison of Cloze Test Means

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local setting</td>
<td>-</td>
<td>4.37***</td>
<td>2.64*</td>
<td>-</td>
</tr>
<tr>
<td>Foreign setting</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Non-specific setting</td>
<td>3</td>
<td>-</td>
<td>2.72*</td>
<td>-</td>
</tr>
<tr>
<td>Specific setting (1&amp;2)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

\[ \text{df}(2, 258) \]

* \( p < .05 \)

*** \( p < .001 \)
on easy stories and Cloze scores on difficult stories.

Analysis of Variance procedure yielded an $F(1,258) = 366.12$, $p < .001$. Comprehension was significantly higher on the easy stories than on the difficult stories (Table 12). Therefore, the null hypothesis was rejected.

Research Question 3.0

To what extent is the interest of sixth grade children influenced by the physical setting in a story?

Hypothesis 3.1

There is no statistical difference between interest scores on a locally-set story and a foreign-set story.

Analysis of Variance was carried out on the test scores (Table 13). Results indicated that the overall main effect for setting was statistically significant at the .05 level, $F(2,516) = 2.91$, $p < .05$.

The means were inspected pairwise using the Scheffé test for multiple comparisons (Table 14). Results showed no significant differences ($p > .05$). Although there was an overall significant main effect due to setting there was no significant pairwise comparison. Therefore, the null hypothesis was not rejected.

Hypothesis 3.2

There is no statistically significant difference between interest scores on locally-set stories and interest scores on non-specifically set stories.

Scheffé results showed no significant difference ($p > .05$). The null hypothesis was not rejected (Table 14).

Hypothesis 3.3

There is no statistically significant difference between interest
Table 12
Analysis of Variance of Cloze Scores of Story Difficulty, and Story Difficulty by Reading Ability

<table>
<thead>
<tr>
<th>Source</th>
<th>ss</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>8442.20</td>
<td>1</td>
<td>8442.20</td>
<td>366.12***</td>
</tr>
<tr>
<td>Interaction</td>
<td>80.94</td>
<td>2</td>
<td>40.47</td>
<td>1.76 N.S.</td>
</tr>
<tr>
<td>Within</td>
<td>5949.18</td>
<td>258</td>
<td>23.05</td>
<td></td>
</tr>
</tbody>
</table>

***p < .001

Table 13
Analysis of Variance of Interest Scores of Physical Setting, and Physical Setting by Reading Ability

<table>
<thead>
<tr>
<th>Source</th>
<th>ss</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>23.97</td>
<td>2</td>
<td>11.98</td>
<td>2.91*</td>
</tr>
<tr>
<td>Interaction</td>
<td>6.27</td>
<td>4</td>
<td>1.56</td>
<td>.38 N.S.</td>
</tr>
<tr>
<td>Within</td>
<td>2125.41</td>
<td>516</td>
<td>4.11</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05
Table 14
Scheffé's S Tests for Comparisons of Means on Interest Scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Setting</td>
<td>-</td>
<td>.262 N.S.</td>
<td>.00 N.S.</td>
<td>-</td>
</tr>
<tr>
<td>Foreign Setting</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>.262 N.S.</td>
</tr>
<tr>
<td>Non-Specific Setting</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Specific vs. Non-Specific</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

\[df(2,258)\]
scores on foreign-set stories and interest scores on non-specific set stories. Scheffé results showed no significant difference ($p > .05$). Therefore, the null hypothesis was not rejected (Table 14).

**Hypothesis 3.4**

There is no statistically significant difference between interest scores on specific set stories and non-specific set stories. Scheffé results showed no significant difference ($p > .05$). Therefore, the null hypothesis was not rejected (Table 14).

**Research Question 4.0**

To what extent is the interest of sixth grade children influenced by the difficulty of a story?

**Hypothesis 4.1**

There is no statistically significant difference between interest scores on easy stories and interest scores on difficult stories. Analysis of Variance procedure yielded an $F(1,258) = 13.33$, $p < .001$. Easy stories were significantly rated as being more interesting than difficult stories (Table 15). Therefore, the null hypothesis was rejected.

**Research Question 5.0**

To what extent is interest of sixth grade children influenced by their reading ability?

**Hypothesis 5.1**

There is no statistically significant difference between interest scores for low reading ability students and interest scores for high reading ability students.

Analysis of Variance procedure yielded a significant main effect for reading ability on interest, $F(2,258) = 2.96$, $p < .05$ (Table 16). However, when these means were examined by the Scheffé procedure for
Table 15

Analysis of Variance of Interest Scores of Difficulty of Stories, and Difficulty and Reading Ability

<table>
<thead>
<tr>
<th>Source</th>
<th>ss</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>45.18</td>
<td>1</td>
<td>45.18</td>
<td>13.33***</td>
</tr>
<tr>
<td>Interaction</td>
<td>1.62</td>
<td>2</td>
<td>.81</td>
<td>.24 N.S.</td>
</tr>
<tr>
<td>Within</td>
<td>874.19</td>
<td>258</td>
<td>3.38</td>
<td></td>
</tr>
</tbody>
</table>

***p < .001

Table 16

Analysis of Variance of Interest Scores on Reading Ability

<table>
<thead>
<tr>
<th>Source</th>
<th>ss</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>85.74</td>
<td>2</td>
<td>43.77</td>
<td>2.96*</td>
</tr>
<tr>
<td>Within</td>
<td>3821.82</td>
<td>258</td>
<td>14.81</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05
multiple comparisons they did not reach statistical significance \( (p > .05) \). Therefore, the null hypothesis was not rejected (Table 17).

Research Question 6.0

Is the reading comprehension of sixth grade children influenced by the interaction of content difficulty and the physical setting in a story?

Hypothesis 6.1

There is no statistically significant interaction between story difficulty (easy and difficult) and local and foreign physical setting as shown by scores on Cloze tests.

Analysis of Variance procedure yielded an \( F(2,516) = 1.39, p > .05 \). Therefore, the null hypothesis was not rejected (Table 18).

Research Question 7.0

To what extent is the interest of sixth grade children influenced by the interaction of their reading ability and the physical setting in a story?

Hypothesis 7.1

There is no statistically significant interaction between reading ability and the physical setting in a story as measured by a reading interest scale.

Analysis of Variance procedure yielded an \( F(4,816) = .38, p > .05 \). Therefore, the null hypothesis was not rejected (Table 13).

Research Question 8.0

To what extent is the interest of sixth grade children influenced by the interaction of the content difficulty and the physical setting in a story?

Hypothesis 8.1

There is no statistically significant interaction between story
Table 17

Scheffé's Tests for Comparison of Means on Reading Ability

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Reading Ability</td>
<td>1</td>
<td>-0.049</td>
<td>N.S.</td>
</tr>
<tr>
<td>Average Reading Ability</td>
<td>2</td>
<td>0.82 N.S.</td>
<td>-</td>
</tr>
<tr>
<td>Above Average Reading</td>
<td>3</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

df(2,258)

Table 18

Analysis of Variance of Cloze Scores of Content Difficulty and Physical Setting, and Content Difficulty, Physical Setting, and Reading Ability

<table>
<thead>
<tr>
<th>Source</th>
<th>ss</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty x Setting Interaction</td>
<td>77.65</td>
<td>2</td>
<td>38.82</td>
<td>1.39 N.S.</td>
</tr>
<tr>
<td>Difficulty x Setting x Reading Ability</td>
<td>124.45</td>
<td>4</td>
<td>31.11</td>
<td>1.11 N.S.</td>
</tr>
<tr>
<td>Within</td>
<td>14450.55</td>
<td>516</td>
<td>28.00</td>
<td></td>
</tr>
</tbody>
</table>
difficulty and setting variables as shown by scores on an interest scale.

Analysis of Variance procedure produced an $F(2,516) = .19, p > .05$. Therefore, the null hypothesis was not rejected. Setting variable did not interact significantly with the story difficulty (Table 19).

Research Question 9.0

What is the relationship between comprehension and interest of stories with local physical settings, foreign physical settings, and non-specific settings?

Hypothesis 9.1

There is no statistically significant correlation between scores on a Cloze comprehension measure and scores on an interest measure.

Pearson Product-moment correlation coefficients were computed between the Cloze scores and the Semantic Differential interest scores. There was a low positive correlation, different from 0, statistically significant at the $.001$ level, $(r(260) = .234)$. The null hypothesis was rejected (Table 20).

Hypothesis 9.2

There is no statistically significant correlation between cloze scores on locally-set stories and interest scores on locally-set stories.

Pearson Product-moment correlations coefficients were computed among the Cloze scores and the Semantic Differential interest scores. There was a low positive correlation, different from 0, statistically significant at the $.01$ level of significance, $r(260) = .215, p < .01$. The null hypothesis was rejected.
### Table 19

Analysis of Variance of Interest Scores of Content Difficulty and Physical Setting; and Difficulty, Physical Setting and Reading Ability

<table>
<thead>
<tr>
<th>Source</th>
<th>ss</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty × Setting Interaction</td>
<td>1.44</td>
<td>2</td>
<td>.72</td>
<td>.19 N.S.</td>
</tr>
<tr>
<td>Difficulty × Setting × Reading Ability</td>
<td>27.43</td>
<td>4</td>
<td>6.85</td>
<td>1.76 N.S.</td>
</tr>
<tr>
<td>Within</td>
<td>2008.10</td>
<td>516</td>
<td>3.89</td>
<td></td>
</tr>
</tbody>
</table>

### Table 20

Correlation Coefficients of Scores on a Cloze Measure and Scores on an Interest Measure

<table>
<thead>
<tr>
<th>Cloze</th>
<th>Overall Interest</th>
<th>Local Setting Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>.234***</td>
<td>-</td>
</tr>
<tr>
<td>Local Setting</td>
<td>-</td>
<td>.215***</td>
</tr>
</tbody>
</table>

***p < .001

df = 260
CHAPTER V
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter summarizes the study, draws conclusions based on the findings, and suggests educational recommendations that can be drawn from the conclusions.

Summary

The purpose of the study was to determine the extent to which the variable, physical setting, in narrative prose affected the silent reading comprehension and expressed interest of sixth grade students when they read such narrative prose.

Specifically, the study sought to measure sixth grade children's silent reading comprehension and expressed interest in matched stories with local physical settings, stories with foreign physical settings, and stories with non-specific physical settings.

The study also sought to determine whether or not there was a relationship between grade six children's silent reading comprehension of the stories and their expressed interest in the stories, and the extent to which an interaction between content difficulty of the stories and the physical setting variable affected grade six children's silent reading comprehension and expressed reading interest.

Materials

Six stories (each with three setting treatment levels) were written for this study. The treatment levels were: local physical-setting, foreign physical-setting, and a no specific setting, in which the setting
statements had been removed. Each story was designed to control relevant qualitative and quantitative variables, and difficulty level. Three stories were written with grade four level readability and three stories were written at a grade eight readability. The stories were all written to approximate the first chapter in a novel.

Seventh word deletion Cloze tests were constructed over all the story versions to measure silent reading comprehension and two evaluative scales were constructed to measure expressed reading interest in the stories. Scores from the Gates-MacGinitie reading comprehension test were obtained for the subjects and were used to divide the sample into three reading ability groups.

Subjects

Subjects were 344 grade six students from Vancouver school district. Thirteen classes were selected from seven schools and there was a mix of socio-economic levels. Eighty-three subjects were eliminated from the data analysis due to incomplete data and for statistical purposes. Complete data were available and analyzed for 261 subjects.

Collection of the Data

The 18 versions of the stories and the 18 Cloze tests constructed from these versions were divided into three separate groups. Each group consisted of six stories (three easy stories and three difficult stories); each of the setting treatments being represented twice (once in the easy story set of three and once in the difficult set of three).

Each class received a randomized selection of the three groups. Children read one story at a time before completing the Semantic Differential and the relevant Cloze test. The Gates-MacGinitie Comprehension Test was administered by the classroom teachers, either before or after
the rest of the data collection.

Data Analysis

Data were analyzed using a fixed effects $2 \times 3 \times 3$ fully crossed factorial design. The three independent variables were difficulty, physical setting, and reading ability. The two dependent measures were silent reading comprehension and reading interest. Scheffé tests for multiple comparisons were used to determine differences between groups. Pearson Product Moment correlations were calculated to determine relationships between the two dependent variables.

Findings

The questions raised at the beginning of the study are answered here according to the results of data analyses described in Chapter IV.

Two findings were directly concerned with reading comprehension.

1. Reading comprehension of sixth grade children was significantly influenced by the physical setting of the stories read.

   Cloze scores on the locally set stories were reliably higher than Cloze scores on the foreign set stories.

   Cloze scores on the locally-set stories were reliably higher than Cloze scores on the non-specific set stories.

   Cloze scores on the non-specific set stories (stories with local and foreign settings combined) were reliably higher than Cloze scores on the foreign-set stories.

   There was no statistically significant difference between Cloze scores on specifically set and Cloze scores on non-specifically set stories.

2. Reading comprehension of sixth grade children was significantly influenced by the difficulty of the story.
Cloze scores on the easy stories were reliably higher than Cloze scores on the difficult stories.

Three sets of findings were concerned specifically with reading interest.

1. Interest scores of sixth grade children were found overall to be affected by the physical setting in a story to a statistically significant extent.

Physical setting as a general variable in narrative did have a significant effect on reading interest; however the effect was not strong enough to state that any one of the three setting levels was responsible for the significance.

2. The reading interest of grade six children was found to be significantly influenced by the difficulty level of the story read. Interest scores on the easy stories were significantly higher than interest scores on the difficult stories.

3. Interest scores of sixth grade children were found to be influenced by their reading ability to a statistically significant extent. Reading ability as a general variable did have an overall effect on reading interest. However, the effect was not strong enough to state which of the pairs of reading ability groups was responsible for the significance.

Three sets of findings were concerned with the interactions of reading ability, content difficulty, and physical setting.

1. Reading comprehension of sixth grade children was not significantly influenced by the interaction of content difficulty and the physical setting in a story.

2. The reading interest of grade six children was not found to be
significantly influenced by the interaction of their reading ability and
the physical setting in a story.

3. The reading interest of grade six children was not found to be
significantly influenced by the interaction of the content difficulty and
physical setting in a story.

One set of findings was concerned with the relationship between
reading comprehension and reading interest.

1. There was a statistically significant relationship between
reading interest and reading comprehension of sixth grade children when
reading six stories with the physical setting variables combined.

There was a statistically significant relationship between reading
interest and reading comprehension of sixth grade children when reading
stories with local physical setting but the relationship was no stronger
than it was for the settings collapsed.

The relationship between reading interest and reading comprehension
appears to be a relationship that is not affected by the physical setting
of the stories.

Discussion and Conclusions

The following conclusions are drawn based on the findings.

It would appear that grade six children are implicitly utilizing
their pre-existing local environment schema to gain stronger access to the
locally set stories and to facilitate their reading comprehension.
Although the foreign set stories were set in exotic places such as Paris
and the Caribbean, they were the least well comprehended. The conclusion
was drawn that Vancouver children's schema for such places is weak and
that the foreign setting impeded comprehension.

Stories with local physical settings were also comprehended better
than stories with non-specific settings. Although the non-specific setting versions were slightly shorter in length, and slightly easier in style (see Tables 2 and 3) they were less well comprehended. It would appear that familiarity with the local setting schema facilitates comprehension more than a generalized non-specific setting does. An explanation that may help to explain this result is that the reader of the non-specifically set story is free to imagine a specific setting as s/he reads. The word "beach" may summon up a pre-existing beach schema that is specific rather than generalized. The word "amusement park" may, to the local Vancouver child, summon up the P.N.E. Therefore, when reading the non-specifically set stories, the subjects may also have been using pre-existing setting schemata. In this case, however, the extra work has to be done by them, the schema is not so well organized, and thus reading comprehension is weaker. The children reading the local physical setting stories had only to match the local setting in the story with their own pre-existing schema. Since the two matched, comprehension was facilitated.

The stories with non-specific settings were read with more understanding than the foreign set stories. It becomes clear that the foreign physical setting acted to the detriment of comprehension. Rather than "highlighting" or "fleshing" out the story, the foreign physical setting in fact inhibited comprehension. This result gives more credence to the explanation mentioned in the previous conclusion. If the reader of the non-specific setting story is utilizing pre-existing setting schema (although this utilization may be poorly organized and a weaker match than the match made by the reader reading locally set stories), nevertheless, the facilitating effect on reading comprehension would be
stronger than that of the reader reading foreign set stories for which pre-existing schema is virtually nonexistent.

This explanation may also account for the appeal of series books such as The Hardy Boys, Nancy Drew, etc., which all have non-specific settings. If the reader is utilizing a familiar local setting when reading such books then comprehension will likely be facilitated.

Stories with specific settings were comprehended as well as stories with non-specific settings. It was not the general variable of specificity that caused the differences in reading comprehension. The important ingredient was "where" the story was set. If the reader has a schema for the setting, then comprehension is facilitated; if the reader has no schema, or if the schema is weak, then comprehension is retarded.

Not all aspects of text are utilized in reading. The reader reads selectively for important narrative elements (Brown et al., 1977; Pichert & Anderson, 1977). Children reading for important elements such as plot may "skip" setting as having a minor importance. Setting the story in an area for which a child has a strong pre-existing schema may result in the setting variable rising in importance and in its utilization for a more thorough reading. Alternatively, because of strong schema, although setting may still be skimmed or partially "skipped," the reading need not be as thorough, since inferences, connections, and associations will be clarified and "gaps filled in" because of the strength of the pre-existing schema.

The physical setting of the stories made a substantial difference in reading scores, up to four grade levels. An examination of the group means showed that the average readers scored as well when reading difficult stories with local settings as they did when reading easy stories with foreign settings (Table 23, Appendix A). Similarly, the same result was
noted with the above average readers (Table 23, Appendix A). Even the below average readers were helped considerably when they read difficult stories with local settings as compared to easy stories with foreign settings; the difference being approximately two grade levels of reading difficulty (Table 23, Appendix A).

All reading groups expressed significantly more interest in the easy stories than they did in the difficult stories, although for the above average group the difficult stories should have posed no reading problem. The differences between the easy stories and the hard stories were not in story content, but rather in style of writing and literary devices. The difficult stories had longer sentences, more involved syntax, and contained more modifiers, metaphor, and imaginative detail; ingredients that would label them as being more literary. The interest choice of the above average readers, therefore, would seem to suggest that they are not interested in "literary" prose, but prefer the more action centred, simple style of the easy stories. (This conclusion would support researchers who claim that "literary" material is not typically chosen by children [Ashley, 1971].)

Although the children comprehended the local stories better than the others, they did not express an interest in any particular setting (over the others). Neither the foreign, local, nor non-specific settings were preferred. The children's expressed response would seem to be one of mild interest (as shown by the overall statistically significant F for-interest) but without clear pairwise directional differences. This result would be in agreement with the conclusions of Simpson and Soares (1965) who found the setting variable to be not significant compared to other content variables in narrative.
In the introduction to this study it was suggested that pre-existing schema may not only have an effect on reading comprehension, but may also affect reading interest. However, the suggestion does not seem to have been borne out by the results. It would not appear that pre-existing schema for local setting is influencing the expressed interest of the grade six children to any significant extent.

Correlations between interest and comprehension of locally set stories, while significantly different than zero, were low and no higher than the overall correlation for interest and comprehension. Although there is a relationship between comprehension and interest it does not appear that the children are expressing an interest in the setting variable. This again agrees with the results found by Simpson and Soares (1967) who found the setting variable to be not significant when compared to other content variables such as plot and characterization. Physical setting does not (in this study) appear to have been a conscious factor in the children's expressed interest (unlike story difficulty).

Implications for Pedagogy and Research

Pedagogical Implications

In this study, grade six Vancouver children have been found to comprehend stories with local physical settings with greater success than they have comprehended stories with foreign physical settings and stories with non-specific settings. Setting is only one narrative element. A complete novel set locally presumably would have a far stronger effect on reading comprehension as it would utilize local children's pre-existing schemata for language patterns, cultural customs, and character type and motivation.
The use of high-interest low-vocabulary material is generally recommended for remedial readers. Results from this study would suggest that these students would benefit from reading materials in which the stories were set locally.

If the setting variable can make a difference of the equivalent of four grade levels in reading comprehension then this should be taken into account when reading tests are used that contain material with foreign settings, as many current standardized tests do. Standardized tests should be developed that use non-specific settings in order that children are not penalized for lack of pre-existing schemata for other places. Tests developed for local usage, however, could utilize a balance of local, foreign, and non-specific settings.

The results of this study would seem to confirm Anderson's (1977) conclusions that meaning does not reside in the text, but that the text is a recipe that can guide the reader into constructing a representation through relevant schema. This has implications for curriculum and reading pedagogy. Teachers and educators need to recognize that reading comprehension is best facilitated by matching reading materials to the child's pre-existing schema—as this study has demonstrated. The traditional directed reading lesson has always required the teaching of vocabulary and necessary background information to students before their undertaking the reading of a selection. Results of this study not only give support to this teaching method, but also indicate that a few minutes of pre-teaching may not be sufficient for all children to develop the necessary background. More attention must be given to this development through direct and vicarious experience before reading takes place. This would seem to be especially important for materials outside the child's
knowledge base. Although this study deals with narrative, the results suggest that the other content areas of reading in the elementary school could be affected similarly. It would then appear to be crucial that the pre-teaching be extensive and thorough. Films, stories, pictures, field-trips, and excursions should precede reading rather than be used merely as enrichment at the end of a unit.

Since the average and above average readers scored as well when reading the difficult stories with local settings as they did on the easy stories with foreign settings, the whole concept of difficulty level needs re-evaluating in the light of schema theory. Difficulty levels for the stories were calculated on the Dale-Chall readability formula (which uses syntax and a common core vocabulary list as its difficulty indices). Pre-existing schema, as shown by this study, can override these factors by as much as four grade levels. It becomes apparent that some comment on the semantic content is necessary when reporting readability levels.

Research Implications

The stories written for this study were controlled for qualitative and quantitative variables. However, the non-specific versions were slightly shorter in length, due to the removal of the setting statements. It may be that this difference had an effect on the subjects' reading behaviour and subsequently inflated the scores on the non-specific version Cloze tests. This study should be repeated with all story versions being rewritten to identical lengths in order to further tighten the design and ensure that the non-specific setting results have not been skewed.

The dependent measure of comprehension in this study, the Cloze
procedure, was chosen because of its superior reliability and validity, which allows for generalizability of results. However, due to its measurement specifications, use of the Cloze procedure requires multiple passages and large samples and is not able to examine affective components or a child's specific response to a passage. Using a small sample it would be possible to repeat this study with oral recall as the dependent measure of comprehension. This would enable the independent variable, physical setting, to be examined in closer detail.

This study only examined grade six students. The study could be replicated with adjusted material at the primary and high school levels, to ascertain whether the results are in some way "developmental" or generalizable to all levels.

This study should be replicated with a different population. The stories should be rewritten in order that the local settings reflect the environment of the new population. Results would give validity to the present study and add to its generalizability.

The stories in this study were not illustrated. However, most stories for elementary children do have illustrations in order to motivate and create interest in the reading content. This study should be replicated using accompanying pictures for each story. The presence of a picture may give a partial schema to children that could alter the results of the present study in a measurable manner, as a partial schema for foreign settings would increase the comprehension scores on the foreign setting story versions.

The non-specific setting version could be further investigated using illustrations. Using only the non-specific versions of the six stories, pictures could illustrate either a foreign or a local setting.
Scores on the Cloze tests would then indicate to what extent schema is strengthened and comprehension affected by illustrations alone.

In this study setting was found to be significant as a main effect. There were no significant interactions with either reading ability or content difficulty. However, there may be other interactions that are significant. For instance, there was no hypothesis in this study for story differences (stories were all mystery-adventure), yet the genres of historical fiction, fantasy, or animal realism may affect the setting variable. Further research should examine possible interactions between story genre and physical setting.

Using the same method for controlling content other narrative elements could be examined—such as figurative language, mood, and point of view, to ascertain what role they play in a child's reading comprehension and reading interest.

This study dealt only with narrative. The study should be replicated with expository material to ascertain whether the difference in style and organization of text would affect the results found in this study.

Work on text comprehension is not far advanced. This study has added to the knowledge being collated in this area. It is hoped that further research exploring the relationship between schema and text will, besides increasing our understanding of the reading process, enable teachers and educators to develop materials and curriculum for children in order that their reading comprehension be facilitated, and so that they can read with enjoyment.
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78-10400)
APPENDIX A

Summary Tables of Analysis of Variance
Table 21
Analysis of Variance Summary Table for Dependent Variables: Interest
(n = 261)

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***p < .001
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*p < .05
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Analysis of Variance Summary Table for Dependent Variable: Cloze Procedure (n = 261)

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APPENDIX B

Practice Cloze Test
The Wind

Have you ever had your hat blown off by an autumn wind?

Has________winter wind ever made________face red

and cold? __________is moving air.

The________works hard. Sometimes it________as soft as a________. Sometimes it is strong________to lift houses off________ground. The wind can

________fly a leaf, but________can also blow down

________trees. The wind carries________snow over

the mountains________we can ski and________snowball

fights. The wind________the rain to make________grow. When we see________kite flying high in________sky on a spring________, we know the wind________strong. When we see________sailboat sailing out at

________we know the wind________pushing it along.
APPENDIX C

Stories
Mystery in the London Art Gallery

I didn't want to go. But of course no one took any notice of that. They never do in schools. The class was going to the Art Gallery and that was that!

"The whole class!" Mr. Renaud shouted at me. "That means you too, Pat!"

The bus was late of course, and then we had to squash three in a seat. It was enough to make you sick!

Naturally half-way across the Tower Bridge we got stuck in a terrible traffic-jam. Some guy had run out of gas. It wasn't fair. Life was outside, all warm and smelling of new leaves and flowers. From the bus I could see crowds of yellow daffodils under the trees in Hyde Park. Many coloured kites soared high up against the bright blue sky looking like giant birds about to attack. The fountains in Trafalgar Square glinted and sparkled, and the pigeons were going crazy, pushing and flapping and......free! People on the streets had their coats off. They were almost skipping along in the sunshine. I felt like a prisoner shut-up for life.

We'd come to the Gallery to see the Turner paintings. I guess they were O.K., if you like storm clouded oceans and thousands of sunsets. I stayed near the back where I couldn't hear the guide. There was a black couch sort of hidden in an alcove. I sat myself down on it out of sight of everyone...and that's how I saw it happen!

An old grey-haired lady was standing at the side of the room. She was staring at a tiny gold-framed painting of a bunch of flowers. I noticed her because of her moulting fur coat. It looked like buffalo or something. Anyway, I was thinking she must be boiling with such a heavy coat on a warm sunny day. When suddenly, she darted a crafty look around the room and then, quick as a cat, she sidled up to the painting, whipped it off its hook and under her fur coat. Two seconds it took, and off she went for the Exit.

I was stunned. I just sat there with my mouth open. Of course what I should have done was scream "STOP THIEF". If I'd screamed loudly then, I might have saved myself a whole lot of danger and trouble. But I felt sorry for her. Poor old woman. Maybe she was broke. All the same, you can't go round lifting Britain's art treasures, even I knew that.

I don't know what got into me, but before I knew what I was doing I was out of the room and running after her towards the Exit. Funny thing too, she moved awfully fast for an old lady...!
Mystery in the Vancouver Art Gallery

I didn't want to go. But of course no one took any notice of that. They never do in schools. The class was going to the Art Gallery and that was that!

"The whole class!" Mr. Renaud shouted at me. "That means you too, Pat."

The bus was late, of course, and then we had to squash three in a seat. It was enough to make you sick!

Naturally, half-way across Lion's Gate Bridge we got stuck in a terrible traffic-jam. Some guy had run out of gas. It wasn't fair. Life was outside, all warm and smelling of new leaves and flowers and sea-air. Down below I could see sail-boats gliding and darting in the bay. High above, sea-gulls were screaming and wheeling against the bright blue sky. There were crowds of yellow daffodils all along the banks of Stanley Park and the ducks in Lost Lagoon were going crazy, diving and quacking and......free! People on the streets had their coats off. They were almost skipping along in the sunshine. I felt like a prisoner shut-up for life.

We'd come to the Gallery to see the Emily Carr paintings. I guess they were O.K. if you like dark green forests and rotting totem poles. I stayed near the back where I couldn't hear the guide. There was a black couch sort of hidden in an alcove. I sat myself down on it out of sight of everyone......and that's how I saw it happen!

An old grey-haired lady was standing at the side of the room. She was staring at a tiny gold-framed painting of a bunch of flowers. I noticed her because of her moulting fur coat. It looked like a buffalo or something. Anyway, I was thinking she must be boiled with such a heavy coat on a warm sunny day. When, suddenly, she darted a crafty look around the room, and then, quick as a cat, she sidled up to the painting, whipped it off its hook and under her fur coat. Two seconds it took, and off she went for the Exit.

I was stunned. I just sat there with my mouth open. Of course what I should have done was scream "STOP THIEF!" If I'd screamed loudly then I might have saved myself a whole lot of danger and trouble. But I felt sorry for her. Poor old woman. Maybe she was broke. All the same you can't go round lifting B.C.'s art treasures, even I knew that.

I don't know what got into me, but before I knew what I was doing I was out of the room and running after her towards the Exit. Funny thing too, she moved awfully fast for an old lady...!
Mystery in the Art Gallery

I didn't want to go. But of course no one took any notice of that. They never do in schools. The class was going to the Art Gallery, and that was that! "The whole class!" the teacher shouted at me. "That means you too, Pat."
The bus was late of course, and then we had to squash three in a seat. It was enough to make you sick!

Naturally, just half-way across the town we got stuck in a terrible traffic-jam. Some guy had run out of gas. It wasn't fair. Life was outside waiting for me, but I was trapped just like some poor old prisoner....shut-up for life.

We'd come to the Gallery to see a lot of paintings. I guess they were O.K. if you're a person who likes that sort of thing. I stayed near the back where I couldn't hear the guide. There was a black couch sort of hidden in an alcove. I sat myself down on it out of sight of everyone....and that's how I saw it happen!

An old grey-haired lady was standing at the side of the room. She was staring at a tiny gold-framed painting of a bunch of flowers. I noticed her because of her old fur coat. Anyway, I was thinking she must be boiled with such a heavy coat on a warm day. When, suddenly, she darted a crafty look around the room, and then, quick as a cat, she sidled up to the painting, whipped it off its hook and under the fur coat! Two seconds it took, and off she went for the Exit.

I was stunned. I just sat there with my mouth open. Of course what I should have done was scream "STOP THIEF!" If I'd screamed loudly then I might have saved myself a whole lot of danger and trouble. But I felt sorry for her. Poor old woman. Maybe she was broke. All the same you can't go round lifting the country's art treasures, even I knew that.

I don't know what got into me, but before I knew what I was doing I was out of the room and running after her towards the Exit. Funny thing too, she moved awfully fast for an old lady.....!
Joe raced up Cable beach. He grabbed his towel from the coral sand where he'd left it under the shade of a drooping palm. It was finally getting cooler. The sun was going fast. They'd stayed in the sea for too long.

"Hurry up, Linda," he yelled to his sister. "It's getting dark and we haven't lights on our bikes."

"I'm coming. You don't have to shout." Linda let the tide float her gently to the shore like a piece of flotsam. She got slowly to her feet and peeled off her mask and snorkel. It was late. The beach was deserted. The sun was sinking behind the palms and the low white clouds on the horizon were all streaked through with a lazy pink flush. Far out past the breakwater on the Cay the lighthouse was winking. The lights had begun to gleam from the tour-liner moored at Prince George's Wharf and Cable beach was becoming covered with cold black shadows.

"Hurry up," Joe grumbled. "You're always so slow."

Linda made a face at him, but didn't bother to argue. "Just smell the Oleander scent, Joe," she sniffed. "Things always smell so much better at night."

"Hmm!" said Joe. "I'd rather have the smell of Fish and Chips myself. It's too bad the shop is closed now."

Suddenly, a cooling breeze rippled eerily past the breakwater stirring the long green fronds of the palm trees and mixing the perfumes of the tropical flowers.

Linda felt a prickle at the back of her neck and she shivered. "We're the only ones left on the beach," she said.

"And we're going to catch it when we get home." Joe frowned and stared up at the sky turning black before his eyes. "Do get a move on, Lin. I wanted to watch the cricket match on T.V. tonight."

"I'm ready." Linda lifted her pack over her shoulder. "Let's....."

She stopped suddenly as Joe gripped her arm. "Hey! Cut it out! What's the...."

"Shhh!" Joe hissed in her ear. "Look! Look up there..... that light!"

Linda stared. High up, where the velvet blue of the sky was turning navy, a silver light pulsed slowly.

"What is it?" Linda whispered. "It's not a plane..... It's not moving."

"Helicopter?"

"With a silver light?"

"Whatever it is," Joe said, "it's getting nearer. It's much bigger."

Linda swallowed. "I'll say it is. It's as big as a full moon now."
They stared upwards, their eyes straining as the silver light grew ever larger, brighter, and nearer.

"It's going to crash at Paradise Island!" Joe's voice wobbled a bit. His throat hurt and his eyes were dazzled by the silver pulse.

"No. No, it's not!" Linda rubbed her eyes hard. She could hardly see.
"It's nearer than the island. It's.... It's coming here. It's coming towards us....!"
Joe raced up Kitsilano beach. He grabbed his towel from the giant log where he'd left it. "Brrrl!" he began to shiver. It was starting to get very chilly. The sun was going down fast. They'd stayed in the sea too long. "Hurry up, Linda," he yelled to his sister. "It's getting dark and we haven't lights on our bikes."

"I'm coming. You don't have to shout!" Linda let the tide float her gently to shore like a piece of driftwood. She got slowly to her feet and peeled off her mask and flippers. It was late. The beach was deserted. The sun was sinking behind the mountains, a red ball of flame that lit up the snow capped tips in a lazy pink flush. Lights had begun to glow from the North Shore. The Grouse Mountain chair-lift sparkled like a necklace of diamonds. Out in English Bay the lights from the waiting grain freighters winked back from the shadowy water.

"Hurry up!" Joe grumbled. "You're always so slow."

Linda made a face at him, but didn't bother to argue. "Just smell those pine trees, Joe," she sniffed. "Things always smell so much better at night."

"Hmm," said Joe. "I'd rather have the smell of fish and chips myself. It's too bad the concession stand is shut."

Suddenly, a chilling breeze rippled eerily through the trees, stirring the needles on the pines, and making a shower of golden Arbutus leaves.

Linda felt goose-flesh rising on her arms and legs. "We're the only ones left on the beach," she said.

"And we're going to catch it when we get home," Joe frowned and stared up at the sky turning black before his eyes. "Do get a move on, Lin. I wanted to watch the White-Caps game on T.V. tonight."

"I'm ready." Linda lifted her pack over her shoulder. "Let's....."

She stopped suddenly as Joe gripped her arm. "Hey! Cut it out! What's the....."

"Shhh!" Joe hissed in her ear. "Look! Look up there... that light!"

Linda stared. High up, where the velvet blue of the sky was turning navy, a silver light pulsed slowly.

"What is it?" Linda whispered. "It's not a plane. It's not moving."

"Helicopter?"

"With a silver light?"

"Whatever it is," Joe said, "it's getting nearer. It's much bigger."

Linda swallowed. "I'll say it is. It's as big as a full moon now."
They stared upwards, their eyes straining as the silver light grew larger, brighter and nearer.

"It's going to crash in Stanley Park!" Joe's voice wobbled a bit. His throat hurt and his eyes were dazzled by the silver pulse.

"No. No, it's not!" Linda rubbed her eyes hard. She could hardly see. "It's nearer than the park. It's.... It's coming here. It's coming towards us....!"
Beach Mystery

Joe raced up the beach. He grabbed his towel from the sand where he'd left it earlier. It was finally getting colder. The sun was going down fast. They're stayed in the sea for too long.

"Hurry up, Linda," he yelled to his sister. "It's getting dark and we haven't lights on our bikes."

"I'm coming. You don't have to shout." Linda let the tide float her gently to the shore. She stood up and peeled off her mask and snorkel. It was late. The beach was deserted. Everyone had gone home.

"Hurry up," Joe grumbled. "You're always so slow."

Linda made a face at him, but didn't bother to argue. "Just smell the fresh air, Joe," she sniffed. "Things always smell so much better at night."

"Hmm," said Joe. "I'd rather be home and have the smell of supper cooking myself."

Suddenly a breeze rippled eerily through the trees. Linda felt a prickle at the back of her neck. "We're the last ones on the beach," she said.

"And we're going to catch it when we get home," Joe frowned and stared up at the sky turning black before his eyes. "Do get a move on, Lin. I wanted to watch a game on T.V. tonight."

"I'm ready," Linda swung her day-pack over her shoulder. "Let's..."

She stopped suddenly as Joe gripped her arm. "Hey! Cut it out! What's the...."

"Shhh!" Joe hissed in her ear. "Look! Look up there....that light!"

Linda stared. High up, where the velvet blue of the sky was turning navy, a silver light pulsed slowly.

"What is it?" Linda whispered. "It's not a plane... It's not moving."

"Helicopter?"

"With a silver light?"

"Whatever it is," Joe said, "it's getting nearer. It's much bigger."

Linda swallowed. "I'll say it is. It's as big as a full moon now."

They stared upwards, their eyes straining as the silver light grew ever larger, brighter, and nearer.

"It's going to crash right over there!" Joe pointed into the distance. His voice wobbled a bit. His throat hurt and his eyes were dazzled by the silver pulse.

"No. No, it's not!" Linda rubbed her eyes hard. She could hardly see. "It's much nearer than that. It's... It's coming here! It's coming towards us.......!"
Mystery on the Balclutha

"And the Balclutha was the last of the Cape Horn sailing ships, a 'Windjammer!'" The guide led the grade seven class across the red painted deck.

"Look at those huge masts and all that rigging," Terri whispered to Sandy, who was standing nearby. "How'd they ever get the sails up?"

Sandy shrugged. "Beats me."

"A captain, four officers and twelve crew sailed the ship. The cabin boy was the youngest on board," the guide went on. "The boy would have been just your age."

"I wonder what happened to him?" asked Terri.

The guide looked up. "Nobody knows. There's a bit of a mystery about him. Some people say that sometimes when it goes all quiet on board that he ...." The guide stopped suddenly. "Never mind. We'd better get on. Mind your heads please. We're going inside."

It was musty and dark inside. The captain's cabin was comfortable and had a real bed, but the officers' cabins were very tiny. Terri didn't see how anyone could live in one. There was a square skylight, a narrow bunk bed with rough blankets and a few books on a shelf.

"I don't think those bunks are even long enough for me to sleep in." Terri held Sandy back as the class trooped by. "Do you think they're fakes?"

"Let's have a try." Sandy watched the rest of the class disappear down into the hold and then jumped quickly over the rope barrier. "They're as hard as iron. But I guess they're long enough."

Terri looked at the books on the shelves.

Suddenly it was very quiet and still. A clock ticked gently on a wooden chest. They could hear their own heart-beats. And then slowly, with a little creak of its hinges, the door of the cabin began to close.

Terri and Sandy stared at each other for one long second. Then both at once the rushed for the door. They flung it open and stared out.

There, running lightly up the ladder to the deck, was a dark-haired boy dressed in leggings and a yellow waistcoat.

"A ghost!" hissed Sandy.

"No!" gasped Terri.

"Quick! Let's follow him!" Sandy raced up the ladder and onto the deck. But there was nothing there. The deck was empty. They stared around. The
sun was breaking through the fog. They could see the Golden Gate bridge in
the distance, the fishing boats in the bay, and the grim island of Alcatraz.
Nothing moved. On shore, even the red-painted tram car was waiting. The
boy was gone.

Or was he? Just then a flash of movement caught Sandy's eye. Right
at the crow's nest at the top of the main mast, a figure was waving down
at them.

"After him!" Sandy grabbed Terri's arm. "We'll have to climb up
there....."
"And the St. Roche was the first boat to sail both ways through the N.W. Passage," the guide said proudly, leading the grade seven class across the red painted deck.

"Look at those huge masts and all that rigging," Terri whispered to Sandy who was standing nearby. "How'd they ever get the sail up?"
Sandy shrugged. "Beats me."

"And this tent on the deck was the home of an Inuit man, his wife and four children," the guide went on. "One of the boys was just your age."

"I wonder what happened to him?" asked Terri.

The guide looked up. "Nobody knows. There's a bit of a mystery about him. But people do say that sometimes, when it goes all quiet on board, that he...."
The guide stopped suddenly. "Never mind. We'd better get on. Mind your heads please, we're going inside."

The cabins were so tiny, Terri didn't see how anyone could live in one. There was a round brass port-hole, a wash stand, a narrow bunk bed with rough blankets and a few books on a shelf.

"I don't think those bunks are even long enough for me to sleep in," Terri held Sandy back as the class trooped by. "Do you think they're fakes?"

"Let's have a look." Sandy watched the rest of the class disappear down into the hold and then jumped quickly over the rope barrier. "They're as hard as iron. But I guess they're long enough."

Terri looked at the books on the shelves. Suddenly it was very quiet and still. A clock on the wall ticked. They could even hear their own heart-beats. And then slowly, with a little creak of its hinges, the door of the cabin began to close.

Terri and Sandy stared at each other for one long second. Then both at once they rushed for the door. They flung it open and stared out.

There, running lightly up the ladder to the deck, was a dark-haired boy dressed in a seal-skin parka, leggings and mukluks.

"A ghost!" Sandy hissed.

"No!" gasped Terri.

"Quick! Let's follow him!" Sandy raced up the ladder and onto the deck. But there was nothing there. The deck was empty. They stared around. Outside the sun was breaking through the fog. They could see the sea-gulls on the rocks, the freighters anchored in the bay, the mountains poking through the mist, and the round white dome of the Planetarium. Nothing moved. The totem pole with
its dark green and red carvings stood silent. The boy was gone!

Or was he? Just then a flash of movement caught Sandy's eye. Right at the crow's nest at the top of the mast, a figure was waving down at them.

"After him!" Sandy grabbed Terri's arm. "We'll have to climb up there....!"
"And this is the last of the sailing ships," the guide said, leading the grade seven class across the wooden deck.

"Look at those huge masts and all that rigging," Terri whispered to Sandy who was standing nearby. "How'd they ever get the sails up?"

Sandy shrugged. "Beats me."

"The cabin boy was the youngest on board," the guide went on. "The boy would have been just your age."

"I wonder what happened to him?" asked Terri.

The guide looked up. "Nobody knows. There's a bit of a mystery about him. Some people say that sometimes when it goes all quiet on board that he ...." The guide stopped suddenly. "Never mind. We'd better get on. Mind your heads, please. We're going inside."

It was musty and dark inside. The captain's cabin was comfortable and had a real bed, but the officers' cabins were very tiny. Terri didn't see how anyone could live in one. There was a round brass port-hole, a narrow bunk bed with rough blankets, and a few books on a shelf.

"I don't think those bunks are even long enough for me to sleep in," Terri held Sandy back as the class trooped by. "Do you think they're fakes?"

"Let's have a try." Sandy watched the rest of the class disappear down into the hold and then jumped quickly over the rope barrier. "They're as hard as iron. But I guess they're long enough."

Terri looked at the books on the shelves.

Suddenly it was very quiet and still. A clock ticked gently on a wooden chest. They could hear their own hearts beat. And then, slowly, with a little creak of its hinges, the door of the cabin began to close.

Terri and Sandy stared at each other for one long second. Then both at once they rushed for the door. They flung it open and stared out.

There running lightly up the ladder to the deck was a dark-haired boy dressed in leggings and a yellow waist-coat.

"A ghost!" hissed Sandy.

"No!" gasped Terri.

"Quick! Let's follow him!" Sandy raced up the ladder and onto the deck. But there was nothing there. The deck was empty. They stared around. The boy was gone.

Or was he? Just then a flash of movement caught Sandy's eye. Right at the crows-nest at the top of the mast, a figure was waving down at them.

"After him!" Sandy grabbed Terri's arm. "We'll have to climb up there...!"
The Tivoli Gardens Adventure

The sodden crowd surged eagerly forward and the turnstile clicked furiously as the early-birds poured into the Tivoli Gardens; and as if to show its approval, the sun slid suddenly from behind a gloomy cloud-bank and the crowd began happily shedding their raincoats, and furling dripping umbrellas.

Cathy and Eric, swept along in the mob, fought their way to the fringes.

"Ouch!" yelled Eric, as a tall scrawny man in a checked raincoat and cap pushed roughly past him, sending him staggering to the ground.

"Hey! Are you all right?" Cathy helped him to his feet. "What an animal, shoving like that."

"Quick!" Eric shouted at her. "It's my wallet...that man...he's taken my wallet!"

"A pick-pocket!" Cathy wheeled sharply around, her eyes searching the crowd. "Look! ... That's him ... past the playground!"

"After him," Eric began hobbling in pursuit. "We have to catch him ... that's all our money!"

Past the marching Tivoli boy-guards with their bushy bearskins and bandoliers; past the lake with the shining sparkling fountains, and the red, yellow and blues of the gay flower beds; past the laughing children being drawn around in the tiny goat carts; past the Peacock Theatre with its twin red and gold towering pagodas and excited crowd cheering a troupe of juggling acrobats, past an open-air restaurant with its white-painted tables, striped umbrellas and delicious smell of fresh Danish Pastry; right into the heart of the sleepy lunch-time fun-fair, they ran.

"Lost him," puffed Cathy, holding onto the railing of the Ghost-Train. "He could be anywhere."

Eric rubbed his knee, which was aching. "Have you any money at all?" he demanded.

Cathy pulled out a sixteen Kroner note. "Only this.... I gave you the rest to keep safe... big deal!"

"There's no time to argue," Eric started running once more. "Let's go up on the Ferris-Wheel.... maybe we can spot him from there."

Sighing and thinking wistfully of the fresh pastries and cold orange drinks in the open-air restaurant, Cathy followed.
As the giant wheel turned upwards, Cathy and Eric craned their necks. They certainly had a good view of the Tivoli grounds.

"It shouldn't be difficult to spot him," Eric muttered. "There's not many people in the fun-fair."

"If he's still around," Cathy said, holding on grimly as they rocked wildly backwards and forwards.

Around and around went the wheel, faster and faster, until the fun-fair became one blur of coloured lights and shapes, and their eyes grew strained with staring. Then, just as they had given up hope and the wheel was dying to a close, Eric saw a flick of checked coat and cap.

"The Fun-House...he's going into the Fun-House." The chair rocked crazily as he tried to stand up. "We've got him now...come on....."
The sodden crowd surged eagerly forward and the turn-stile clicked furiously as the early-birds poured into the P.N.E. grounds, and as if to show its approval, the sun slid suddenly from behind a gloomy grey cloud bank and the crowd began happily shedding their raincoats and furling dripping umbrellas.

Cathy and Eric, swept along in the mob, fought their way to the fringes.

"Ouch!" yelled Eric, as a tall scrawny man in a checked raincoat and cap pushed roughly past him, sending him staggering to the ground.

"Hey! Are you all right?" Cathy helped him to his feet. "What an animal, shoving you like that."

"Quick!" Eric shouted at her. "It's my wallet...he's taken my wallet!"

"A pick-pocket!" Cathy wheeled sharply, her eyes searching the crowd. "Look! ...That's him... past the Food Fair."

"After him," Eric began hobbling in pursuit. "We have to catch him... that's all our money!"

Past the Salvation Army band playing marches; past the stalls smelling of frying onions, corn and cotton-candy; past the shouting hucksters waving greaseless frying pans and five coloured pens; under the sky-ride, with its sparkling red, blue and yellow chairs; up the hill to the logging show, where already an excited crowd was cheering two men in flannel shirts and knee boots who were racing up and down the towering tree-trunks as though gravity didn't exist; past the Bingo tents, right into the depths of the sleepy lunch-time Playland, they ran.

"Lost him," puffed Cathy, holding onto the railing of the Giant-Slide. "He could be anywhere."

Eric rubbed his knee which was aching. "Have you any money at all?" he demanded.

Cathy pulled out a two dollar bill. "Only this...I gave you the rest to keep safe...big deal!"

"There's no time to argue," Eric started running once more. "Let's go up on the Ferris-Wheel...maybe we can spot him from there."

Sighing and thinking wistfully of the fresh pizzas and cold orange drinks in the Food-Fair, Cathy followed.

As the giant wheel turned upwards, Cathy and Eric craned their necks.
They certainly had a good view of the P.N.E. grounds.

"It shouldn't be difficult to spot him," Eric muttered. "There's not very many people in Playland."

"If he's still around," Cathy said, holding on grimly as they rocked wildly backwards and forwards.

Around and around went the wheel, faster and faster, until Playland became one blur of coloured lights and shapes, and their eyes grew strained with staring. Then just as they had given up hope and the wheel was dying to a close, Eric saw a flick of checked coat and cap.

"The Fun-House... he's going into the Fun-House!" The chair rocked crazily as he tried to stand up. "We've got him now... come on!"
The crowd surged eagerly forward and the turnstile clicked furiously as the early-birds poured into the Amusement Park.

Cathy and Eric, swept along in the mob, fought their way to the fringes. "Ouch!" yelled Eric as a tall scrawny man in a checked raincoat and cap pushed roughly past him, sending him staggering to the ground.

"Hey! Are you all right?" Cathy helped him to his feet. "What an animal, shoving like that."

"Quick!" Eric shouted at her. "It's my wallet...that man...he's taken my wallet!"

"A pick-pocket!" Cathy wheeled sharply round, her eyes searching the crowd. "Look...there he goes...over there!"

"After him," Eric began hobbling in pursuit. "We have to catch him... that's all our money!"

Past the crowds; past the tents; and past the rides; right into the depths of the sleepy lunch-time Amusement-Park, they ran.

"Lost him," puffed Cathy, holding onto the railing of a carousel. "He could be anywhere."

Eric rubbed his knee which was aching. "Have you any money at all?" he demanded.

Cathy pulled out a two dollar bill. "Only this....I gave you the rest to keep safe...big deal!"

"There's no time to argue," Eric started running once more. "Let's go up on the Ferris-Wheel...maybe we can spot him from there."

Sighing and thinking wistfully of lunch, Cathy followed him slowly. At least she wouldn't be sick this time, she thought, as the attendant pulled the bar across the seat. She had nothing inside her to be sick with.

As the giant wheel turned upwards Cathy and Eric craned their necks. They certainly had a good view of the Amusement Park.

"It shouldn't be difficult to spot him," Eric muttered. "There's not many people in the park."

"If he's still around," Cathy said, holding on grimly as they rocked wildly backwards and forwards.

Around and around went the wheel, faster and faster, until the Amusement Park became a blur of colours and shapes, and their eyes grew strained with
staring. Then, just as they had given up hope and the wheel was dying to a close, Eric saw a flick of checked coat and cap.

"The Fun-House...he's going into the Fun-House," the chair rocked crazily as he tried to stand up. "We've got him now...come on!"
The gigantic red and gold striped balloon swayed gently on its mooring tethers in the centre of the parade-ground in the Champ-de-Mars. A golden painted wicker basket hung underneath, and the holiday crowd gathered to watch; all cheered as the winners of the competition came forward to claim their balloon ride.

Jules and Marie were the fortunate winners, the two twelve year olds who had designed the winning poster for Balloon Day.

A portly gentleman carrying a megaphone hastily motioned them to climb into the golden-painted wicker basket.

"Safe as houses, Ladies and Gentlemen," he bellowed at the milling crowd. "The winners will have a half-hour balloon ride...but of course they will still be attached to the ground by the anchor cable."

He gave a signal to the four workmen who were standing at the four corner cables, and with a flourish they released the ropes, and the balloon, freed from all restraint except the anchor cable, began to rise regally into the air.

The crowd cheered and waved enthusiastically; Marie's mother cried out, "Oh, do hang on tightly, Marie": the band broke into a stirring march; and Jules and Marie grinned cheerfully and waved back.

"It's so quiet," Marie gazed out with delight as the balloon sailed steadily upwards, scattering some sparrows as it went.

"No motor," Jules got out his camera. "I'll get some fantastic photos of the city."

"They all look like miniature dolls down there, dolls and toy cars," Marie craned her neck. "It's a gigantic map. And look...we're almost as high as the Eiffel Tower.....see the tourists in the top platforms waving at us!"

"There's the Isle de Cité and Notre Dame." Jules adjusted his camera. "Count the bridges...eleven...twelve... I'll get a good picture."

Marie pointed her finger. "There's the Arc de Triomphe...and the Bois de Boulogne...only it's a bit hazy." She moved cautiously around to the other side of the wicker basket. "We could see forever if there was no pollution...look...even Orly Airport! I think...," she stopped abruptly as a jerk shuddered through the wicker basket. "What was that?"
Jules frowned. "Probably the anchor cable tightening. We must be as high as it will let us go."

But they weren't. Another violent jerk shook the basket, throwing them both helplessly to the floor, and then with one terrific pull and a wrench, the anchor cable snapped clean and the balloon jumped upwards like a cork released from a champagne bottle. What had been a half-hour view of the city had turned into a dangerous adventure, and the hazy mass of Orly Airport with its constant jet traffic grew steadily closer and closer with every passing second......
The gigantic red and gold striped balloon swayed gently on its mooring tethers in the centre of Robson Square. A golden painted wicker basket hung underneath, and the holiday crowd gathered to watch; all cheered as the winners of the competition came forward to claim their balloon ride.

Jules and Marie were the fortunate winners; the two grade seven students who had designed the winning posters for Balloon Day.

A portly gentleman carrying a megaphone hastily motioned them to climb into the golden-painted basket.

"Safe as houses, Ladies and Gentlemen," he bellowed at the milling crowd. "The winners will have a half-hour balloon ride...but of course they will still be attached to the ground by the anchor cable."

He gave a signal to the four workmen who were standing at the four corner cables and with a flourish they released the ropes, and the balloon, freed from all restraint, except the anchor cable, began to rise regally into the air.

The crowd cheered and waved enthusiastically; Marie's mother cried out, "Oh, do hang on, Marie;" the band broke into a stirring march; and Jules and Marie grinned cheerfully and waved back.

"It's so quiet," Marie gazed out with delight as the balloon sailed steadily upwards, scattering some seagulls as it went.

"No motor," Jules got out his camera. "I'll get some fantastic photos of the city."

They all look like miniature dolls down there; dolls and toy cars," Marie craned her neck. "It's a gigantic map. There's the Hotel Vancouver, and the B.C. Hydro building, and Stanley Park...look, you can see the sailboats in English Bay."

"And the Planetarium," Jules adjusted his camera, "and the North Shore mountains across the bay...with that fresh snow on the tips...I'll get a good picture."

"I can even see Vancouver Island...all misty grey hills," Marie moved cautiously around to the other side of the wicker basket. "We can see forever...look...even Mount Baker. I think..." She stopped abruptly as a jerk shuddered through the wicker basket. "What was that?"

Jules frowned, "Probably the anchor cable tightening. We must be as high as it will let us go."
But they weren't! Another violent jerk shook the basket, throwing them both helplessly to the floor, and then with one terrific pull and a wrench, the anchor cable snapped clean and the balloon jumped upwards like a cork released from a champagne bottle. What had been a half-hour view of the city had turned into a dangerous adventure, and the misty grey hills of Vancouver Island and beyond that the wide Pacific Ocean grew steadily closer and closer with every passing second....
The gigantic red and gold striped balloon swayed gently on its mooring tethers in the centre of the town. A golden painted wicker basket hung underneath, and the holiday crowd gathered to watch, all cheered as the winners of the competition came forward to claim their balloon ride.

Jules and Marie were the fortunate winners; the two grade seven students who had designed the winning posters for Balloon Day.

A portly gentleman carrying a megaphone hastily motioned them to climb into the golden-painted wicker basket.

"Safe as houses, Ladies and Gentlemen," he bellowed at the milling crowd. "The winners will have a half-hour balloon ride...but of course they will still be attached to the ground by the anchor cable."

He gave a signal to the four workmen who were standing at the four corner cables and with a flourish they released the ropes and the balloon, freed from all restraint, except the anchor cable, began to rise regally into the air.

The crowd cheered and waved enthusiastically; Marie's mother cried out, "Oh, do hang on tightly, Marie;" the band broke into a stirring march; and Jules and Marie grinned cheerfully and waved back.

"It's so quiet," Marie gazed out with delight as the balloon sailed steadily upwards, scattering some birds as it went.

"No motor," Jules got out his camera. "I'll get some fantastic photos of the town."

"They all look like miniature dolls down there, dolls and toy cars," Marie craned her neck. "It's a gigantic map."

Jules adjusted his camera. "I'm going to get some very good pictures."

Marie moved cautiously around to the other side of the wicker basket. "We can see for miles...we can see forever. Look...right over there...I think...." She stopped abruptly as a jerk shuddered through the wicker basket. "What was that?"

Jules frowned. "Probably the anchor cable tightening. We must be as high as it will let us go."

But they weren't! Another violent jerk shook the basket, throwing them both helplessly to the floor, and then with one terrific pull and a wrench, the anchor cable snapped clean and the balloon jumped upwards like a cork released from a champagne bottle. What had been a half-hour view of the town had turned into a dangerous adventure, and the distant country suddenly grew steadily closer and closer with every passing second.
It's true it was a biting gusty autumn day, and I'd have been warmer in a freezing cold shower; but I had my brand-new birthday camera and so that's how I just happened to be at the Central Park Zoo at 9 o'clock on a Sunday morning.

The seals and I were about the only animate objects around. Oh, there were a few hardy tourists all bundled together and tightly huddled up in heavy overcoats and woolly scarves, and looking distinctly bluish and pinched around the nose.

I decided to get some action photos of the seals catching their fish. The colours were dramatic...the brown and yellowy shiny-wet skins of the seals stood out against the stark black iron railings and the grey surroundings...and I crouched right down behind the looped railings that circled the pool, so as to be eyeball to eyeball with the streamlined swimmers. And this is when a really weird thing happened.

I was sort of fiddling round with the view-finder when this guy in a dark brown coat with a fur-collar appeared on the opposite side of the seal pool, leant casually against the railing and lowered one arm down the inside. There was something so furtive and creepy about him that I was sort of paralyzed to the spot. I guess he couldn't see me because of the iron railing, but I could sure see him.

As I said, it was really weird. He thrust his arm down nearly to the water and pulled out a stone from the wall, then he slipped what looked like a tiny plastic bag into the hole and pushed back the stone again.

I had to crane my neck to see all this and at that precise moment he glanced up and saw me. For an indescribable moment we stared straight at each other, and then, in a moment of pure nervous panic, I clicked the shutter of my camera... my camera that was pointing straight at him.

He uttered a sort of throttled roar and swinging round, started round the pool toward me.

I didn't stop to think...I ran...how I ran! I raced past the balloon sellers and the nickelodeon players, setting up their stands for the day, right down the path to the pony rides and on out of Central Park into the Grand Army Plaza. Past the patiently-waiting horse-drawn carriages I ran, and around the fountain. My heart was throbbing unbearably, the wind whipped the icy spray against my face, the last yellow leaves of the elms blew in swirling gusts across my pounding feet, and every time I turned to look he was coming behind me! Where could I hide...what should I do...?
Adventure in the Stanley Park Zoo

It's true it was a biting gusty autumn day, and I'd have been warmer in a freezing cold shower; but I had my brand-new birthday camera, and so that's how I happened to be at the Stanley Park Zoo at 9 o'clock on a Sunday morning.

The penguins and I were about the only animate objects. Oh, there were a few hardy tourists all bundled together and tightly huddled up in heavy overcoats and woolly scarves, and looking distinctly bluish and pinched around the nose.

I decided to get some action photos of the penguins catching their fish. The colours were dramatic...the black and white dress-suits of the tiny penguins and the bright yellow bibs of the Emperors, standing out against the grey surroundings... and I crouched down behind the stone wall that circled the pool so as to get eyeball to eyeball with these glossy swimmers. And this is when a really weird thing happened.

I was sort of fiddling round with the view-finder when this guy in a dark brown coat with a fur-collar appeared on the opposite side of the penguin pool, leant casually against the wall and lowered one arm down the inside. There was something so furtive and creepy about him that I was sort of paralyzed on the spot. I guess he couldn't see me because of the iron railing, but I sure could see him.

As I said, it was really weird. He thrust his arm down nearly to the water and pulled out a stone from the wall, then he slipped what looked like a tiny plastic bag into the hole and pushed back the stone again.

I had to crane my neck to see all this, and at that precise moment he looked up and saw me. For an indescribable moment we stared straight at each other, and then in a moment of pure nervous panic I clicked the shutter of my camera...my camera that was pointing straight at him.

He uttered a sort of throttled roar and swinging round, started round the pool towards me.

I didn't stop to think...I ran...how I ran. I raced past the pop-corn stands, down the hill, around the seal-pond, past the cage of raucous monkeys, past the duck-pond and the Aquarium, right down the path to Lumberman's Arch and the sea-wall. Past the empty swimming-pool I ran and under the huge girders of the bridge.

My heart was throbbing unbearably, the sea air whipped my face and the last red and yellow leaves of the maples blew in swirling gusts across my pounding feet, and every time I turned to look, he was coming behind me. Where could I hide...what should I do.....?
It's true it was a biting gusty autumn day, and I'd have been warmer in a freezing cold shower; but I had my brand-new birthday camera, and so that's how I just happened to be at the zoo at 9 o'clock on a Sunday morning.

The seals and I were just about the only animate objects around. Oh, there were a few hardy souls all bundled together and tightly huddled up in heavy overcoats and woolly scarves, and looking distinctly bluish and pinched around the nose.

I decided to get some action photos of the seals catching their fish. The colours were dramatic—the brown and yellowy shiny-wet skins of the seals stood out against the stark black iron railings and the grey surroundings—and I crouched right down behind the iron railings that circled the pool so as to be eyeball to eyeball with the streamlined swimmers. And this is when a really weird thing happened.

I was sort of fiddling round with the view-finder when this guy in a dark brown coat with a fur-collar appeared on the opposite side of the seal pool, leant casually against the railing and lowered one arm down the inside. There was something so furtive and creepy about him that I was sort of paralyzed to the spot. I guess he couldn't see me because of the iron railing, but I could surely see him.

As I said, it was really weird. He thrust his arm down nearly to the water and pulled out a stone from the wall, then he slipped what looked like a tiny plastic bag into the hole and pushed back the stone again.

I had to crane my neck to see all this and at that precise moment he glanced up and saw me. For an indescribable moment we stared straight at each other, and then in a moment of pure nervous panic I clicked the shutter of my camera—my camera that was pointing straight at him.

He uttered a sort of throttled roar and swinging around, started round the pool towards me.

I didn't stop to think......I ran....how I ran. I raced past the animal cages and the bird-house, right down the path and out of the zoo. Everytime I turned to look he was coming behind me! Where could I hide.... what should I do.....?
APPENDIX D

Cloze Tests
Mystery in the London Art Gallery

I didn't want to go. But of course no one took any notice of that. They never went in schools. The class was going to the Art Gallery and that was that!

"Whole class!" Mr. Renaud shouted at Pat.

"That means you too, Pat!"

The class was late of course, and then had to squish three in a seat. It was enough to make you late!

Naturally, half-way across the Tower Bridge got stuck in a terrible traffic-jam. A guy had run out of gas. wasn't fair. Life outside was all and smelling of new leaves and . From the bus I could see of yellow daffodils under the trees . Hyde Park. Many coloured kites soared up against the bright blue sky looking like giant birds to attack. fountains in Trafalgar Square glinted and , and the pigeons were going crazy, and flapping and... free! People on streets had their coats off. They almost skipping along in the sunshine. felt like a prisoner shut-up for .

We'd come to the Gallery to the Turner paintings. I guess were O.K., if you like storm oceans and thousands of sunsets. I near the back where I couldn't the guide. There was a black sort of hidden in an alcove. sat myself down on it out sight of everyone......and that's how saw it happen!

An old grey-haired was standing at the side of room. She was staring at a gold-framed painting of a bunch flowers. I noticed her because of moulting fur coat. It looked like or something. Anyway, I was thinking must be boiling with such a coat on a warm sunny day. Suddenly, she
darted a crafty look the room and then, quick as a cat, she sidled up to the coat, whipped it off its hook and her fur coat. Two seconds it and off she went for the I was stunned. I just sat with my mouth open. Of course what I should have done was scream "STOP THIEF". If I'd screamed loudly then, I might have saved myself a whole lot of danger and trouble. But I felt sorry for her. Poor old woman. Maybe she was broke. All the same you can't go round lifting Britain's art treasures, even I knew that.

I don't know what got into me, but before I knew what I was doing I was out of the room and running after her towards the Exit. Funny thing, too, she moved awfully fast for an old lady...!
Mystery in the Vancouver Art Gallery

I didn't want to go. But of course no one noticed any notice of that. They never noticed in schools. The class was going to the Art Gallery and that was that!

"Whole class!" Mr. Renaud shouted at the class.

"That means you too, Pat."

The bell was late of course, and then we had to squash three in a row. It was enough to make you late!

Naturally, half-way across Lion's Gate Bridge got stuck in a terrible traffic-jam. Some guy had run out of gas. It wasn't fair. Life was outside, all gliding and darting in the sky. Down below I could see sail-boats gliding and darting in the sky. High above, sea-gulls were screaming and against the bright blue sky. There were crowds of yellow daffodils all along the banks of Stanley Park and the ducks in Lost Lagoon were going crazy, quacking and free! People on streets had their coats off. They almost skipping along in the sunshine.

We'd come to the Gallery to see the Emily Carr paintings. I guess were O.K. if you like dark forests and rotting totem poles. I felt like a prisoner shut-up near the back where I couldn't hear the guide. There was a black sort of hidden in an alcove. sat myself down on it out of sight of everyone... and that's how I saw it happen!

An old grey-haired was standing at the side of the room. She was staring at a gold-framed painting of a bunch flowers. I noticed her because of her moulted fur coat. It looked like or something. Anyway, I was thinking must be boiled.
with such a coat on a warm sunny day. suddenly, she darted a crafty look the room, and then, quick as cat, she sidled up to the, whipped it off its hook and her fur coat. Two seconds it, and off she went for the. I was stunned. I just sat with my mouth open. Of course what I should have done was scream "STOP THIEF!" If I'd screamed loudly then, I might have saved myself a whole lot of danger and trouble. But I felt sorry for her. Poor old woman. Maybe she was broke. All the same, you can't go round lifting B.C.'s art treasures, even I knew that.

I don't know what got into me, but before I knew what I was doing I was out of the room and running after her towards the Exit. Funny thing too, she moved awfully fast for an old lady...!
Mystery in the Art Gallery

I didn't want to go. But of course no one noticed any notice of that. They never in schools. The class was going the Art Gallery, and that was that!

"whole class!" the teacher shouted at.

"That means you too, Pat."

The was late of course, and then had to squash three in a . It was enough to make you!

Naturally, just half-way across the town got stuck in a terrible traffic-jam. guy had run out of gas. wasn't fair. Life was outside waiting me, but I was trapped just some poor old prisoner...shut-up for.

We'd come to the Gallery to a lot of paintings. I guess were O.K. if you're a person likes that sort of thing.

I near the back where I couldn't the guide. There was a black sort of hidden in an alcove. sat myself down on it out sight of everyone... and that's how saw it happen!

An old grey-haired was standing at the side of room. She was staring at a gold-framed painting of a bunch flowers. I noticed her because of fur coat.

Anyway, I was thinking must be boiled with such a coat on a warm day. , suddenly, she darted a crafty look the room, and then, quick as a , she sidled up to the, whipped it off its hook and the fur coat! Two seconds it and off she went for the.

I was stunned. I just with my mouth open. Of course I should have done was scream "THIEF!" If I'd
screamed loudly then, __________ might have saved myself a whole __________ of danger and trouble. But I __________ sorry for her. Poor old woman.

__________ she was broke. All the same __________ can't go round lifting the country's __________ treasures, even I knew that.

I __________ know what got into me, but __________ I knew what I was doing __________ was out of the room and running after her towards the Exit.

Funny thing too, she moved awfully fast for an old lady.....!
Joe raced up Cable beach. He grabbed his towel from the sand where he'd left it under shade of a drooping palm. It finally getting cooler. The sun was down fast. They'd stayed in the for too long.

"Hurry up, Linda," yelled to his sister. "It's getting and we haven't lights on our ."

"I'm coming. You don't have to ." Linda let the tide float her to the shore like a piece flotsam. She got to her feet peeled off her mask and snorkel.

was late. The beach was deserted. sun was sinking the palms the low white clouds on the were streaked right through with a pink flush. Far out past the on the Cay the lighthouse was . The lights had begun to gleam the tour-liner moored at Prince George's and Cable Beach was becoming covered cold black shadows.

"Hurry up," Joe. "You're always so slow."

Linda made face at him, but didn't bother argue. "Just smell the Oleander scent," she sniffed. "Things always smell so better at night."

"Hmm!" said Joe. "rather have the smell of fish chips myself. It's too bad the is closed now."

Suddenly, a cooling rippled eerily past the breakwater stirring long green fronds of the palm and mixing the perfumes of the flowers.

Linda felt a prickle at back of her neck and she .

"We're the only ones left on beach," she said.

"And we're going catch it when we get home." Joe frowned and stared up at the turning black before his eyes."
get a move on, Lin. I _______________ to watch the cricket match on ____________
tonight."

"I'm ready." Linda lifted her _______________ over her shoulder. "Let's....
She stopped ___________ as Joe gripped her arm. "Hey! ___________ it out!
What's the......."

"Shhh!" Joe _______________ in her ear. "Look! Look up ___________ .......that light!"

Linda stared. High up, _______________ the velvet blue of the sky ___________
turning navy, a silver light pulsed _______________.

"What is it?" Linda whispered. "It's not a plane. It's not moving."

"Helicopter?"

"With a silver light?"

"Whatever it is," Joe said, "it's getting nearer. It's much bigger."
Linda swallowed. "I'll say it is. It's as big as a full moon now."
They stared upwards, their eyes straining as the silver light grew ever larger, brighter, and nearer.

"It's going to crash at Paradise Island." Joe's voice wobbled a bit.
His throat hurt and his eyes were dazzled by the silver pulse.

"No. No, it's not!" Linda rubbed her eyes hard. She could hardly see.
"It's nearer than the island. It's..... It's coming here. It's coming
towards us........!"
Joe raced up Kitsilano beach. He grabbed his towel from the log where he'd left it. "Brrr!" began to shiver. It was starting to get very chilly. The sun was down fast. They'd stayed in the for too long.

"Hurry up, Linda," yelled to his sister. "It's getting and we haven't lights on our.

"I'm coming. You don't have to !!!" Linda let the tide float her to the shore like a piece of driftwood. She got to her feet, peeled off her mask and flippers. was late. The beach was deserted. sun was sinking behind the mountains, red ball of flame that lit the snow capped tips in a pink flush. Lights had begun to from the North Shore.

The Grouse chair-lift sparkled like a necklace of . Out in English Bay the lights the waiting grain freighters winked back the shadowy water.

"Hurry up!" Joe. "You're always so slow."

Linda made face at him, but didn't bother to argue. "Just smell those pine trees," she sniffed. "Things always smell so better at night."

"Hmm," said Joe. "I rather have the smell of fish chips myself. It's too bad the stand is shut."

Suddenly, a chilling rippled eerily through the trees, stirring needles on the pines, and making shower of golden Arbutus leaves.

Linda goose-flesh rising on her arms and .

"We're the only ones left on beach," she said.

"And we're going to catch it when we get home,".
frowned and stared up at the turning black before his eyes.

"get a move on, Lin. I to watch the White-Caps game on tonight."

"I'm ready," Linda lifted her over her shoulder. "Let's...."

She stopped as Joe gripped her arm. "Hey! it out! What's the...."

"Shhh!" Joe in her ear. "Look! Look up that light!"

Linda stared. High up, the velvet blue of the sky turning navy, a silver light pulsed.

"What is it?" Linda whispered. "It's not a plane. It's not moving."

"Helicopter?"

"With a silver light?"

"Whatever it is," said Joe, "it's getting nearer. It's much bigger."

Linda swallowed. "I'll say it is. It's as big as a full moon now."

They stared upwards, their eyes straining as the silver light grew ever larger, brighter and nearer.

"It's going to crash in Stanley Park!" Joe's voice wobbled a bit. His throat hurt and his eyes were dazzled by the silver pulse.

"No. No, it's not!" Linda rubbed her eyes hard. She could hardly see. "It's nearer than the park. It's----It's coming here. It's coming towards us....!"
Beach Mystery

Joe raced up the beach. He grabbed his towel from the where he'd left it earlier. It finally getting. The sun was down fast. They'd stayed in the for too long.

"Hurry up, Linda," yelled to his sister. "It's getting and we haven't lights on our ."

"I'm coming. You don't have to ." Linda let the tide float her to the shore. She stood up peeled off her mask and snorkel. was late. The beach was deserted.

had gone home.

"Hurry up," Joe . "You're always so slow." Linda made face at him, but didn't bother argue. "Just smell the fresh air," she sniffed. "Things always smell so much better at night."

"Hmmm," said Joe. " rather be at home and have smell of supper cooking myself."

Suddenly a rippled eerily through the trees. Linda a prickle at the back of neck. "We're the only ones on beach," she said.

"And we're going catch it when we get home," frowned and stared up at the turning black before his eyes.

" get a move on, Lin. I to watch a game on tonight."

"I'm ready," Linda swung her over her shoulder. "Let's...." She stopped as Joe gripped her arm. "Hey! it out! What's the....."
"Shhh!" Joe whispered in her ear. "Look! Look up that light!"

Linda stared. High up, the velvet blue of the sky turning navy, a silver light pulsed.

"What is it?" Linda whispered. "It's a plane.... It's not moving."

"Helicopter?"

"a silver light?"

"Whatever it is," said, "it's getting nearer. It's much as big as a full moon."

Linda swallowed. "I'll say it is. as big as a full moon.

They stared upwards, their eyes straining the silver light grew ever larger, and nearer.

"It's going to crash over there!" Joe pointed into the. His voice wobbled a bit. His eyes were dazzled the silver pulse.

"No. No, it's!" Linda rubbed her eyes hard. She could hardly see. "It's much nearer than that. It's.... It's coming here. It's coming towards us....!"
Mystery on the Balclutha

"And the Balclutha was the last of the Cape Horn sailing ships, a 'Windjammer'." The guide led the grade seven class across the red painted deck.

"Look at those huge masts and all that rigging," Terri whispered to Sandy who was standing nearby. "How'd they ever get the sails up?"

Sandy shrugged. "Beats me."

"A captain, four officers and twelve_______, sailed the ship.

The cabin boy_______ the youngest on board," the guide_______ on. "The boy would have been_______ your age."

"I wonder what happened_______ him?" asked Terri.

The guide looked_______. "Nobody knows. There's a bit of mystery about him. Some people say_______ sometimes when it goes all quiet_______ board that...." The guide stopped_______ . "Never mind. We'd better get on._______ your heads please. We're going inside."

_______ was musty and dark inside. The_______ cabin was comfortable and had a_______ bed, but the officers' cabins were_______ tiny. Terri didn't see how anyone_______ live in one. There was a_______ sky-light, a narrow bunk bed with_______ blankets and a_______

few books on_______ shelf.

"I don't think those bunks_______ even long enough for me to_______ in." Terri held Sandy back as the_______ class trooped by.

"Do you think_______ fakes?"

"Let's have a try." Sandy_______ the rest of the class disappear into the hold and then jumped_______ over the rope barrier. "They're as_______ as iron. But I guess they're_______ enough."
Terri looked at the books in the shelves.

Suddenly it was very quiet and still. A clock ticked gently against a wooden chest. They could hear their own heart-beats.

And then, slowly, a little creak of its hinges, the door of the cabin began to open.

Terri and Sandy stared at each other for one long second. Then both turned once they rushed for the door and flung it open and stared out.

__________________________, running lightly up the ladder to ____________ was a dark-haired boy dressed_________________ and a yellow waist-coat.

"A ____________!" hissed Sandy.

"No!" gasped Terri.

"Quick! ____________ follow him!" Sandy raced up the ____________ and onto the deck. But there was nothing there. The deck was empty.

__________________________ stared around. The sun was breaking through the fog. They could see the ____________ Gate bridge in the distance, the ____________ boats in the bay, and the ____________ island of Alcatraz. Nothing moved. On shore, even the red-painted tram car was waiting. The boy was gone.

Or was he? Just then a flash of movement caught Sandy's eye. Right at the crow's nest at the top of the main mast, a figure was waving down at them.

"After him!" Sandy grabbed Terri's arm. "We'll have to climb up there...."
Mystery on the St. Roche

"And the St. Roche was the first boat to sail both ways through the N.W. Passage," the guide said proudly, leading the grade seven class across the red painted deck.

"Look at those huge masts and all that rigging," Terri whispered to Sandy who was standing nearby. "How'd they ever get the sail up?"

Sandy shrugged. "Beats me."

"And this tent on the deck is the home of an Inuit man, his wife and four children," the guide on. "One of the boys was your age."

"I wonder what happened to him?" asked Terri.

The guide looked. "Nobody knows. There's a bit of mystery about him. But people do say sometimes, when it goes all quiet on board, that he..." The guide stopped.

"Never mind. We'd better get on. Your heads please. We're going inside."

The cabins were so tiny, Terri didn't how anyone could live in one. was a round brass porthole, a stand, a narrow bunk bed with blankets, and a few books on shelf.

"I don't think those bunks are long enough for me to in," Terri held Sandy back as class trooped by. "Do you think fakes?"

"Let's have a look." Sandy the rest of the class disappear into the hold and then jumped over the rope barrier. "They're as as iron. But I guess they're enough."

Terri looked at the books the shelves. Suddenly it was very and still. A clock on the ticked. They
could even hear own heart-beats. And then slowly, a little creak of its hinges, door of the cabin began to.

Terri and Sandy stared at each for one long second. Then both once they rushed for the door. flung it open and stared out.

running lightly up the ladder to deck, was a dark-haired boy dressed a seal-skin parka, leggings, and mukluks.

"A!" Sandy hissed.

"No!" gasped Terri.

"Quick! follow him!" Sandy raced up the and onto the deck. But there nothing there. The deck was empty. stared around. Outside the sun was through the fog. They could see sea-gulls on the rocks, the freighters in the bay, the mountains poking the mist, and the round white of the Planetarium. Nothing moved. The pole with its dark green and red carvings stood silent.

The boy was gone!

Or was he? Just then a flash of movement caught Sandy's eye. Right at the crows-nest at the top of the main-mast, a figure was waving down at them.

"After him!" Sandy grabbed Terri's arm. "We'll have to climb up there....!"
Mystery on the Sailing Ship

"And this is the last of the sailing ships," the guide said, leading the grade seven class across the wooden deck.

"Look at those huge masts and all that rigging," Terri whispered to Sandy who was standing nearby. "How'd they ever get the sails up?"

shugged. "Beats me."

The cabin boy on. "The boy would have been your age."

"I wonder what happened him?" asked Terri.

The guide looked. "Nobody knows. There's a bit of mystery about him. Some people say sometimes when it goes all quiet board that he..." The guide stopped.

"Never mind. We'd better get on. your heads, please. We're going inside."

was musty and dark inside. The cabin was comfortable and had a bed, but the officers' cabins were very. Terri didn't see how anyone could in one. There was a round port-hole, a narrow bunk bed with blankets and a few books on shelf.

"I don't think those bunks even long enough for me to in." Terri held Sandy back as class trooped by. "Do you think fakes?"

"Let's have a try." Sandy the rest of the class disappear into the hold and then jumped over the rope barrier.

"They're as as iron. But I guess they're enough."

Terri looked at the books the shelves.

Suddenly it was very and still. A clock ticked gently a wooden chest. They could hear own hearts beat.
And then, slowly, a little creak of its hinges, door of the cabin began to.

Terri and Sandy stared at each other one long second. Then both once they rushed for the door. flung it open and stared out.

running lightly up the ladder to deck was a dark-haired boy dressed leggings and a yellow waist-coat.

"A!" hissed Sandy.

"No!" gasped Terri.

"Quick! follow him!" Sandy raced up the and onto the deck. But there nothing there. The deck was empty. stared around. The boy was gone.

was he? Just then a flash movement caught Sandy's eye. Right at crows-nest at the top of the, a figure was waving down at them.

"After him." Sandy grabbed Terri's arm. We'll have to climb up there....!"
The sodden crowd surged eagerly forward and the turnstile clicked furiously as the early-birds poured into the Tivoli Gardens; and as if to show its approval, the sun slid suddenly from behind a gloomy cloud-bank and the crowd began happily shedding their raincoats and furling dripping umbrellas.

Cathy and Eric, swept along in the mob, fought their way to the.

"Ouch!" yelled Eric, as a tall man in a checked raincoat and pushed roughly past him, sending him to the ground.

"Hey! Are you right?" Cathy helped him to his. "What an animal, shoving like that."

"pick-pocket!" Cathy wheeled sharply around, her searching the crowd. "Look!...that's him...the playground!"

"After him," Eric began in pursuit. "We have to catch...that's all our money!"

Past the Tivoli boy-guards with their bushy bear skins bandoliers; past the lake with the sparkling fountains, and the red, yellow blues of the gay flower beds; the laughing children being drawn around the tiny goat carts: past the Theatre with its twin red and towering pagodas, and excited crowd cheering troupe of juggling acrobats, past an restaurant with its white-painted tables, striped and delicious smell of fresh Danish
right into the heart of the lunch-time fun-fair, they ran.

"Lost him," Cathy, holding onto the railing of Ghost-Train. "He could be anywhere."

Eric his knee, which was aching. "Have any money at all?" he demanded.

pulled out a sixteen Kroner note. "this ...

I gave you the rest keep safe...big deal!"

"There's no to argue," Eric started running once . "Let's go up on the Ferris-Wheel... we can spot him from there."

and thinking wistfully of the fresh and cold orange-drinks in the open-air, Cathy followed.

As the giant wheel upwards Cathy and Eric craned their . They certainly had a good view the Tivoli grounds.

"It shouldn't be to spot him," Eric muttered.

"There's many people in the fun-fair."

"If still around," Cathy said, holding on as they rocked wildly backwards and .

Around and around went the wheel, and faster, until the fun-fair became blur of coloured lights and shapes, and their eyes grew strained with staring. Then, just as they had given up hope and the wheel was dying to a close, Eric saw a flick of checked coat and cap.

"The Fun-House...he's going into the Fun-House," the chair rocked crazily as he tried to stand up. "We've got him now... come one..."
The sodden crowd surged eagerly forward and the turnstile clicked furiously as the early-birds poured into the P.N.E. grounds; and as if to show its approval, the sun slid suddenly from behind a gloomy grey cloud bank and the crowd began happily shedding their raincoats and furling dripping umbrellas.

Cathy and Eric, swept along in a mob, fought their way to the turnstile.

"Ouch!" yelled Eric, as a tall man in a checked raincoat pushed roughly past him, sending him to the ground.

"Hey! Are you right?" Cathy helped him to his feet. "What an animal, shoving like that."

"pick-pocket!" Cathy wheeled sharply, her eyes searching the crowd. "Look!...that's him... the Food-Fair."

"After him," Eric began in pursuit. "We have to catch... that's all our money!"

Past the Army band playing marches; past the smelling of frying onions, corn and ; past the shouting hucksters waving greaseless pans and five coloured pens; under sky-ride, with its sparkling red, blue yellow chairs; up the hill to logging show, where already an excited was cheering two men in flannel and knee boots who were racing and down the towering tree-trunks as
gravity didn't exist; past the Bingo right into the depths of the lunch-time Playland, they ran.

"Lost him," Cathy, holding onto the railing of Giant-Slide. "He could be anywhere."

Eric his knee, which was aching. "Have any money at all?" he demanded.

pulled out a two dollar bill. "this...I gave you the rest keep safe...big deal!"

"There's no to argue," Eric started running once. "Let's go up on the Ferris-Wheel... we can spot him from there."

and thinking wistfully of the fresh and cold orange drinks in the , Cathy followed.

As the giant wheel upwards, Cathy and Eric craned their . They certainly had a good view the P.N.E. grounds.

"It shouldn't be to spot him," Eric muttered. "There's very many people in Playland."

"If still around," Cathy said holding on as they rocked wildly backwards and .

Around and around went the wheel, and faster, until Playland became blur of coloured lights and shapes, and their eyes grew strained with staring. Then just as they had given up hope and the wheel was dying to a close, Eric saw a flick of checked coat and cap.

"The Fun House...he's going into the Fun House!!" The chair rocked crazily as he tried to stand up. "We've got him now...come on!!"
Amusement Park Adventure

The crowd surged eagerly forward and the turnstile clicked furiously as the early-birds poured into the Amusement Park.

Cathy and Eric swept along in the mob, fought their way to the

"Ouch!" yelled Eric as a tall man in a checked raincoat and pushed roughly past him sending him to the ground.

"Hey! Are you right?" Cathy helped him to his.

"What an animal, shoving like that."

"Pick-pocket!" Cathy wheeled sharply around, her searching the crowd. "Look...there he over there!"

"After him," Eric began in pursuit. "We have to catch that's all our money!"

Past the; past the tents; and past the; right into the depths of the lunch-time Amusement-Park, they ran.

"Lost him," Cathy, holding onto the railing of Carousel. "He could be anywhere."

Eric his knee, which was aching. "Have any money at all?" he demanded.

pulled out a two dollar bill. "this...I gave you the rest keep safe...big deal!"

"There's no to argue," Eric started running once.
"Let's go up on the Ferris-Wheel... we can spot him from there."

and thinking wistfully of lunch, Cathy him slowly. At least she wouldn't sick this time, she thought, as attendant pulled the bar across the. She had nothing inside her to sick with.

As the giant wheel upwards, Cathy and Eric craned their. They certainly had a good view the Amusement Park.

"It shouldn't be to spot him," Eric muttered. "There's not many people in the park."

"If still around," Cathy said, holding on as they rocked wildly backwards and.

Around and around went the wheel, and faster, until the Amusement Park became blur of colours and shapes, and eyes grew strained with staring. Then as they had given up hope the wheel was dying to a , Eric saw a flick of checked and cap.

"The Fun-House...he's going the Fun-House," the chair rocked crazily he tried to stand up. "We've got him now... come on!"
Adventure over Paris

The gigantic red and gold striped balloon swayed gently on its mooring tethers in the centre of the parade-ground in the Champ-de-Mars. A golden painted wicker basket hung and the holiday crowd gathered to, all cheered as the winners of competition came forward to claim their ride.

Jules and Marie were the winners, the two twelve year olds had designed the winning posters for Day.

A portly gentleman carrying hastily motioned them to climb into golden-painted wicker basket.

"Safe as houses, and Gentlemen," he bellowed at the crowd. "The winners will have a balloon ride ...but of course they still attached to the ground the anchor cable."

He gave a to the four workmen who were at the four corner cables and a flourish they released the ropes, the balloon freed from all restraint, the anchor cable, began to rise into the air.

The crowd cheered waved enthusiastically; Marie's mother cried out, "do hang on tightly, Marie"; the broke into a stirring march; and and Marie grinned cheerfully and waved.

"It's so quiet," Marie gazed out delight as the balloon sailed steadily scattering some sparrows as it went.

"motor", Jules got out his camera. "get some fantastic photos of the."

"They all look like miniature dolls there, dolls and toy
cars," Marie her neck. "It's a gigantic map. look...we're almost as Eiffel Tower...see the tourists in top platform waving at us!"

"There's Isle de Cite and Notre Dame." adjusted his camera. "Count the bridges...twelve.... I'll get a good picture."

pointed her finger. "There's the Arc Triomphe...and the Bois de Boulogne...it's a bit hazy." She moved around to the other side of wicker basket. "We could see forever there was no pollution...look, even Airport! I think..." she stopped abruptly a jerk shuddered through the wicker. "What was that?"

Jules frowned. "Probably anchor cable tightening. We must be high as it will let us."

But they weren't. Another violent jerk shook the basket, throwing them both helplessly to the floor, and then with one terrific pull and a wrench, he anchor cable snapped clean and the balloon jumped upwards like a cork released from a champagne bottle. What had been a half-hour view of the city had turned into a dangerous adventure, and the hazy mass of Orly Airport with its constant jet traffic grew steadily closer and closer with every passing second....
The gigantic red and gold striped balloon swayed gently on its mooring tethers in the centre of Robson Square. A golden painted wicker basket hung, and the holiday crowd gathered to ; all cheered as the winners of competition came forward to claim their ride.

Jules and Marie were the winners; the two grade seven students had designed the winning posters for Day.

A portly gentleman carrying a hastily motioned them to climb into golden-painted wicker basket.

"Safe as houses, and Gentlemen," he bellowed at the crowd. "The winners will have a balloon ride...but of course they still be attached to the ground the anchor cable."

He gave to the four workmen who were at the four corner cables and a flourish they released the ropes the balloon, freed from all restraint, the anchor cable, began to rise into the air.

The crowd cheered waved enthusiastically; Marie's mother cried out, "do hang on tightly, Marie;" the broke into a stirring march; and and Marie grinned cheerfully and waved.

"It's so quiet," Marie gazed out delight as the balloon sailed steadily scattering some sea-gulls as it went.

"motor," Jules got out his camera. "get some fantastic photos of the."

"They all look like miniature dolls there; dolls and
toy cars," Marie her neck. "It's a gigantic map. the Hotel Vancouver, and the B.C. building, and Stanley Park
...look, you see the sail-boats in English Bay."
"the Planetarium," Jules adjusted his camera, "the North Shore mountains across bay...with that fresh snow on
tips...I'll get a good picture."
"can even see Vancouver Island...all grey hills," Marie moved cautiously around the other side of the
wicker. "We can see forever...look...even Baker. I think..." she stopped abruptly a jerk shuddered
through the wicker. "What was that?"
Jules frowned. "Probably anchor cable tightening. We must be high as it will let us."
But they weren't! Another violent jerk the basket, throwing them both helplessly to the floor, and then with one terrific pull and a wrench, the anchor cable snapped clean and the balloon jumped upwards like a cork released from a champagne bottle. What had been a half-hour view of the city had turned into a dangerous adventure, and the misty grey hills of Vancouver Island and beyond that the wide Pacific Ocean grew steadily closer and closer with every passing second....
Adventure over the City

The gigantic red and gold striped balloon swayed gently on its mooring tethers in the centre of the town. A golden painted wicker basket hung, and the holiday crowd gathered to, all cheered as the winners of competition came forward to claim their ride.

Jules and Marie were the winners; the two grade seven students had designed the winning posters for Day.

A portly gentleman carrying a hastily motioned them to climb into golden-painted wicker basket.

"Safe as houses, and Gentlemen," he bellowed at the crowd. "The winners will have a balloon ride...but of course they still be attached to the ground the anchor cable."

He gave a to the four workmen who were at the four corner cables and a flourish they released the ropes the balloon, freed from all restraint, the anchor cable, began to rise into the air.

The crowd cheered waved enthusiastically; Marie's mother cried out, "do hang on tightly, Marie;" the broke into a stirring march; and and Marie grinned cheerfully and waved.

"It's so quiet," Marie gazed out delight as the balloon sailed steadily, scattering some birds as it went. "motor," Jules got out his camera. "get some fantastic photos of the."

"They all look like miniature dolls there, dolls and toy
cars," Marie adjusted his camera. "I'm going to make some very good pictures."

Marie moved around to the other side of the wicker basket. "We can see forever... can see forever. Look... right there.... I think...." She stopped abruptly as a jerk shuddered through the wicker. "What was that?"

Jules frowned. "Probably anchor cable tightening. We must be high as it will let us..."

But they weren't! Another violent jerk the basket, throwing them helplessly the floor, and then with one pull and a wrench, the anchor snapped clean and the balloon jumped like a cork released from a bottle. What had been a half-hour of the town had turned into a dangerous adventure and the distant country suddenly grew steadily closer and closer with every passing second.
Adventure in the Central Park Zoo

It's true it was a biting gusty autumn day, and I'd have been warmer in a freezing cold shower; but I had my brand-new birthday camera, and so that's how I just happened to be at the Central Park Zoo at 9 o'clock on a Sunday morning.

The seals and I were about only animate objects around. Oh, there a few hardy tourists all bundled and tightly huddled up in heavy and woolly scarves, and looking distinctly and pinched around the nose.

I to get some action photos of seals catching their fish. The colours dramatic....the brown and yellowy shiny-wet of the seals stood out against stark black iron railings and the surroundings....and I crouched down the looped railings that circled the, so as to be eyeball to with the streamlined swimmers. And this when a really weird thing happened.

was sort of fiddling round with view-finder when this guy in a brown coat with a fur-collar appeared the opposite side of the seal, leant casually against the railing and one arm down the inside. There something so furtive and creepy about that I was sort of paralyzed the spot. I guess he couldn't me because of the iron railing, I could sure see him.

As said, it was really weird. He his arm down nearly to the and pulled out a stone from wall, then he slipped what looked a tiny plastic bag into the and pushed back the stone again.
had to crane my neck to all this and at that precise moment he glanced up and saw me. An indescribable moment we stared straight at each other, and then, in a moment of pure nervous panic, I clicked shutter of my camera... my camera was pointing straight at him.

He a sort of throttled roar and around, started round the pool towards.

I didn't stop to think... how I ran! I raced past balloon sellers and the nickelodeon players up their stands for the day, down the path to the pony, and out of Central Park the Grand Army Plaza. Past the waiting horse-drawn carriages I ran, and around the fountain. My heart was throbbing unbearably, the wind whipped the icy spray against my face, the last yellow leaves of the elms blew in swirling gusts across my pounding feet, and every time I turned to look he was coming behind me!

Where could I hide... what could I do...?
Adventure in the Stanley Park Zoo

It's true it was a biting gusty autumn day, and I'd have been warmer in a freezing cold shower; but I had my brand-new birthday camera, and so that's how I just happened to be at the Stanley Park Zoo at 9 O'clock on a Sunday morning.

The penguins and I were about only animate objects around. Oh, there a few hardy tourists all bundled and tightly huddled up in heavy and woolly scarves, and looking distinctly and pinched around the nose.

I to get some action photos of penguins catching their fish. The colours dramatic... the black and white dress-suits of tiny penguins and the bright yellow of the Emperors, standing out against grey surroundings....and I crouched down the stone wall that circled the so as to get eyeball to with these glossy swimmers. And this when a really weird thing happened.

was sort of fiddling round with view-finder when this guy in a brown coat with a fur-collar appeared the opposite side of the penguin, leant casually against the wall and one arm down the inside. There something so furtive and creepy about that I was sort of paralyzed the spot. I guess he couldn't me because of the iron railing, I could sure see him.

As said, it was really weird. He his arm down nearly to the and pulled out a stone from wall, then he slipped what looked a tiny plastic bag into the and pushed back the stone again.
had to crane my neck to all this, and at that precise moment he looked up and saw me. An indescribable moment we stared straight at each other, and then in a moment of pure nervous panic I clicked shutter of my camera...my camera was pointing straight at him.

He a sort of throttled roar and around, started round the pool towards.

I didn't stop to think... I how I ran. I raced past pop-corn stands, down the hill, around seal-pond, past the cage of raucous, past the duck-pond and the Aquarium, down the path to Lumberman's Arch the sea-wall. Past the swimming-pool I ran, and under the huge girders of the bridge.

My heart was throbbing unbearably, the sea air whipped my face, and the last red and yellow leaves of the maples blew in swirling gusts across my pounding feet, and every time I turned to look, he was coming behind me. Where could I hide... what should I do...?
It's true it was a biting gusty autumn day, and I'd have been warmer
in a freezing cold shower; but I had my brand-new birthday camera, and so
that's how I just happened to be at the zoo at 9 o'clock on a Sunday morning.

seals and I were just about only animate
objects around. Oh, there a few hardy souls all bundled
and tightly huddled up in heavy and woolly
scarves, and looking distinctly and pinched around the nose.

I to get some action photos of seals
catching their fish. The colours dramatic--the brown and
yellowy shiny-wet of the seals stood out against stark black iron railings and the surroundings--and I crouched
right down the iron railings that circled the
so as to be eyeball to with the streamlined swimmers. And
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this guy in a brown coat with a fur-collar appeared
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had to crane my neck to all this, and at
that precise he glanced up and saw me.
indescribable moment we stared straight into each other, and then in a volley of pure nervous panic I clicked shutter of my camera—my camera was pointing straight at him.

He gave a sort of throttled roar and started around, started round the pool towards ...

I didn't stop to think—how I ran. I raced past animal cages and the bird-house, right the path and out of the . Everytime I turned to look he coming behind me! Where could I ... what should I do.....?
APPENDIX E

Semantic Differential
Put a X on each line to show how you feel about the story you have just read.

Like: __________: Dislike.

Boring: __________: Interesting