

READER, TEXT, AND CULTURE: HOW THREE AGENTS TRANSACT WHILE  
READING CHILDREN'S PICTUREBOOKS

by

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## ABSTRACT OF THE DISSERTATION

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Picturebooks

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This dissertation explores reading, specifically describing the roles of reader, text, and culture in reading events. The study is grounded in the cultural theory of reading, framing reading as a transaction in which reader, text, and culture all act agentively. The study conflates theories of metacognitive reading, narrative conventions, children's literature, multimodality, and the role of cultural knowledge in reading in order to thoroughly describe each agent's roles. Data was collected through a think-aloud protocol in which a group of elementary school students individually read and shared their thinking about children's fictional picturebooks. The readers' statements while reading were then analyzed quantitatively in terms of the agentive moves made by reader, text, and culture. Data analysis of the agency of readers showed that readers most frequently performed five commonly described reading behaviors: summary, inference, prediction, synthesis, and making connections. The behaviors are further described in terms of their content and patterns of their individual use as well as their use in combination with other behaviors. Data analysis of the role of text demonstrated that both written text and illustration acted frequently, though written text dominated the transactions. The study presents a catalog of textual conventions that pertain specifically to children's fictional picturebooks. The study also describes how texts gradually release responsibility to readers. Data analysis of the role of culture demonstrated that genre-related knowledge was the type of extratextual knowledge that most frequently acted in the reading event. Knowledge of specific cultures portrayed in the text had little effect on interpretations. These findings are of potential significance for reading teachers and book publishers. The author suggests questions for future investigation which might clarify or confirm these findings.

# READER, TEXT, AND CULTURE

## Dedication

This dissertation is dedicated to my husband, Tom Larkin. He has remained patient and understanding through many years of research. Without his love, emotional support, and willingness to shoulder a heavy load of parenting our children, I would not have completed this dissertation.

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**Chapter 1: INTRODUCTION**

Reading is without doubt one of the most important skills that students learn in school. Comprehension, or making meaning from text, is “the essence of reading” (Durkin, 1978-1979); a text is not useful if it is not to some degree understood. Success in our society now requires a higher ability to comprehend than any other time in history (Snow, 2002).

Reading is also one of the most complex tasks that teachers expect students to perform. The complexity of reading is, at least in part, a product of the complexity of literature. Literature is art, and to experience literature one must engage with the subjectivity inherent in its artfulness (Protherough, 1983). Due to this subjectivity, idiosyncrasy of interpretation is the norm (Fish, 1980; Holland, 1975; Rosenblatt, 1978; 1994). Interpretation, or the construction of meaning from a text, occurs through the transaction of multiple agents: text, reader, and culture (Rosenblatt, 1978; 1994; Smagorinsky, 2001); a single text may therefore yield a wide range of interpretations (Smagorinsky, 2001). While multiple interpretations are acceptable, not all interpretations are considered equal; especially in school settings, some interpretations are considered better or more correct than others (Rosenblatt, 1994). Successful interpretation requires that a reader understand the cultural assumptions embedded in a text (Delpit, 1995; Lee, 1995; Smagorinsky, 2001).

My own experiences as an educator and educational researcher confirm the complexity of teaching children to construct strong interpretations of texts. Comprehension seems to come naturally to many readers. They just seemed to “get it.” For others, comprehension seemed mysteriously elusive, and I struggled to find

instructional strategies that helped them. Students completed comprehension activities, but did not necessarily learn to construct meaning. The “force and focus” message (“work harder, pay more attention”) (Tishman, 1991) only frustrated these students who struggled to comprehend. Students were able to perform cognitive behaviors in isolation but didn’t know when to use these skills when reading independently. These students appeared to lack a broad understanding that guided their cognitive moves while reading.

The complexity of reading comprehension is only complicated by the dynamics of young readers and adult-created texts. When children read, we assume that they learn from texts (Meek, 1988, 1996). This requires that the text act as a teacher, and that teaching and learning occur in the act of reading. Sociocultural theories of learning situate teaching and learning in dialogue between an adult and a learner within the learner’s zone of proximal development (Cazden, 2001; Vygotsky, 1978). In the act of reading, readers participate in a supportive dialogue with text in which they construct their interpretations (Clay, 1991).

My research questions have evolved from a desire to understand how readers comprehend texts. At first, I didn’t look at the dialogue between reader and text, but rather at metacognition and how readers consciously processed information from texts (Baker & Brown, 1984a; Brown, 1980; Jacobs & Paris, 1987). I came to realize, however, that metacognition explained the reader’s process only after sensing the opportunity to use it. Knowing that many skilled readers often fail to detect their own comprehension problems (Markman, 1977, 1979; Markman & Gorin, 1981), I saw that metacognition did explain the readers’ management of their cognitive behaviors but did not explain how a reader decided that it was an opportune time to use his or her repertoire



of behaviors in the first place. As I looked at the events that triggered metacognitive action, I came to understand that a reader's ability to sense when to apply metacognitive knowledge is based on the ability to recognize and respond to certain cultural assumptions. Book creators (authors, illustrators, and publishers) held assumptions regarding readers' knowledge and responses; these assumptions governed the interactions between readers and texts (Volosinov, 1973).

My realization of the importance of culture to the reading event led me to investigate and ultimately embrace the cultural theory of reading (Smagorinsky, 2001), in which reading is conceptualized as a transaction between three agents (reader, text, and culture). This theory underpins the current study and will be fully described in Chapter 2.

The conceptualization of reading I employ in the present study has also been shaped by the methodology I used while studying metacognition. In the metacognition study, I used think-aloud protocols as a window to view hidden mental processes. The think-aloud data helped me come to understand reading as a dialogue and to appreciate think-aloud protocols as a way to listen to that dialogue. In this study, I use think-aloud protocols to elucidate the dialogues that occur within a specific reading event: children in grades two through five reading fictional picturebooks. The research question that guides the study is this: If the construction of meaning during reading is framed as a transaction among reader, text, and culture, then what are the characteristics of this transaction? Within every reading event three agents (reader, text, and culture) act together in the construction of meaning; sub-questions address each agent's specific role.

My first sub-question addresses the role of the reader: (1) How do readers respond to texts? This sub-question explores the cognitive and metacognitive processes that readers use as they construct their interpretations of texts.

The second sub-question addresses the role of the text: (2) How do texts guide readers toward certain interpretations? I claim that children's picturebooks use specific textual features and other narrative conventions to support young readers. I use think-aloud data to identify and describe these supportive features.

My third and final sub-question addresses the role of culture: (3) How does culture fulfill its role in the reading event? Culture is by nature invisible and difficult to observe and describe (Bourdieu, 1990; Smagorinsky, 2001). In this study, culture's agency takes the form of cultural knowledge, also known as cultural capital (Bourdieu, 1990). Smagorinsky defines culture as "the recurring social practices and their artifacts that give order, purpose, and continuity to social life" (Smagorinsky, 2001). In the reading event, knowledge of culture can be sufficient. That is, if a reader is familiar with social practice or artifacts reference in a text, then the reader can access the desired interpretation. The purpose of this question is to identify specific cultural information required to construct a desired interpretation.

This research question and its three sub-questions explore the requirements of reader, text, and culture that are necessary for a reader to successfully comprehend a text (Smagorinsky, 2001). In the following section I expand the discussion of why it is important to study comprehension and particularly the way that reader, text, and culture transact within the reading event. I also describe existing work that addresses the role of culture in the interpretation of text.

### **The Need for This Study**

Reading comprehension is one of the most important processes taught in school, for several reasons. Literacy is changing, and literacy education must change to keep pace. In this age of information, our society places increasingly high literacy demands on its citizens (Moore, Bean, Birdyshaw & Rycik, 1999; Pressley, 2002; Snow, 2002).

Communication is also becoming more multimodal; technology fosters combinations of written, visual, aural and other forms of language (Pahl & Rowsell, 2005).

At the same time, teaching reading comprehension has become more complicated. Teachers used to teach from texts specifically crafted for instruction, or specifically chosen for representing the narrative, descriptive, expository, or persuasive genre. Now, we find a drastically expanded range of text subjects, difficulty levels, and genres (Snow, 2002). Additionally, a large part of learning occurs via the written word, so difficulties with reading comprehension have a wide impact. Middle and secondary teachers report that low comprehension levels are consistently a problem; low ability to interpret texts affects learning in every content area (Allen, 2000; National Institute of Child Health and Human Development, 2000; Snow, 2002).

Unfortunately, our schools seem to be losing ground when it comes to the successful teaching of reading comprehension. While comprehension demands increase, scores on American comprehension assessments remain static (Allen, 2000; Snow, 2002). Students in other parts of the world are scoring better on comprehension assessments, while American students lose ground (Snow, 2002). Additionally, there are significant disparities in reading performances among different demographic groups in the United

States, despite attempts to reduce and eliminate such gaps (Perie, Grigg & Donahue, 2005; Snow, 2002).

These trends point to a need for better comprehension instruction. Almost thirty years ago, Durkin (1978-1979) showed the education world that reading comprehension instruction was not instruction at all but rather a series of opportunities to for students to demonstrate what they already understood. Educators asked students to answer questions, complete workbook pages, and take texts, but they never gave students guidance in how to comprehend (Durkin, 1978-1979). Decades later, scholars still identify a need to further understand and to inform teachers about the process of comprehension (Pressley, 2000; Snow, 2002).

There is agreement that reading instruction should be directed toward teaching all readers to do the things that good readers do (Pearson, Roehler, Dole & Duffy, 1992; Pressley, 2000; Snow, 2002). In order to do this, it is necessary to understand the different forces at work during successful reading. If texts, readers, and culture all are agents in a reading event, we need to understand each of their roles (Meek, 1988, 1996).

Metacognitive research provides much information about how readers act during the reading event. Effective readers achieve comprehension by thinking strategically, using metacognition to control their efforts. When effective readers sense a comprehension challenge, they engage reading behaviors such as making predictions, using their personal background knowledge, and re-reading in order to achieve understanding (Baker & Brown, 1984a, 1984b; Pearson et al., 1992; Pressley, Johnson, Symons, McGoldrick, & Kurita, 1989).

Metacognitive research also provides a model for the investigation of transactional reading, using think-aloud protocols to understand reader behavior. In this study that methodology is extended to text and cultural behavior as well. Metacognitive research also offers a model of what good readers do, as well as evidence that when struggling readers are taught these behaviors, they improve. Greater understanding of the role of texts and culture in the reading transaction may offer readers, teachers, and book publishers additional information about how to successfully create transactional zones of reading in which reader, text, and culture all achieve codified resonance, fulfill their roles, and construct a quality interpretation. This study seeks to extend knowledge about reader behavior into the cultural theory of reading, viewing reader, text, and culture as agents.

There is little information describing the way text fulfills its roles. In general terms, we know that texts can communicate to readers through narrative conventions (Rabinowitz, 1987). The creators of a text (author, illustrator, and publisher) anticipate a reader's interpretive moves, and plan the text accordingly. Yet there is little specific description of how text acts. The Rand report writes, "Research that would ... chart the impact of different text features would offer teachers considerable help in understanding the reading comprehension phenomenon" (Snow, 2002 p. xv). Meek echoes the sentiment from a sociocultural perspective: "We have not yet described how an author organizes a text that teaches an experienced reader how to read it. Literature, not reading lessons, teaches children to read" (Meek, 1988, p. 177).

There is also little scholarship regarding the role of culture in the reading event, especially work that describes how readers, texts, and culture come together to create

meaning. Earlier work addressed text-reader transactions (Fish, 1980; Holland, 1975; Rosenblatt, 1978, 1994) and the importance of cultural knowledge in interpreting text (Cherland, 1992, 2008; Jarve, 2002; Kovala & Vainikkala, 1996; Marotti, Mauther Wasserman, Dulan, & Mathur, 1993; Squire, 1964). Smagorinsky began the work of exploring how reader, text, and culture come together in the reading event. His theory, however, is still in development; his work is subtitled “Toward a cultural theory of reading (Smagorinsky, 2001).” The present study adds to this understanding by specifically describing the actions taken by reader, text, and culture as well as the transactions among them. This study will explore the dynamics of these transactions in a particular type of reading event: elementary school students reading fictional picturebooks.

The present study is also innovative in its perspective. There is only a small body of research which conceptualizes text as an agent in a reading event and focuses on the teaching role of texts written for children. The present study explicitly considers culture as an agent and focuses on culture’s actions in a reading event. Methodologically, this appears to be the first study that uses reader think-aloud protocols in conjunction with the cultural theory of reading to examine the roles of reader, text, and culture in a reading event.

In the next chapter, I present a review of literature related to text-reader interactions as well as the individual roles of reader, text, and culture. These theories and understandings are conflated under the cultural theory of reading as the conceptual framework for the present study.

## CHAPTER 2: LITERATURE AND CONCEPTUAL FRAMEWORK

The research question explored in this study is: If the construction of meaning during reading is framed as a transaction among reader, text, and culture, then what are the characteristics of this transaction? This research question in itself reflects my embrace of Smagorinsky's emerging cultural theory of reading, described in his work "If Meaning Is Constructed, What Is It Made From? Toward a Cultural Theory of Reading" (2001). The cultural theory of reading frames reading as the construction of meaning in a transactional zone where text, reader, and context work together in order to guide a reader toward an effective interpretation.

In this chapter I review existing scholarship that supports this conceptualization of reading. This includes scholarship that focuses on each individual agent as well as scholarship that focuses on the reader-text transaction. The conceptual framework for the current study conflates theories from several strands of research under the umbrella of the cultural theory of reading; therefore, as I present existing knowledge, I also explain how it relates to reading as a transaction among reader, text, and culture.

### **Meaning: Who Defines It?**

A reader's construction of meaning is the result of a complex interaction among reader, text, and culture (Smagorinsky, 2001). This work examines the role of each agent in supporting children's constructions of desired meanings. The concept of *meaning*, then, requires further explanation. Where does meaning lie? Who defines it?

Bruner (1987) asserts that texts possess a "meaning incarnate" that is independent of readers and cultures, and lies purely within a text. Surely a writer, or in the case of a picturebook, and writer/illustrator team, had an *intended meaning*, and wrote the text

accordingly (Rosenblatt, 1978, 1994; Wertsch, 2000). Yet in the end, the text stands independently; no reader can know with absolute certainty what the author and illustrator intended to say (Volosinov, 1973).

In the case of children reading picturebooks in school, the more relevant concept is *officially sanctioned meaning*. Officially sanctioned meaning is determined by those who hold cultural capital in a specific field. This concept was popularized by Bourdieu, who defined fields as social spaces in which people maneuver for social positions (Bourdieu, 1990). Fields may range from courtroom to playground, yet within any field, people socialize according to a particular set of rules. For the purposes of this paper, the field is elementary school and the study of literature in it.

An individual participates in many fields, bringing to each his or her habitus. Habitus is a system of dispositions which governs the ways that people perceive, think, and act within that field (Bourdieu, 1990). As each field has its own rules, one habitus may be more suited to a particular field than another. Individuals who possess versions of this well-suited habitus will experience success in the field. As they do, their habitus become the doxa of the field. Doxa are subconscious but deeply ingrained beliefs which simultaneously constitute a field and work to sustain it. The field exists only as long as people “play by its rules,” incorporating the doxa; conversely, when people honor these rules, they reproduce the structures of the field and make it more powerful.

Cultural capital refers to behaviors, knowledge, and expectations deriving from doxa (Bourdieu, 1990). Those who possess this cultural capital are successful within the field and have the power to determine officially sanctioned meaning. The officially sanctioned meaning becomes part of the doxa: one needs cultural capital to arrive at the



officially sanctioned meaning, and knowing the officially sanctioned meaning helps one succeed in the field. Without cultural capital, one cannot arrive at the officially sanctioned meanings (Bourdieu, 1990; Delpit, 1995; Heath, 1983). Because of the interdependence of cultural capital, doxa, and field, a reader who does not possess cultural capital of a field will be unable to succeed in it.

In this study, I view the study of children's fictional picturebooks in elementary school as a field with its own doxa. One can argue the existence of fields that are both broader and narrower. For example, one can argue that every book, with its individual meaning, requires a reader to understand its particular doxa. One can also argue that children's fiction, regardless of the role of illustrations, possesses a belief system with sufficient unique components to be considered an independent field. My decision to delineate children's picturebooks as the field in this study is based on my desire to inform instruction. It is important to identify the doxa of children's picturebooks read in school because of their widespread use in elementary classrooms.

In the current study, I examine the ways in which text, reader, and culture transact in ways which support readers' constructions of certain interpretations. One product of this study is a catalog of narrative conventions that texts use to communicate with readers. It might seem that the focus on text would indicate a belief in intended meanings (Smagorinsky, 2001; Wertsch, 2000) or even meanings incarnate (Bruner, 1987), but this is not the case. For the most part, picturebook creators work within the same field and doxa as the children who read them; this is important for the texts' commercial success (Meek, 1988) and their inclusion in school literacy activities (Austin, Dwyer & Freebody, 2003). There are notable exceptions to the alignment between

creators and readers; for example, when the text was created in another era or another culture. This study required fictional picturebooks that possess a reliable officially sanctioned meaning, so I selected texts that were published within the past fifteen years by mainstream American publishing houses such as Houghton Mifflin and Henry Holt and Company.

While these texts, in the contexts of elementary classrooms, do have officially sanctioned meanings, it is important to remember that an essential artistic quality of literature is that it does not prescribe exact meaning. Rather, literature implies meaning that can often operate on several different levels (Eco, 1979; Sipe, 1999; Smagorinsky, 2001). Bakhtin (Volosinov, 1973) used the term *heteroglossia* to describe how multiple voices are present in any discourse; picturebooks, with their interactive but independent linguistic and visual narratives, are by nature heteroglossic. The sparse words and reliance on illustration in picturebooks particularly allow for multiple layers of interpretation; illustrations expand on meanings without pinning down specific interpretations (Meek, 1988).

Books, including picturebooks, vary in their degrees of heteroglossia. Some texts require a reader to actively integrate information to produce meaning; while other texts transmit information directly to a more passive assumed reader. This continuum has been described in various ways: open vs. closed (Eco, 1979); dialogic/ heteroglossic vs. monologic (Volosinov 1973); and writerly vs. readerly (Barthes, 1974). Generally, more open or heteroglossic texts are considered to have more literary value (Freedman, 1990). However, extremely open texts are unlikely to be used in elementary classrooms. An example of an extremely open text is James Joyce's *Finnegan's Wake* (1939).

Freedom of interpretation in an open text conflicts with the idea of officially sanctioned meaning. Literacy itself is culturally defined; people of different cultures vary in their understandings of literature and their literate behaviors (Freedman, 1990; Heath, 1983). How can different readers of different cultures be expected to arrive at a single meaning, one that is so related to a dominant culture? To complicate the issue even more, a person is not a member of a single culture, but rather participates in many different fields: a primary school student operates in his or her home, community, classroom, and other fields. Each field possesses its own habitus and officially sanctioned meanings. Educators have an obligation to ensure that differences in culture, language, and gender are not barriers to educational success (The New London Group, 2000). In an educational climate where children are required to pass standardized reading tests that do not consider cultural variations in literacy, readers must possess the ability to construct officially sanctioned meaning (Castenell & Castenell, 1988; Smagorinsky, 2001).

While individual interpretations of text are valuable in many contexts, success in schools relies on understanding officially sanctioned meanings. In school, it is generally accepted that not all interpretations are equal; some are better than others. In most classrooms, the standards for interpretations align with Rosenblatt's concept of *warranted assertibility*: the interpretation must be compatible with the full text, it must not project meanings unrelated to the text, and it must consider the context of the reading event (Rosenblatt, 1994). Another useful tool when considering quality of interpretations is Protherough's continuum of subjectivity (Protherough, 1983). Least subjective to interpretation are matters of fact stated directly in text, such as dates, places, character

relationships, actual words, and actions. More open to interpretation are implications drawn from the work, such as judgments of character, awareness of irony, and evaluations of action. Most subjective are personal associations with aspects of text and meanings that are based on a particular stance, such as a Christian, Marxist, or feminist viewpoint, which is not shared with the writer (Protherough, 1983). This continuum is valuable for both teachers and students because it demystifies issues of right and wrong in interpretations. Otherwise, students can be understandably confused in determining which elements are up to interpretation (no wrong answer), fixed (one right answer), or located somewhere in-between on the continuum of subjectivity.

In this work, I seek to describe transactions among readers, texts, and culture that lead to successful construction of desired interpretations. One might say that the text guides readers toward the author/illustrator's intended meaning, but as noted earlier, this is a dead-end street. There can never be clear confirmation that a reader has arrived at a text's intended meaning. Instead, we can look at the ways in which a reader is guided toward an officially sanctioned meaning, one that will be confirmed (Smagorinsky, 2001). In elementary schools, such confirmation comes from teachers, tests, and peers in the school setting.

I prescribe to the idea of an officially sanctioned meaning with hesitation, as I believe that there is no single meaning in a text, nor is there a single path to that meaning. Meaning is constructed in the interaction between reading, text, and context; as such, no two readers' meanings will be alike (Smagorinsky, 2001). The reality of children reading picturebooks in school, however, does privilege certain meanings. I suggest that officially sanctioned meanings of literature walk a fine line which on one hand allows for

some degree of freedom of interpretation and on the other hand requires that certain elements be interpreted in prescribed ways.

Those students with more cultural capital arrive at these “insider” meanings easily, while those with less cultural capital find them elusive. There is a need to elucidate in a teachable way how readers arrive at these insider meanings. Specifically, there is a need to identify instructional elements that will enable readers with less cultural capital to achieve officially sanctioned meanings and therefore a certain type and level of reading “success.”

I put success in quotations because I realize that privileging officially sanctioned meanings has its costs: imaginative and personal meanings are discouraged, writings outside the canon are undervalued, and certain meanings may even harm members of cultural groups that possess less cultural capital (Smagorinsky, 2001). The quest for officially sanctioned meanings must be tempered with attention to context: the officially sanctioned meaning is valuable in the context of school and particularly with improving reading comprehension as generally measured in schools, yet this value is arbitrary and limited to this field. For the purposes of this study, however, looking at readers in primary schools, the quality of a reader’s interpretation is measured according to its alignment with officially sanctioned meaning.

### **The Paradox of Separating Transactional Agents**

In this literature review, I draw on a wide array of literature, some of which describes the roles of reader, text, or culture in isolation. Other sources focus on the transaction between reader and text, but do not consider the role of culture. There is a definite contradiction in describing the individual role that a reader, text, or culture plays

in the reading event when each of the agents so clearly affects and is affected by the others. This contradiction subsides, however, when reading is considered in terms of Latour's paradox of modernity (Latour, 1993). According to Latour, there are two things that make our world modern, and they are in contradiction to each other: everything in our world is now a hybrid of separate elements, and the only way to understand these hybrids is by considering their elements in isolation. Humans have a tendency to want to break things down in to things-in-themselves, humans-among-themselves, and discourses. (In the case of reading, these align with the 3 agents: texts, readers, and culture.) While we like to consider them separately, they are interwoven with what Latour calls Ariadne's thread. Ariadne's thread serves a distinct function: while we attempt to isolate knowledge and power, Ariadne's thread maintains the connection between them. At the same time, we cannot stop looking at elements in isolation. First of all, it is the only way we can manage it. Secondly, it allows us to appreciate the strengths of one element in terms of the weaknesses of the others (Latour, 1993).

This may be the main contribution of the present study: magnifying our understanding of how texts, readers, and culture affect one another in the construction of meaning. It may allow us to further understand the inseparable transaction of the three agents by considering each individually as well as the ways in which they affect each other. A reader doesn't just decode a text, but rather encodes it by interpreting signs with personal meanings, meanings that seem relevant to the reader in the context of the reading event. An author composes a text using signs that are also personally and culturally inscribed with meaning. Text, reader, and culture each have independent agency, and at the same time must affect each other in order for a successful construction

of meaning. For these reasons, this literature review presents existing scholarship regarding reader-text interactions as well as the individual roles of reader, text, and culture.

### **Existing Knowledge of Transactional Reading: The Reader-Text Dialogue**

This study describes how texts, readers, and culture assume agency in reading events. I begin, then, by presenting existing scholarship that supports the notion that both readers and texts are both actors in the reading event. In this section, I conflate the sociocultural theories of addressivity (Volosinov, 1973), learning through social interaction (Vygotsky, 1978); and the transactional nature of reading in order to support the notion of a text that works agentively to support young readers.

Bakhtin's notion of addressivity helps us understand how a fixed text can be an active participant in a reader-text dialogue. Bakhtin proposes that all communication, including text, is a dialogue, and therefore depends on a reciprocal relationship between the addresser and the addressee. In reading, the text is the addresser, working to convey a meaning. The text is written with a certain reader in mind, and words are chosen considering that reader's likely perception. While the reader interprets words with a degree of idiosyncrasy, attention is also paid to the text's probable intended meaning. This "two-sided act" of anticipating probable intended meanings and interpretations is known as addressivity (Volosinov, 1973). Successful reading depends on addressivity on the part of the reader and the text; addressivity explains much of text's agency in the reading event.

Rosenblatt's transactional theory of reading (Rosenblatt, 1978, 1994) further emphasizes that reading is a dialogue. Rosenblatt conceptualizes reading as a series of

transactions between a text and a reader. Reading is transactional in that neither text nor reader acts independently; both affect, and are affected by, one another. Each fulfills certain roles in the reading event, and through these transactions, individual readers arrive at personal interpretations (Rosenblatt, 1978). The roles of text include signaling to readers the opportunity for deeper understanding. Specific roles of text will be discussed later in this section.

Having supported my premise of reading as a dialogue, I now offer support for the conceptualization of learning as a dialogue and text as a teacher operating within the dialogue. Vygotsky's concept of learning in the Zone of Proximal Development (ZPD) represents the ways in which children solve problems when they have an adult or more capable peer to provide guidance. (*For simplicity, this paper will refer to the adult or more capable peer as the adult and the child as the learner.*) With adult guidance, learners can solve more difficult problems than they can when working independently. The zone of proximal development, then, is the distance between two levels of mental functions: those that the learner can perform independently and those that the learner can perform with assistance (Vygotsky, 1978). Within the zone of proximal development lie functions that are not yet mature but are in the process of maturation (Vygotsky, 1978).

An important characteristic of the zone of proximal development is the primacy of social interaction in learning; development occurs through learner problem-solving guided by an adult. According to Vygotsky, there are numerous forms that these interactions can take, but the most common is dialogue. It is through language that adults share with children much of their vast body of cultural knowledge (Vygotsky, 1978). While Vygotsky described the interactions in the ZPD as child/adult and child/ more



capable peer, there is precedent for considering other possible interactions, such as child/text. Wells writes:

The ZPD is now seen as providing a way of conceptualizing the many ways in which an individual's development may be assisted by other members of the culture, both in face-to-face interaction and through the legacy of the artifacts they have created. (2002, p. 57)

This suggests that a text, as an artifact created by a writer, may provide the assistance in the ZPD traditionally provided by the more capable other. Reading, then, can be viewed as learning that occurs in the ZPD through text-reader interaction.

### **Text as Teacher**

The concept of the ZPD and the transactional theory of reading both inform the way in which a text teaches a reader. In order to locate a reader's ZPD, a text must anticipate the reader's abilities and developmental levels. This is necessary in order to pose an appropriate comprehension challenge, one that the learner cannot do alone but can do with assistance. The text then progresses according to the gradual release of responsibility model (Pearson & Gallagher, 1983; Vygotsky, 1978): at first, the text does the most of the work of constructing meaning, explaining the process in order to provide the reader with a vocabulary that supports the construction of interpretation. At this point, the learner observes and asks questions, but as the learner accepts the text's direction, he or she can begin to construct a personal interpretation.

Addressivity describes how text functions as teacher on a larger scale: setting instructional goals and moving toward them. The transactional theory of reading describes how text supports readers on a smaller scale: the individual discursive moves

text can make. First, the text is a stimulus that activates the reader's background knowledge (Rosenblatt, 1978). Readers connect their own life experiences to those referenced in a text, and these connections inform their interpretations. Text also acts as a blueprint, guiding the reader's thoughts by indicating places to direct attention (Rosenblatt, 1978). Of course, both of these actions require that the reader respond to the text's guidance; this is part of the transactional nature of reading.

### **Reader as Learner**

The works of Vygotsky (1978), Bakhtin (Volosinov, 1973) and Rosenblatt (1978; 1994) also support my conceptualization of reader as learner. Again, the ideas of Vygotsky and Bakhtin address greater questions of instructional methodology, while the ideas of Rosenblatt clearly describe procedure.

The reader's goal is to learn from the dialogue with the text. Vygotsky theorizes that understanding is gradual, characterized by tentative and provisional stages that precede full understanding (Vygotsky, 1978). As the reader listens to the text, the reader learns to use the text's language to organize his or her own understanding and then to plan actions. (At the same time, the text is anticipating certain levels of reader understanding, and has provided appropriate supports in the text). As the learner takes on more language, he or she takes on more responsibility for constructing a personal interpretation.

Rosenblatt provides descriptions of particular discursive moves that the reader can make within this learning dialogue: selective attention, stance, and self-correction. Selective attention is the process of making decisions (consciously or unconsciously) about where to place attention. Readers are constantly making these decisions; savvy

readers allow texts to influence their decisions. For example, genre often provides clues (Rosenblatt, 1994): when reading a fable, one looks for the lesson in the story. When reading a mystery, one looks for clues.

A reader also adopts a stance, or perspective, based on his or her purposes for reading a given text. Readers may read for aesthetic pleasure, for information, or for a combination of the two (Rosenblatt 1978, 1994). Readers choose their own stances, but texts often indicate appropriate choices. For example, an informed reader knows that poetry is usually intended as a more aesthetic experience. On the other end of the continuum, technical manuals are usually intended as informational.

Readers also self-correct as they read. They may re-read or mentally review parts of text in order to check their understandings. They encounter parts of the text that make them aware of a need to self-correct. The back-and-forth nature of reading and re-reading for self-correction is, according to Rosenblatt, evidence that both text and reader are agents (Rosenblatt, 1978).

In this section, I used sociocultural theories to support my conceptualizations of reading as a learning dialogue and text as a teacher in that dialogue. I described the behaviors of both text and reader as they transact. This integration of addressivity, learning through dialogue, the zone of proximal development, and the transactional theory of reading is, to my knowledge, an innovative conflation of theory.

In the next section, I return to another conceptualization of reading comprehension: metacognition. I describe the strengths of the metacognitive model of reading and its components. I draw on the metacognitive model because it provides detailed description of reader behavior which has proven to be very useful for

instructional purposes. To date, there is no similar understanding of textual or cultural agency. By conflating the notions of text as teacher, learning as dialogue, and the metacognitive model of reading, I hope to elucidate the roles of reader, text, and culture in the reading event.

### **The Metacognitive Model of Reader Agency**

Metacognition is defined as a higher order thought process which involves a person's awareness of his or her thoughts while reasoning (Baker, 1984; Baker & Brown, 1984b; Ghaith, 2001; Jacobs & Paris, 1987). Metacognitive readers understand how they construct meaning and are empowered by this knowledge of their mental actions (Duffy, 1993). The connections between metacognition and successful reading comprehension which have been well-established through research studying the behaviors of competent readers (Baker & Brown, 1984a; 1984b; Brown, 1980; Paris & Myers, 1981; Pressley, 2000). Additionally, instruction in metacognition improves reading performance (Palinscar, 1986; Palinscar & Brown, 1984; Palinscar, Brown & Martin, 1987).

### **The Components of Metacognition**

Metacognition is generally conceptualized as involving two forms of mental activity on the part of the reader: self-appraised knowledge about cognition and self-management of one's own thinking. This distinction is useful for two reasons: (1) it clearly differentiates mental processes guiding reading behavior, and (2) it recognizes that readers may be more proficient in one form than another.

**Metacognitive knowledge.** Self-appraised knowledge is the knowledge of thinking processes that readers know they have (Cross & Paris, 1988; Jacobs & Paris, 1987). If readers are not aware that they possess knowledge, they cannot consciously

apply that knowledge. In terms of reading comprehension, self-appraised knowledge usually takes the form of reading strategies. Reading strategies are defined as processes, or series of processes, that when appropriately matched to the requirements of a reading task, facilitate performance (Palinscar & Brown, 1984). Examples of these strategic reading behaviors include clarifying reading purposes, using prior knowledge, identifying main ideas, visualizing, making inferences, generating predictions, asking questions, using text structure, and summarizing content (Brown, 1980; Brown et al, 1996; Palinscar & Brown, 1984; Pressley, Goodchild, Fleet & Zajchowski, 1989; Yuill & Oakhill, 1988).

Metacognitive knowledge, or knowledge of these strategies, can be divided into three mental subsets: declarative, procedural, and conditional understanding (Cross & Paris, 1988, Jacobs & Paris, 1987). Declarative knowledge is the most basic form of metacognitive understanding, as it refers to awareness of individual reading behaviors. For example, a student reflecting on what she already knows can engage prediction to guess at what is likely to happen next in a story. Procedural knowledge is knowledge about how to apply declarative knowledge. The same hypothetical student might say that when she makes a prediction, she thinks about what she has already read, the title, the author's other works, and/or her own similar personal experiences. She can explain why she engages declarative understanding as she does. Conditional knowledge is knowledge about when the procedural knowledge should be utilized. The same hypothetical student might explain that she makes predictions as soon as she determines the problem in the story. She predicts the solution so that as she keeps reading, she can check all the new information against her prediction.

By nature, these levels of metacognitive understanding develop sequentially: first one must know what a skill is (declarative knowledge), then one can learn how to do it (procedural knowledge), and finally, one can learn how and when to effectively use it (conditional knowledge). This division of knowledge into three types supports educators who are helping students with comprehension. Educators can assess, for different reading behaviors, whether individual students possess the three types of knowledge necessary to effectively use a particular behavior for better comprehension.

**Metacognitive self-management.** The second component of metacognition is self-management. This component is more demanding, as it requires not just that metacognitive knowledge be put into action but that it is also revised across texts and time. Self-management consists of three skills: evaluation, planning, and regulation, which generally occur sequentially (Cross & Paris, 1988). Evaluation refers to analyzing the comprehension task, assessing one's own personal abilities in regard to the task, and setting a comprehension goal. For example, a student may identify that he doesn't understand a sentence because he does not know a word meaning. In his previous reading experience, he has been able to infer word meanings from contexts, so he sets this as a goal. The reader then plans, selecting the behaviors best suited to accomplish the established goal. Perhaps he will decide to determine the part of speech, and try substituting words he knows for the unknown word. He will generate a few possible word meanings and test them as he reads.

Regulation refers to the monitoring and redirection of one's mental activities in order to accomplish comprehension goals (Cross & Paris, 1988). The above reader may have chosen a likely meaning, and then decided to advance under the assumption that it is

correct. If he encounters evidence to the contrary, he might go back and try another possible word meaning, or consult a dictionary. This division of self-management into three separate skills is also useful to educators, as they can pinpoint which skills a student does and doesn't perform effectively in different situations.

Finally, some metacognitive theorists note a phenomenon called the triggering event, defined as the situation in which the reader becomes aware that he or she doesn't understand (Jacobs & Paris, 1987). Triggering events seem highly significant because they signal to readers that there is a need to activate metacognitive knowledge; a reader cannot work to solve a problem without first being aware of its existence. There is, however, little scholarship regarding triggering events (Hare, 1981). Researchers have observed that triggering events occur when readers recognize unfamiliar concepts or unknown words, when their expectations are not confirmed, when the text seems to contradict their prior knowledge, or when portions of the text seem contradictory (Baker, 2002; Baker & Brown, 1984a; Jacobs & Paris, 1987; Olshavsky, 1976-1977).

**Triggering events: Reader-text dialogue in the metacognitive model.**

Triggering events piqued my interest greatly. Metacognitive theorists used triggering events to mark the onset of reader agency, but when viewed through the lens of transactional reading, triggering events suggested textual agency. Triggering events seemed to communicate to readers, "There is something here in the text which is important for your interpretation."

As I worked with the notion of triggering events as reader-text dialogue, problems arose. I found the conceptualization of triggering events in the metacognitive model to be problematic in its simplicity. The conceptualization seems behavioristic: the

triggering event causes a metacognitive response. At the same time, triggering events are described as interactions between a reader and a text that make the reader aware of a comprehension problem (Baker, 2002; Baker & Brown, 1984a; Brown, 1980). It is difficult to reconcile how a triggering event could be both a stimulus and an interaction. In fact, both of these perspectives have limitations in understanding how readers sense and respond to reading challenges.

Firstly, triggering events don't occur in the predictable manner of a stimulus-response event. There is a body of research demonstrating that reading difficulties often occur when a reader does not respond to what should have been a triggering event. Readers given texts that contained inconsistencies generally failed to detect those inconsistencies (Markman, 1977, 1979; Markman & Gorin, 1981). Readers who have metacognitive knowledge do not always succeed in using it for better comprehension (Baker, 2002; Baker & Brown, 1984b; Bereiter & Bird, 1985; Butterfield & Nelson, 1991; Forrest-Pressley & Waller, 1984; Olshavsky, 1976-1977; Paris, Cross & Lipson, 1984). For these reasons, triggering events do not seem reliable enough to be called stimuli.

The concept of triggering events as interactions between a text and a reader is also problematic. Reading is a complicated and idiosyncratic activity which depends on the personal experiences, vocabulary, stance, and reading behaviors of an individual (Rosenblatt, 1978, 1994). Detection of triggering events is likewise idiosyncratic; what triggers one reader into metacognitive activity may have no effect on another reader. In fact, triggers are not consistent even within a single reader and a single text: a reader's response changes with each additional reading (Rosenblatt, 1978, 1994). To consider a



triggering event as an interaction leaves big questions: what was the trigger behind the triggering event? If the reader does not experience a triggering event, then what do we call the unrealized trigger? This conceptualization of triggering event as reader-text interaction is limited because it can only be applied retroactively to an interaction that has already occurred. It does not allow for the prediction, or the instruction, of triggering events. Nor can it answer the important question of how a reader can successfully comprehend when comprehension does not come easily.

My final issue with triggering events is that according to the definition, they only occur when readers have a comprehension problem, realizing that they do not understand part of a text. This is overly simplistic, as comprehension is not an all-or-nothing activity (Mackey, 1997). Sophisticated interpretations of literature are not marked by a lack of misunderstanding but rather by deep understanding. Yet the way triggering events are conceptualized in the metacognitive model does not allow for degrees of comprehension. Readers' failures are not usually factual errors but rather missed opportunities to understand more deeply. What guidance can we provide these readers on how to achieve a more complete interpretation?

These questions influenced my present study, in which I have abandoned the notion of *triggering events* and replaced it with the concept of *textual cues*. Textual cues serve as signals from the text to the reader. If the reader properly attends to a textual cue, the result is a triggering event. Textual cues, however, do not depend on reader actions. The cues exist entirely in the text and are identifiable. They function to help readers correct their misunderstandings and achieve deeper understanding. This focus on textual cues allows me to isolate the text's actions from the readers. My second research sub-

question focuses on the supportive role of the text: How do texts guide readers toward certain interpretations? In this next section, I will review literature that describes how text acts through the use of conventions.

### **Conventions as Textual Actions**

Texts are conventionalized through genre (Rabinowitz, 1987; Smagorinsky, 2001; Volosinov, 1973); for example, a reader knows that a recipe should be read very differently than a poem. Genres are also conventionalized through texts; following the principles of dialogy (Volosinov, 1973), one innovative text may influence future texts in that genre and may also influence how these future texts are interpreted. This resembles the way habitus in a field both shapes and is shaped by participants in the field (Bourdieu, 1990); in this case, the texts, the readers, and the culture are the participants.

Genre can be described as a system of conventions that guide reading (Rabinowitz, 1987; Smagorinsky, 2001; Volosinov, 1973). All texts exist in a dialogy of genre: a text is interpreted according to interpretations of previous texts in the same genre. Each reading, along with the anticipation of future readings, contributes to the further development of the genre (Volosinov, 1973). This reflects the transaction among reader, text, and cultural that occurs in every reading event. For the purposes of this study, however, genre and textual conventions are considered the role of the text.

Genre, or the systems of conventions that govern reading, have been described in many ways: codes or rules (Rabinowitz, 1987); patterns that have become cultural forces (Kress & van Leeuwen, 1996); human operations carried out (de Beaugrande, 1982); and grammars (Halliday, 1975). The main difference among these conceptualizations is the degree of power each acknowledges genre to possess. Rabinowitz (1987) refers to the

conventions as a contract between the reader and writer, represented by the text. If the reader violates the contract by not performing the cognitive activities suggested by the text, then the reader will not achieve the expected meaning. De Beaugrande (1982) conceives of conventions in a more relative way, defining them as the operations a reader carries out when comprehending a story. As long as the reader successfully comprehends the story, the conventions (human operations) are appropriate. Halliday (1975) also views conventions with relativism; in his work they are not formal rules but rather tools that readers use to make sense of their textual experience. Rabinowitz (1987) agrees that conventions are not without exception, so there seems to be a consensus that conventions serve as guidelines or frames of expectation around which readers can organize their thoughts and plan their actions.

Evidence of the influence of conventions also comes from two more practical sources. The first is the publishing industry: several scholars have noted that if a fictional work text does not abide by “the rules,” that is, if it does not offer typical supports to readers in the construction of a cohesive meaning, it is generally not accepted for publication (Meek, 1988, 1996; Rabinowitz, 1987). There is also a body of research that looks at the correlation between successful text comprehension and the texts’ adherence to conventions. When texts violate conventions, readers are less successful in retelling them and answering questions about them (Baumann, 1986; Bower, 1976; Gordon, Schumm, Coffland, & Doucette, 1992; Konopak, 1988).

Conventions, then, describe the behavior of text during reading transactions that achieve codified resonance – that is, reading events in which reader, text, and culture

together successfully construct meaning. The next section describes two existing systems of textual conventions.

### **Two Existing Systems of Conventions**

In this section, I present two existing examples of conventions that have been identified as effective in guiding readers toward officially sanctioned meanings. These systems pertain to two different genres, textbooks and adult fiction. While neither system can be directly translated to children's picturebooks, both are relevant by way of demonstrating the way that texts use textual conventions to support readers in their constructions of meaning.

**Considerate text characteristics.** One well-defined system of conventions is that known as *considerate text characteristics*. This system was devised as a means for schools to evaluate the readability of textbooks. Examples of considerate text characteristics include: (1) signals that indicate organization and structure; (2) explicit identification of anticipated audience and its prior knowledge; (3) definitions and other background knowledge; (4) suggestions of strategies for successful comprehension, often located in sidebars; (5) indication of varying levels of the importance of information; and (6) post-reading processing suggestions (Konopak, 1988). These conventions are appropriate for textbooks, which possess certain characteristics: they are almost exclusively non-fiction, read for the purpose of retaining information, and univocal. The system of considerate text characteristics is based on the notion that readers need certain structures, and that readers who perform certain behaviors will comprehend better than readers who do not (Armbruster & Anderson, 1985). Indeed, there is substantial research demonstrating that considerate texts support student learning more than texts that do not

possess such characteristics (Baumann, 1986; Gordon et al., 1992; Konopak, 1988).

Considerate text characteristics are generally used in two ways: teachers instruct readers to recognize and respond to these characteristics, and school districts use them to inform their textbook purchasing decisions (Konopak, 1988). .

Unfortunately, these considerate text characteristics for non-fiction do not apply to children's fictional picturebooks. The reading of fiction differs greatly from the reading of textbooks. Readers tend to take different stances (leaning toward efferent for textbooks and aesthetic for literature). Desired outcomes are different (test preparation vs. interpretation) as are text perspectives (univocal vs. multivocal). In the next section, I describe another system of textual conventions which is less-known but specifically for fiction.

**Rabinowitz's rules: a system of textual conventions for adult literature.**

Peter Rabinowitz offers a system of textual conventions for adult literature that describes the agency of text within a certain reading event: adults reading fiction for enjoyment.

Rabinowitz's focus is the conjunction of texts, with their genre-based systems of conventions, with readers and their knowledge of such conventions. According to Rabinowitz, writers anticipate a hypothetical desired audience, and encode meanings in ways that they presume this audience can decode (Rabinowitz, 1987). Embedded in these presumptions are "the rules." Rabinowitz describes the rules and their functions like this:

These rules govern operations or activities that, from the author's perspective, it is appropriate for the reader to perform when transforming texts – and indeed, that it is even necessary for the reader to perform if he

or she is to end up with the expected meaning. And they are, from the other end, what readers implicitly call upon when they argue for or against a particular paraphrase of a text. Rules, in other words, serve as a kind of assumed contract between author and reader – they specify the grounds on which the intended reading should take place. They are, of course, socially constructed – and they can vary with genre, culture, history, and text. And readers do not always apply them as authors hope they will – even if they are trying to do so, which they sometimes are not.

(Rabinowitz, 1987, p. 43)

The rules align well with the cultural theory of reading. In this model, the rules (text's role) tell the reader which actions to take (reader's role) within a particular socially constructed space (culture). And while Rabinowitz (1987) does not explicitly grant the rules their own agency in the reading transaction, he does attribute to them agentic characteristics such as the power of regulation and the ability to change.

Rabinowitz devised four levels of rules that applied to adult fiction. They are located along a continuum which ranges from concrete to abstract. First are the *rules of notice*, which help a reader determine which details are important. Examples are visual cues such as italics or semantic cues such as titles. The next level of abstraction is the *rules of signification*, which help a reader determine how to interpret elements of the text such as symbolism or perspective. The third level is the *roles of configuration*, which guide readers in developing an interpretation of the work as a whole. These rules help readers perceive literary forms and patterns as they read, for example, a tragedy or a

mystery. The most abstract level is the *rules of coherence*, which guide the reader's retrospective interpretation of a text. Some adult fiction has a clear coherence; romance novels are an example. Others don't achieve coherence without critical manipulation; these are, in current times, the works that achieve higher literary status (Rabinowitz, 1987). Rabinowitz felt that it could be useful for readers and teachers of reading to understand these rules, but focused more on how rules influenced the politics of interpretation: how certain applications of these conventions caused different consequences (Rabinowitz, 1987).

These two systems of textual conventions illustrate the powers of an agentive text. In the next section, I will address considerations specific to children's literature which may affect textual behavior in the present study.

### **Special Considerations with Children's Literature**

In this section, I review the existing understandings of the agency of children's texts, focusing on the genre of picturebooks. In general, there is a lack of theory specific to children's literature. This may be because children's literature is perceived as simplistic, although this view has been challenged by children's books with complex themes, serious messages, and artistically notable illustrations (Thacker, 2000). The relative lack of theory for children's literature may also be attributed to the perspective that young readers are more simplistic, because of their limited experience with texts and their lesser ability to engage with intertextuality (Thacker, 2000). An underlying assumption in the present study is that reading transactions involving children and picturebooks do create complex meaning worthy of study. In the next section, I review theory which addresses children's literature and more specifically, picturebooks.

**The multimodal nature of picturebooks.** The defining characteristic of a picturebook is multimodality: the meaning comes from multiple modes of communication and often multiple sign systems (Marantz, 1977; Moebius, 1986). In the case of picturebooks, the predominant sign systems are linguistic (the words) and visual (the illustrations); however, meaning can also be communicated through typography, endpapers, and other means (Marantz, 1977; Moebius, 1986). Some feel that in order to qualify as a picturebook, the pictures must be equally important as the text (Stewig, 1995; Sutherland & Hearne, 1977). I am unconcerned with determining domination, as I think this depends at least in part on the reader. Instead, I consider a picturebook to be a book in which the written text and illustrations are stronger together than each is alone (Moebius 1986; Sipe 1999; Stewig 1995) as well as interdependent (Kiefer, 1995; Moebius, 1986; Sipe, 1999). In this work, I use Sipe's term picturebook (rather than the two words written separately) to emphasize the importance of visual information to the picturebook experience.

Multimodality is the characteristic of picturebooks which most distinguishes it from other fiction. Multimodality is a concept that acknowledges that one text can convey information in different ways, for example, through written language, visuals, gestures, and textures (Pahl & Rowsell, 2005). Multimodality enhances a work because whenever we move across sign systems, we create new meaning (Suhor, 1984). It creates a heteroglossia: picturebooks tell a related set of stories, rather than just one story (Meek, 1988).

Some also consider intertextuality to be part of a books' multimodality. There are two ways to interpret this. The first utilizes a broader definition of a text: if one's life is



considered a narrative, then connections with personal experience are a form of intertextuality (Kristeva, 1980). In a narrower view of texts, one in which texts are limited to artifacts with physical form, there are still many connections among books, movies, television programs, and other texts (Many & Anderson, 1992; Sipe, 1999). Often, in children's books, characters interact with books; these metaliteracies are examples of intertextuality which Moebius suggests we consider as little tests of the reader's knowledge of the world of texts (Moebius, 1986). Intertextuality can also be interpreted as a form of dialogic: no text stands on its own but rather is part of a history of texts before it and the possibility of texts after it (Volosinov, 1973).

Multimodality is important to this study because it permits a more expansive conceptualization of text. A multimodal text is not just written language but rather the entire physicality and the intertextuality of the text (Moebius, 1986). This greatly expands the way that texts can function in the reader-text dialogue. Meaning comes from the picturebook as a whole, including characteristics such as the book's size, shape, endpapers, paper choice, or binding, as well as the interplay between these features, the language, and the illustrations (Arizpe & Styles, 2003; Moebius, 1986; Sipe, 1999). It is important to note that the current study uses language that reflects the multimodality of picturebooks: the term *text* refers to the entire text, while terms such as *written text* and *illustration* refer to components.

Traditionally, literary theorists have focused on meaning created through language, at the expense of other modes (Moebius, 1986; Stewig, 1995; Sutherland & Hearne, 1977). Rabinowitz's work with narrative conventions is one example (Rabinowitz, 1987). At the same time, we know that children place more attention on

illustrations, and notice more detail in them, than adult readers (Kiefer, 1995; Meek, 1996). There remains a need to identify the multimodal conventions of picturebooks.

In considering illustrations and other modes, one might draw upon the existing body of knowledge that codifies the meanings conveyed by traditional visual design elements such as color, shape, line, texture, value, style, point of view, and distance (Kress & van Leeuwen, 1996; Moebius, 1986; Sipe, 1999;). This existing work, however, does not focus on the particular context of picturebooks; it is yet to be seen whether this existing knowledge of visual design best describes the ways illustrations and other modes function in the reading of picturebooks.

There is more research which addresses how language and illustration work together to create meaning. Knowledge from this research falls under two main categories: (1) relationships conveyed through the layout of language and illustration (Kress & van Leeuwen, 1996; Sipe, 1999) and (2) dynamics of the interplay between language and illustration (Kress & van Leeuwen, 1996; Schwarcz, 1982). An example of how meaning is conveyed through page layout is Kress and van Leeuwen's (1996) description of the zones of a page. When two images are side by side, the left is considered the status quo, or the given, and the right is the novel – just as in written language, where (in English) we read from left to right. When one image is above another, the upper image is considered the ideal, and the bottom image real (Kress & Van Leeuwen, 1996). Other relationships conveyed through layout are more obvious: for example, larger elements of an illustration are more important to the meaning (Kress & van Leeuwen, 1996; Sipe, 1999).

The dynamics of interplay among written text, illustration, and other modalities are more complex, as they are never either entirely aligned or opposed (Kress & van Leeuwen, 1996). In most cases, the written text and illustration provide complementary information. They offer similar, though not identical, information. It would be difficult for different modalities to offer the identical information. For example, the illustrations will expand upon the written language. “A picture tells a thousand words” applies in picturebooks; an author may not vividly describe aspects of a character or setting, but the illustrator must envision them fully when illustrating. At the same time, while these illustrations expand on the written language, they offer more latitude for interpretation: an illustration rarely commits the reader to a single meaning (Goldstone, 2001/2002; Meek, 1996). Another element of the interplay between language and illustration is timing: sometimes illustrations will run slightly ahead of the text and pull the action forward. The opposite is less frequent, though occasionally the language and illustrations will alternate the responsibility of telling the story (Schwarcz, 1982).

In some cases, illustration and language take meaning in different directions. This sometimes occurs unintentionally, such as when non-sexist language is paired with sexist illustrations (Kress & van Leeuwen, 1996). It can also be intentional: some books, particularly post-modern children’s books, contain multiple layers of meaning, or subtexts, that are conveyed through these oppositions between language and text (Goldstone, 2001/2002). A well-known example is *Good Night, Gorilla* (Rathmann, 1994), in which a zookeeper bids good night to the animals but the pictures show them sneakily following him home.

Whether language and other modes are aligned or opposed, there will be a pull created by differences in the modes. Illustrations convey spatial relationships better and therefore encourage the reader to linger (Kress & van Leeuwen, 1996). Language is more suited for temporal relationships, and therefore tends to propel the reader forward (Kress & van Leeuwen, 1996). This dynamic, specific to picturebooks, leads to a more recursive style of reading (Kress & van Leeuwen, 1996).

The physical characteristics of the book itself also contribute to its meaning. Arizpe and Styles (2003) found that children as young as four years old noted and interpreted meanings from covers, endpapers, framing devices, borders, and other physical characteristics of books. Through group interviews, individual interviews, and artistic responses, the study demonstrated that even very young children can interpret the multimodal communication of picturebooks “far beyond what they might be assumed to know” (p. 138).

**Picturebooks: a developing genre.** Dialogy dictates that are genres are in a constant state of development. Every text is influenced by the texts that preceded it, by the texts that will follow it, and by every reading (Volosinov, 1973). Picturebooks have changed, and will continue to change, in important ways.

Picturebooks have grown immensely in popularity since the mid-1960’s (Doonan, 1993). Many more picturebooks are published, and they appeal to larger audiences. Picturebook reading was once limited to those very young readers who could not read independently; readers with independent reading skills would rapidly “graduate” to books that had only cover and occasional illustrations (Doonan, 1993). Now, picturebooks are the prevalent format for young children’s literature (Sipe, 1999). Newer

picturebooks are also designed to engage older readers through the use of more challenging and mature themes. Illustrators use more complex styles in their illustrations, broadening their appeal (Doonan, 1993). This increase in texts and readership is one compelling reason for further study. Another reason to study multimodality in picturebooks is the growing use of multimodal communication in the modern world. In the world of literature, multimodality is especially pertinent to picturebooks, but if one looks more broadly at multiliteracies, multimodality is increasingly present in formats such as the internet, CD-Roms, and other digital media (Cope & Kalantzis, 2000).

Changes in society also make their mark on picturebooks. A striking example is the changes seen in picturebooks as their audiences rely more and more on television as entertainment media. There are fewer dialogue tags (“he muttered”) replaced by more stylized dialogue (Meek, 1988). Narrators jump into the action of the story, and explain later (Meek, 1988).

Another important development is the sub-genre known as post-modern picturebooks. Compared to classical children’s literature, post-modern children’s books employ non-traditional ways of using plot, character, and setting, which challenge reader expectations and require different ways of constructing meaning (Goldstone, 2001/2002). . Many mix styles of language, illustration, design, and layout, requiring the reader to draw on multiple grammars. Important information is often left out, requiring the reader to draw on intertextuality and other background knowledge. Contesting discourses between language and illustrations also require the reader to consider multiple possibilities. This co-creation of text leads to heteroglossia of readings and meanings (Anstey, 2002; Goldstone, 2001/2002). Some picturebooks, such as *Black and White*

(Macaulay, 1990) and *The True Story of the Three Little Pigs* (Scieszka & Smith, 1996) are strong examples of the postmodern picturebook genre; many other books show one or several of the postmodern characteristics. Post-modern children's picturebooks are growing in popularity (Goldstone, 2001/2002).

### **Existing Work Describing the Role of Culture**

The third agent in the reading event is culture. In the previous sections I have described existing scholarship regarding the roles of reader and text, drawing upon reading response theory, socio-cultural theories of communication and learning, and systems of textual conventions. In this section, I draw upon reading response theory, schema theory, and cultural text analysis as I review current understandings of the role of culture in the reading event.

### **Culture as a Reader Characteristic**

Smagorinsky (2001) was the first to view culture as an independent agent in the reading event; there is, however, a body of scholarship which acknowledged culture's influence in the reading event by considering it a reader characteristic. Squire's (1964) seminal work looked at personal characteristics of high school readers (sex, intelligence, reading ability, socioeconomic status, and personality dispositions) and related these categories to readers' patterns of response when reading four short stories. He found that students from lower socioeconomic backgrounds responded with fewer interpretations of meaning (for example, symbolism) and more retelling statements. He also found that students became more personally involved (for example, making connections to their own lives and showing sympathy) when they read stories that challenged their personal values (Squire, 1964).

The work of several important reading-response theorists started to complicate the notion of culture as it pertains to reading. Holland (1975) explored readers' conceptualizations of their cultural heritages, their value systems, and reality, and then related each reader's unique conceptualizations to his or her interpretations. He also asserted that a reader's identity, comprised of human identity, individual identity, and cultural identity, affected the reader's interpretation (Holland, 1975). Fish (1980) focused on individual reader's membership in one or more interpretive communities. Readers in interpretive communities, Fish theorized, share "levels of experience...independently of differences in education and culture" (Fish, 1980, p. 4). Interpretations depend on the influence of the interpretive community as well as the reader's individual experience in the community. The interpretative community regulates readers; for example, it discourages outlandish interpretations (Fish, 1980). These research designs conceptualized cultural difference as an individual reader's combination of cultural characteristics, rather than membership in one cultural group. While this view stops short of granting culture agency, it is closer to the cultural theory of reading in its notion that culture consists the many cultural factors that enter the reading event. A study by Cherland (1992) also frames culture as a reader characteristic yet reports findings which hinted that culture has agency. In her study, sixth grade boys and girls were asked to read and respond to short stories. She found that differences in sex were linked to very different responses. Girls responded with a *discourse of feelings*, describing emotions, relationships, and values. Boys responded with a *discourse of action*, describing the plot in terms of logic, believability, and legality. The sex of the reader largely determined the actions that the reader took (Cherland, 1992).

**Culture as Schema**

The present study describes culture's agency in terms of the cultural knowledge that enters, affects, and is affected in the reading transaction. While this is a recent conceptualization (Smagorinsky, 2001), there is a tradition of studies that have considered how readers' cultural knowledge affects their comprehension. Early theorists such as Bartlett in 1932 and Huey in 1912 found that when individuals read material that is culturally unfamiliar to them, they comprehend it both differently and less effectively than a native would (as cited in Pritchard, 1990). More recently, a succession of cognitive theorists (Anderson, Reynolds, Schallert, & Goetz, 1977; Langer, 1984; Pritchard, 1990; Reynolds, Taylor, Steffensen, Shirey, & Anderson, 1982; Steffensen, Joag-Dev, & Anderson, 1979) applied schema theory in order to explain these differences.

Schema theory asserts that an individual houses his or her background experiences in mental structures (Andersen et al., 1979). These mental structures are organized representations of all that the individual has experienced. When the individual reads, he or she utilizes these mental structures, or schemata, to construct an interpretation of the text. Therefore, a culturally familiar topic will be easier to comprehend, because the reader already possesses relevant schemata (Anderson et al., 1977; Langer, 1984; Pritchard, 1990; Reynolds et al., 1982; Steffensen et al., 1979).

A frequently cited study which explored how schemata relate to comprehension is that of Steffensen and colleagues (Steffensen et al., 1979). The participants comprised two culturally distinct groups: American graduate students born and raised in the United States and international graduate students who had recently arrived from their native



India. The participants read two texts about weddings, each representing the traditions of one culture. The researchers reported that when reading the culturally familiar text, the participants read more quickly, recalled more details, and constructed more culturally-appropriate interpretations (Steffensen et al., 1979).

It is important to note that in schema theory, schemata are understood as part of the reader, rather fixed, and without an active role (Reynolds et al., 1982). Reynolds expressed this passive conceptualization of schemata when he wrote, “Readers acquire meaning from text by analyzing words and sentences against the backdrop of their own personal knowledge of the world. Personal knowledge, in turn, is conditioned by age, sex, religion, nationality, occupation – in short, by a person’s culture” (Reynolds et al., 1982, p. 2). This strand of research is yet another that contributes to our understanding of culture’s role in reading but stops short of considering culture as an agent in the reading event.

### **Cultural Text Analysis**

A more recent strand of research called cultural text analysis appears to consider culture agentively (Jarve, 2002; Kovala, 2002; Kovala & Vainikkala, 1996; Shaffers, n.d., Slavova, 2002). In this long-term, international study-in-progress, adult readers from different areas of the world read and respond a single short story. To date, the locations include six European countries and Japan. The analysis of reader response transcripts demonstrates how members of different cultures respond differently to a single text (Jarve, 2002; Kovala, 2002; Kovala & Vainikkala, 1996; Shaffers, n.d., Slavova, 2002). Researchers found that readers from different cultures often vary in the topics that enter their interpretations and in the way these topics are interpreted. The topics themselves

are cultural. For example, one study used categories such as value orientations, stereotypes, discourses, presuppositions, and frames of reference (Jarve, 2002).

Unfortunately for the purposes of the current study, this body of research does not discuss its conceptualizations of the role of culture. It appears, however, to consider culture as both an agent in the reading event and part of the interpretation.

### **The Present Study: Developing the Cultural Theory of Reading**

One might expect that a study of the effect of culture on reading would focus on the demographics of the readers, as did many of the studies references earlier in this chapter (e.g., Squire, 1964). For this study, however, I decided to focus on the actions of culture in the observed reading events. Reading is conceptualized as a transaction among three agents: reader, text, and culture (Smagorinsky, 2001). The three agents transact in ways that support a reader in his or her construction of meaning (Volosinov, 1973; Vygotsky, 1978). Each agent affects and is affected by each other agent (Rosenblatt, 1978; 1944; Smagorinsky, 2001). All three agents in a reading event must share a level of understanding, called *codified resonance*, in order to successfully construct an interpretation (Smagorinsky, 2001). The review of the literature in this chapter demonstrates that while existing scholarship has contributed much knowledge related to the agency of reader, text, and culture, it did not always consider this transactive nature of these roles. The present study addresses this need.

The present study also addresses a need to understand the cultural theory of reading in terms of younger readers in individual reading events. Smagorinsky's work with this theory focuses on teen readers and interpretations constructed as they use a common text to create their own text (Smagorinsky, 2001). There has been, to my

knowledge, no cultural theory scholarship based on reading events with younger readers and picturebooks. This study, with its findings about how reader, text, and culture transact in a reading event, may add significantly to cultural theory.

Specifically, findings will describe the role of each agent and the way that they work together in the transactional zone of reading. First, I will describe reader behaviors in ways which reflect the reader's transaction with text and culture. These descriptions will allow for an exploration of how well existing theories and models, such as reading response (Rosenblatt, 1978, 1994), learning through social interaction (Vygotsky, 1978), and addressivity (Volosinov, 1973), describe reader behavior in relation to agentive text and culture. Findings regarding the agency of text will comprise a catalogue of conventions that specifically pertain to children's fictional picturebooks. This catalogue will be the first that is research-based, that focuses on children's (rather than adults) perception of conventions, and that is multimodal. Findings regarding the role of culture are the first to describe culture's agency in the reading transaction. Findings regarding the interplay among reader, text, and culture are also new contributions to the field. These multi-layered descriptions of each agent in the reading event and of their interplay offer a suitably complex description of the very complex act of reading.

This complex description is necessary, as there is a tendency to reduce, or assume a common understanding of reading, when none exists (Smagorinsky, 2009). We know that readers, texts, and cultures are all diverse; how can we help diverse readers in diverse settings achieve officially sanctioned or otherwise desired meanings? It has long been suggested that cultural mismatches, particularly between children from minority groups and the white middle-class people who generally dominate publishing, contribute to the

reading difficulties of some children (Anderson et al., 1977). This study contributes to our practical understanding of how texts act as teachers and how differences in cultural knowledge affect interpretive success.

### CHAPTER 3: METHODOLOGY

The purpose of this study was to describe the roles of reader, text, and culture when a group of elementary students reads a set of fictional picturebooks. In this chapter, I first describe the context of the study: the community, the school, and the program where the elementary school students read picturebooks with me. I then describe the study design: planning and gaining permissions, selecting participants and texts, and collecting data in reading sessions. I discuss my choice of the think-aloud method of data collection. This chapter will not include the data analysis procedure. Due to its complexity, this procedure will be described at length in Chapter 4.

#### **Introducing Smalltown**

I conducted my research in a community which I refer to as Smalltown, which is a town of approximately 8,000 residents surrounded by farms, woods, and small-scale housing developments. It has an old-time feel, although in recent years, many new residents have arrived, mostly commuters from New York City or large corporate workplaces located near the city. The population, then, is a mix of families who have lived in the area for generations as well as the recently arrived. Newer residents include a small but growing number of immigrants, mostly from Mexico.

Before conducting the study, I was familiar with Smalltown and its school on several levels. As a resident of the same county, I knew Smalltown as a place to eat, shop, and attend cultural events. As an educator, I knew the demographics and character of the Smalltown School. Several of my co-workers were residents whose children attended the school. Over the years, I worked alongside teachers and administrators from Smalltown School in different professional activities. Additionally, a close friend

worked there, and through this friend I had a few occasions of social contact with teachers and administrators.

My description of Smalltown's history and citizenry comes from my personal experience as an educator and nearby resident. My confidentiality agreement with the Smalltown Board of Education limits my description; a high degree of specificity or citations of others' descriptions would risk revealing the identity of the town. Instead, I give general descriptions intended to help the reader understand the general flavor of the community. Assertions about the beliefs of community members were taken from discussions that Smalltown parents and educators either had with me or in my presence. Statistics have been rounded so they would not provide a link to the district.

### **Smalltown Residents and Smalltown School**

Residents of Smalltown want to preserve its historical character and sense of community. It is understood that some change is inevitable: corporate workplaces bring more people, more land is developed, and shopping centers stores pop up closer and closer to Smalltown. Residents do not, however, want Smalltown to change too much or too quickly.

Shared values unite the citizens of Smalltown regardless of their backgrounds. Smalltown residents treasure their tight-knit community and quaint downtown. They also cherish their school, which is a center of the community. This reflects the closeness of the town as well as the importance of education to residents. Most families, old-timers and newcomers alike, assume that their children will attend college. This is not a community where parents start strategizing Ivy League college admission for their first-graders, but parents do prioritize educational success for their children. They believe that

educational success, defined as a bachelor's degree at minimum, is necessary for future success.

The Smalltown School embodies the town's commitments to community and to education. The town's one school serves grades kindergarten through eight. With under five hundred children attending, and each child staying for nine years, there is ample time for students, families, teachers, and administrators to form relationships. The school is in the center of town, and most children walk to school. Parents volunteer, mostly through the PTA. When new playground equipment was necessary, the PTA and greater community raised funds. As opposed to many suburban schools, however, parents trust the teachers and the schools with educating their children; there are few if any over-involved "helicopter parents." Overall, the school is a cheerful place and more importantly, one that fits the image of a "typical American school."

### **Smalltown School's Afterschool Program: The Site of the Study**

The study was conducted at the Smalltown School, but outside of school hours, in the context of the Afterschool Program. The Afterschool Program is a low-cost, parent-paid program created to help working parents. The program has about fifty children registered, and typically serves about thirty-five each day. There is also a smaller Before-school Program; however, the Before-school Program was not part of the study.

The Afterschool Program is staffed and managed by Smalltown School. There is one full-time staff person who coordinates and supervises the program. Other staff members are school employees who work as paraprofessionals during the school day. This staffing structure proved advantageous to my purpose. Many school-based child care programs are contracted to outside agencies, so there is little connection between the

school day and the child care program. On the other hand, in this school-run program, the staff and children worked together during day. Staff had a high degree of knowledge regarding children's schedules, academic performances, and personal concerns. They knew when a parent had a new job, or student was about to begin baseball season. They also knew which students had strong academic support at home or which had a parent with an alcohol addiction who was often neglectful. This was consistently helpful to me as I got to know students and in my occasional struggles to schedule the multitude of reading sessions.

The program operates daily from 7:00am to 8:30am and 3:00pm to 6:00pm. My work took place in the afternoon session of the program. When children arrive at 3:00pm, they sign in and have free play time. If the weather is suitable, they are on the playground. Otherwise, they play in the gymnasium. At 3:30pm, they have a snack and then move to the library to do homework. As children complete their homework, they move to the cafeteria where they engage in less structured activities such as games and crafts. On some days, they may play games on the computers in the school technology lab. Children will trickle in throughout the afternoon, as they participate in extracurricular activities such as the school play or scouts. Children also trickle out, as their parents arrive to take them home.

The students in the program are a slightly more diverse group than the general school population. This is probably due to economics. While there were some well-off families in the program, many parents with the means either were home to meet their children after school or hired in-home childcare providers. A larger group of the families in the program were either from single-parent homes or needed two incomes and this



lower-cost child care arrangement. Approximately fifty percent of the students were White, about fifteen percent were African-American, about 20 percent were Asian, and about fifteen percent were Latino. Approximately one-third received free or reduced lunch. Only two students received English Language Learning services, though six were non-native speakers of English.

The program is viewed with affection and gratitude by the majority of families who use it. Parents also view it as a chaotic place, though this is not seen as a negative characteristic, but rather as a natural result of several dozen children in one place for a few hours. Parents find the noise and energy level high, especially after a long day of work, but still consider the program a safe and pleasant place for their children.

### **My Entry into the Afterschool Program**

While I had a degree of familiarity with Smalltown and Smalltown School, the Afterschool Program was largely new to me. I knew about half of the staff members through their other positions as teaching assistants during school hours; however, I didn't know the director. My entry into the community was quite smooth, in terms of the staff, parents, and students accepting me and willingly assisting me. (The process of gaining official permissions, which was also smooth, will be described later in this chapter.) The superintendent was helpful in communicating his trust in me when introducing me to staff and children.

During the late winter and spring of 2005 I began spending two to three hours per day at the Afterschool Program. I gained trust and rapport by spending my first week in the program as a volunteer: assisting the staff in serving snack, monitoring homework progress, and attending to student needs. I interacted with the children, assisting them

with their studies and playing with them. I also introduced myself to and chatted with parents as they picked up their children.

The result was that students, parents, and staff accepted my presence and facilitated my work. Students were generally happy to participate. With a few exceptions, the students enjoyed reading the stories. They also seemed to enjoy the special attention and the break from routine. I was considerate about not removing children from favorite activities. Some children were saddened to miss computer times, while others loved playing soccer or playing with clay. For one reluctant reader, I made the experience more interesting by allowing him to operate the video camera. The students knew that they did not have to read with me if they didn't want to; I was pleased that all of the children stayed with the study through the end.

Parents were also supportive. They were happy that their children were participating, as they viewed participation as an opportunity for their child to do additional reading and comprehension work outside of the school day. At times, it was necessary to remind them that I was not in a position to evaluate their child's reading ability. Overall, however, parents accepted my role, and were gracious about allowing me to finish my work with their children if a session was in progress when they arrived for pickup.

My work could not have been done without the support of the program staff. While I had previous contact with several members of the school staff, I did not know the program staff at all. They were not part of the decision to allow me to conduct the study but rather told to accommodate me once the decision was made. To their credit, the staff did all they could to facilitate my work. They helped me schedule reading sessions

around children's complicated schedules, told me when a child had a particularly good or bad day at school, and shared their knowledge and observations about children and families in the program.

### **Smalltown Students: Bearers of Cultural Knowledge**

The Afterschool Program was a very suitable context as it was a naturalistic setting. Because the students were in school, reading and talking about their reading did not seem out of place, so children readily participated. Doing the sessions outside of school hours, however, lessened time restraints; students did not miss any instruction by participating and did not have to make up work.

More importantly, Smalltown and the Smalltown School were a good fit for my study. Smalltown is a pleasant place that many would consider a good place to live. At the same time, Smalltown is not idyllic; it suffers growing pains and other malaise brought on by our modern world. In its strengths and in its problems, however, it is not unlike many other American towns and schools. In a word, it is quite typical.

Smalltown School's statistics support this idea of Smalltown being very typical. According to information from the New Jersey State Department of Education, the school appears average but not outstanding within the state. Over the past three years, standardized tests compare favorably with state averages, while the mobility rate (percentage of students who enter and leave during the school year) and attendance rate hover above and below the state averages (average mobility rates in NJ are twelve to thirteen percent; average attendance rates in NJ are ninety-four to ninety-six percent). Over ninety-five percent of the students that attended this elementary school go on to graduate from high school in four years (the NJ average is 85%). Smalltown and its

school are, according to New Jersey measurements, typical, in no way extreme, and successful in their educational goals.

This combination of typicality and educational success is my reason for choosing Smalltown and Smalltown School. As good readers in an educationally successful community, this sample of young readers from Smalltown School appears to possess the *habitus* (Bourdieu, 1990) necessary to comprehend children's picturebooks: the narrative conventions that writers, illustrators, and publishers assume readers know.

This study is an extension of the "good reader" strand of research, which documents the behaviors of successful readers. This work also considers the behavior of text and culture in successful reading events. The Smalltown School and its readers possess a great deal of codified resonance: all agents are able to recognize and use narrative conventions in the same way, leading to successful reading events (Smagorinsky, 2001). In this context, I can observe effective transactions among reader, text, and culture and describe the roles of each.

### **The Design of the Study**

In this section, I describe the evolution of my plan, the obtainment of permissions, participant selection, and text selection. Data collection and analysis will be described separately, after further explanation of my data collection method.

#### **Planning and Permissions**

The study design consisted of five texts read by 15 readers each, amounting to 75 reading sessions in total. (The final number of sessions was slightly lower, at 72, because in three cases, the participants had already read the chosen book.) The protocol of each

session will be described more fully in the data collection section. I used this same type of reading session for my preliminary study and found the design to be well-suited for observing the ways in which specific textual features affect readers of this age group. The read-and-think-aloud sessions took place during the after-school program. The teachers, superintendent, and board of education preferred this because it did not interfere with student instruction. Parents were also pleased that their children were doing extra reading in the after-school program.

I first approached the superintendent with my proposal in early fall 2005. He was supportive and helped me arrange a meeting with the district Board of Education who were responsible for approving the study. The board had understandable concerns about student privacy, safety, and comfort, as well as scope of my communication with parents. After I satisfied their concerns, they approved the study. I concurrently applied for and received approval from the Rutgers University Institutional Review Board.

### **Participant Selection**

In February 2006, I spent a week of afternoons in the program. I socialized with and provided homework assistance for the children, so that we could become familiar with each other. After the students and staff knew me, I sent a letter home to families. The letter explained that I was a researcher looking for participants in a study of reading comprehension. I outlined the parameters of participation, such as the rights of participants and their families as well as the time commitment required. I assured families that I was not testing or otherwise “experimenting on” their children but rather observing them read and talking with them about their comprehension. I then made myself available to parents in several ways: they could email, phone, or speak to me in

person as they picked up their children from the program. Families who chose to participate signed consent forms which granted me permission to work with their child, to speak to their child's teacher regarding reading performance, and to audiotape and videotape our sessions.

Twenty children and their families agreed to participate in the study. From this group of twenty, five were eliminated. According to my agreement with the board of education, I would not work with any students who were classified in the special education program or who had been referred for possible classification: this eliminated one student. Another student was eliminated because his schedule of attendance in the after-school program was insufficient for my data needs. Three students were eliminated after their teachers identified them as reading notably below grade level, according to national norms.

I purposefully choose the readers who would best help me address my research question (Creswell, 1998), and for several reasons, this excludes poor readers. A poor reader might not be able to perform the necessary task of reading a text. A second reason is that previous research demonstrates that poor readers use a smaller repertoire of cognitive behaviors (Bereiter & Bird, 1985; Crain-Thorenson, Lippman & McClendon-Magnuson, 1997; Forrest-Pressley & Waller, 1984; Hare, 1981; Hare & Smith, 1982; Paris et al., 1984; Paris & Jacobs, 1984), suggesting that sessions with poor readers would yield less data. A final reason for including only average and strong readers is that I sought to describe effective readers' processes. In the spirit of "good reader" research (Dole, Duffy, Roehler & Pearson, 1991; Paris, Wasik, & Turner, 1996; Pearson &

Fielding, 1991; Pressley & Afflerbach, 1995; Pressley et al., 1989), I wanted to study effective readers with the future goal of using this knowledge to instruct poorer readers.

At this point, one possibility was to narrow the participants according to a particular age or grade level. Limiting the age or grade level of the participants would improve the generalizability of the study; however, I decided against this. Even with fifteen participants from a single age or grade level, the study would have limited generalizability. My intention with this study was to explore the roles of reader, text, and culture, rather than provide generalizable findings regarding the roles. I decided that readers with a broader range of ages would likely demonstrate a broader range of reader behaviors.

After the eliminations, I had fifteen participants. The group consisted of six second-graders, two third-graders, four fourth-graders, and three fifth-graders. Eight were girls and seven were boys. According to their teachers' descriptions of how they performed according to grade-level expectation of reading, five were high readers, five average, and five low (although none were below grade level). Student report cards descriptors of reading performance confirmed the teachers' opinions. Unfortunately, standardized test scores were available for only the fifth-graders, so I was not able to use them to establish student reading levels. Twelve participants were Caucasian/ of - European descent, two were Asian-American, and one was African-American. Twelve spoke English at home; three spoke other languages. One was enrolled in the school's English as a Second Language (ESL) program.

Table 1

*Readers and Their Characteristics*

Reader (pseudonym)	Grade	Sex	Reading Level
Amanda	4	Female	High
Amy	3	Female	High
Brad	4	Male	Average
Chad	5	Male	High
Connie	4	Female	High
Danielle	5	Female	Average
Duncan	2	Male	Low
Dylan	2	Male	Low
Elana	2	Male	Low
Harry	3	Male	Average
Jamie	5	Female	Average
Jill	4	Female	Low
Mei-Lee	2	Female	Low
Pete	2	Male	Low
Ron	2	Male	High

**Text Selection**

While participants in qualitative research are commonly understood to be human subjects, there are two sets of participants in this study: readers and texts. My second sub-question focuses on the agency of text in the reading transaction: the nature of textual guidance. Using data regarding text-reader dialogue, I drew conclusions about the textual features that texts use to communicate with readers. For this reason, I chose texts carefully according to their likelihood to help me determine these relationships (Creswell, 1998). The most important criteria were the problem that a text posed to its reader and the culture portrayed in the story. I also considered text difficulty and range of appeal.

I looked closely at the problems that a text posed to its reader. My intention was to observe the text-reader interaction during reading events, focusing on how the text



supported the reader. If my readers were not challenged, they would not require textual support. I wanted these challenges to involve interpretation rather than word-level reading problems such as decoding. To isolate books that provided comprehension challenges, I utilized Eco's concept of open versus closed texts (Eco, 1979).

According to Eco, an open text is not preassembled for the reader, but rather has many possible interpretations. The message is "productively ambiguous", meaning that it is intentionally non-prescriptive and supports a multitude of understandings, yet at the same time guides the reader in certain directions of thought. The reader who reads an open text feels a conscious freedom in interpretation (Eco, 1979).

My criterion, however, was not that a text be completely open. Openness and closedness fall on a continuum; a classic example of an open text is James Joyce's *Finnegan's Wake* (1939), known for its extreme ambiguity. This degree of openness is atypical and would not serve the purposes of this study. My goal was to see how texts communicate effective constructions of desired meanings; therefore, I chose texts that were clear in leading readers toward particular interpretations, while still offering multiple layers of meaning. Later in this chapter I describe each text and the specific ways in which each is open.

Text selection also considered the cultures portrayed in the stories. I strove to represent different cultures as well as different levels of variation from the readers' cultures. For example, I chose *No Such Thing* (Koller, 1997) because it was very culturally accessible for my readers. The story is based on a common experience of a child being scared of a monster under a bed. *Fly Away Home* (Bunting, 1991), on the other hand, is about a homeless family that lives in an airport; this was culturally very

different from my readers' experiences. *Knots on a Counting Rope* (Martin & Archambault, 1997) was also culturally very different, as the characters are Native American and the story is told in a way that resembles oral tradition. *Cinderella's Rat* (Meddaugh, 2002) and *Bad Day at Riverbend* (Van Allsburg, 1995) both had tricky storyworlds. *Cinderella's Rat* was the well-known fairytale told from the perspective of a rat that was magically changed into a coachman. *Bad Day at Riverbend* seemed to be about a western town, but turned out to be about coloring book characters, making the storyworld change drastically in the course of the reading event. These variations allowed me to observe a range of reader response to cultural differences between their worlds and the storyworlds.

I also considered text difficulty when choosing the texts. I wanted to observe text-reader dialogues in which the text provided support to the reader. In Vygotskian terms, I wanted readers and texts to engage in dialogues located within individual readers' zones of proximal development. If a text was too difficult, the reader would not be able to understand the textual support. If the text was too easy, the reader would not need to rely on textual guidance. Texts at the appropriate level of difficulty provide challenges which encourage a reader cannot perform independently but can perform with support, encouraging the reader to problem-solve using the text (Fountas & Pinnell, 2005b).

There are numerous systems for measuring text difficulty, and rather than aligning myself with any single measure, I used three different systems. One is the Lexile system, which is used to measure either reader ability or text difficulty. For text difficulty, the measure is based on sentence length, word frequency, and other characteristics. 200L

represents a beginning reader and 1700L an advanced reader (Lennon & Burdick, 2004). Publisher-provided reading levels refer to reading levels as grade levels (2.5 means midway through second grade), and while these levels are not known for consistency, I have included them as an additional source. Fountas and Pinnell levels (also known as guided reading levels) measure text difficulty using word and sentence complexity, genre, content, print layout, text structure, and language structure (Fountas & Pinnell, 2005a, 2005b). They are commonly expressed as letters, but also correspond to grade levels. A comparison of the three measures both confirms the difficulty of establishing an exact reading level for any text and supports my claim that these books fall into second to fourth grade difficulty levels.

Table 2

*Reading Levels of Texts*

	Lexile Level	Publisher-provided Reading level	Guided Reading Level
<i>No Such Thing</i>	340L	Grade 2.5	Not available
<i>Cinderella's Rat</i>	420L	Grade 2.6	L (grades 2&3)
<i>Fly Away Home</i>	450L	Grade 4.3	Not available
<i>Knots on a Counting Rope</i>	480L	Grade 4.1	P (grades 3&4)
<i>Bad Day at Riverbend</i>	680L	Grade 2.8	P (grades 3&4)

Finally, I chose books that I thought would appeal to a broad range of readers due to variations in tone, gender and age of characters, and subject matter. Increased engagement with the text results in a richer text-reader dialogue, which I predicted would

provide richer data. The following section describes each text and my reasons for choosing it in more detail.

***No Such Thing* (Koller, 1997).** This book deals with familiar subject matter in children's literature: the monster under the bed. Being scared of this monster is a common experience for most young readers. This particular title, though, had a few twists which led me to choose it. The perspective has some complexity, as the story is told alternately from the monster child's and human child's point of view. As the story unfolds, the reader learns that the two children have quite a bit in common, including knowing more than their parents in this situation. The illustrations reveal this reality before the written text, providing me an opportunity to observe students' responses to multimodal cues. The written text also includes bits of invented "monster language"; I thought this challenge might give insight into the ways a text suggests responses to readers.

***Cinderella's Rat* (Meddaugh, 2002).** This book also works within a familiar subject area, the Cinderella story, permitting me to look for effects of intertextuality in the text-reader transaction. It is also an example of postmodernism owing to the change in perspective (Goldstone, 2001/2002): the narrator is a rat that Cinderella's fairy godmother magically transformed into a coachman. The text needs to signal this perspective change to the reader, and I thought it would be interesting to observe this communication. Other features which led me to choose this book include: challenging language, the tongue-in-cheek tone, dramatic irony, and moments of tension between information conveyed through the written language and the illustration.

*Fly Away Home* (Bunting, 1991). While the previous two texts were chosen because they dealt with familiar subject matter, this text represents the opposite. The story is about a boy and his father who are homeless and live in an airport, a situation far-removed from the daily lives of my small-town, mostly middle-class participants. I also wished to see how the readers would respond to the text's treatment of a serious social issue. The text provides great amounts of detail to help the reader understand the daily life of a homeless family; some of these, such as a fear of airport security personnel, might contradict children's prior knowledge. At the same time, the author provides many ways for readers to relate to the boy by stressing human universals such as the importance of family, friendship, and simple joys like favorite foods. The lack of a happy ending and the inclusion of notable imagery also influenced my decision to choose this book.

*Knots on a Counting Rope* (Martin & Archambault, 1997). This book was also chosen, at least in part, because of its unusual subject matter: The characters are Navajo Indians who belong to a community which in many ways is traditional and different from the everyday experiences of my participants. I also chose this book because of the way the story is told. There is a story within a story, and it is told purely through dialogue. There are no dialogue markers, so readers must sense the differences between the two characters' voices. There are also very notable layers of meaning which some readers successfully interpreted and others did not: the surface-level story, the story within the story, the boy's blindness, and the grandfather's impending death.

*A Bad Day at Riverbend* (Van Allsburg, 1995). This book begins in a small frontier town depicted in black and white line drawings. The town's sheriff and citizens

work to solve the mystery of a slimy substance that is covering the area. The ending reveals that the characters exist within a coloring book and their terror was caused by a crayon-wielding child. I chose this as a strong example of a post-modern picturebook which starts in one reality and ends in a completely different one, playing with the reader's expectation of a book (Goldstone, 2001/2002).

### **The Think-Aloud Methodology**

When I met with a reader, I asked him or her to read one of these picturebooks out loud and share with me his or her thoughts while reading. In this section, I justify the use of think-aloud protocols for this study. First, I provide a brief introduction to the way think-alouds were used in the study. (The next section, "Data Collection and Management", describes my protocol in detail.) I then define the method and explain in detail my choice to use think-aloud protocols over other data collection methods, their advantages and disadvantages, ways to minimize limitations, and the unique nature of my use of think-aloud data.

When I worked with participants, I asked them to read the texts aloud. In a few cases, texts were too difficult for readers, and in those cases I would read the story aloud. In either situation, I asked students to vocalize their thoughts as they read. This is a form of the think-aloud method. In a think-aloud protocol, participants are asked to report their thoughts continuously during various tasks (Stratman & Hamp-Lyons, 1994). Think-alouds have been used in many ways, so further clarification is warranted, particularly to distinguish between think-alouds in classroom settings and instructional settings. In instructional settings, teachers often think aloud to model metacognition for learners (Palinscar & Brown, 1984) and learners are asked to think aloud so that teachers

and other learners can hear their thoughts (Cross & Paris, 1988). Researchers use think-alouds as a way to gather data about readers' comprehension processes (Alvermann, 1984; Laing & Kamhi, 2002). The method has been successfully used in a wide range of comprehension research ranging from cognitive to sociocultural approaches (Smagorinsky, 1994) including metacognition (Baker & Brown, 1984a; 1984b; Brown, 1980; Palinscar, 1986; Palinscar & Brown, 1984; Palinscar, Brown & Martin, 1987; Paris & Myers, 1981; Pressley, 2000) and cultural text analysis (Jarve, 2002; Kovala, 2002; Kovala & Vainikkala, 1996; Shaffers, n.d.; Slavova, 2002). The use of a think-aloud methodology in these studies, all of which inform the current study, supports my choice of the protocol.

There are several reasons that the think-aloud protocol best suits my data collection. The nature of think-alouds is to make visible processes that are usually invisible; this certainly applies to my research questions which intend to uncover the discursive moves that texts make in the reader-text transaction. Think-alouds are also particularly suited for sociocultural research. The method lends itself to detailed description of processes and encourages participants to report influences of context which might otherwise go unnoticed (Smagorinsky, 1994).

I considered other possible data collection methods, but ultimately rejected them. For example, I considered using interviews, which are a common choice for qualitative research (Creswell, 1998; Strauss & Corbin, 1990). Interviews in past research of metacognition and comprehension have consisted of the researcher asking the reader to imagine a reading situation and answer questions about it (Baker & Brown, 1984b). I found this unsuitable for two reasons. First, such a situation is hypothetical. I might

learn what a reader knows how to do, but I would not be sure that this is what really happens when the reader engages with a text. Given the young age of my participants, hypothetical situations with their required abstractions make the data from such interviews even more questionable.

The second reason that interviews about hypothetical reading situations are unsuitable for this study is that they do not acknowledge the agency of text. It is impossible to know what a text “says” to an individual reader; however, in a think-aloud protocol, one can “eavesdrop” on the dialogue. On a simple level, when a reader switches from reading words aloud to sharing personal response, it marks the end of text’s utterance. More abstractly, an examination of the textual utterances preceding a reader response provides an indication of the nonverbal communication between text and reader. The result is by no means complete; for this reason I liken the method to eavesdropping. As in the case of any overheard communication, I can not know everything that was said but I can certainly hear some important information. The following data excerpts are from students’ think-alouds while reading *Fly Away Home* (Bunting, 1991) which illustrate how think-alouds can indicate the nature of textual communication.

*Written text:*

Once a little brown bird got into the main terminal and couldn't get out. It fluttered in the high, hollow spaces. It threw itself at the glass, fell panting on the floor, flew to the tall metal girder, and perched there, exhausted.

"Don't stop trying," I told it silently. "Don't! You can get out!"

For days the bird flew around, dragging one wing. And then it found the instant when a sliding door was open and slipped through. I watched it rise. Its wing seemed okay.

"Fly, bird," I whispered. "Fly away home!"

Though I couldn't hear it, I knew it was singing. Nothing made me as happy as that bird.



*Illustration: On page 16, there is a small illustration of a little brown bird perched on a ledge. On page 17, the boy is alone and watching as the bird flies through an automatic door. There are other people walking in the doorway but no one else is looking (Bunting, 1991, pp. 16-17)*

*Danielle: At the end, because of the bird, he'll want to go somewhere else. Maybe even go somewhere on the plane.*

*Connie: I think that the boy is happy because of the bird, because it made him feel that maybe someday he'll be free.*

*Harry: He can't forget about the bird or else he's gonna be all sad.*

A comparison of the three think-aloud comments gives insight regarding the how think-aloud protocols provide information about both the reader's and the text's actions during a reading event. In this data set, mentions of the bird in all three reader statements suggest that the text communicates to readers, "The bird is important. Pay attention to the bird." Additionally, these three readers all understood that the bird was an inspiration to the boy, suggesting that the text somehow told the readers, "The bird is a symbol, rather than part of the plot. Its importance lies in what it represents to the boy."

Another data collection method I deliberated was the use of a retrospective protocol in which the reader and I would review an audio or videotape of the reader engaged with a text. I decided against this for two reasons: the age of my participants and the distance from the text. A retrospective self-report is a high demand for a young elementary student and unlikely to be reliable. Similar to the interview, the retrospective protocol also yields little information about the text's role in the reading event.

While I feel confident in my use of think-aloud protocols, I also considered their methodological disadvantages, so that I could mitigate them in my research design. One criticism of think-aloud protocols comes from the realm of cognitive research, where some question a fundamental assumption behind think-alouds. The assumption is that the

observed process is a problem-solving activity, rather than a series of stream of consciousness activities (Smagorinsky, 1994). Coming from a socio-cultural perspective, and framing reading as a transaction among reader, text, and context in a zone of proximal development, I acknowledge that I share this assumption that reading is a problem-solving activity. Other criticisms of think-aloud protocols are that they are overly impressionistic, incomplete, non-causal, and reactive. In the following section I consider each of these criticisms.

Some criticize think-aloud protocols as impressionistic and therefore idiosyncratic (Smagorinsky, 1994). I aspire to reduce this tendency in several ways. First, data analysis will include systems developed by other scholars (i.e., Keene & Zimmerman, 2007; Kress & van Leeuwen, 1996; Rabinowitz, 1987). The quantity of data will minimize the possibility of idiosyncratic interpretation. I will include detailed descriptions and examples of my data coding process so that others can see and replicate it.

Others warn that think-alouds are incomplete in that they don't elicit all cognitive activity (Smagorinsky, 1994). I question whether any method can claim to elicit all cognitive activity; nevertheless, I hope to ameliorate the incompleteness of the data through my quantity of data. I have collected data from 72 reading sessions. While it is probable that each set of data is an incomplete description of how a text communicates with a young reader, I believe that patterns across data can provide reliable knowledge of the process.

Another criticism of think-aloud protocols is that they can not lead to strong findings, because the types of causal connections they suggest are not provable

(Smagorinsky, 1994). My goal, however, is not to prove beyond doubt that “when the text said  $x$ , it caused the reader to do  $y$ ”. I do believe that with sufficient patterns of data, I can support claims that certain textual features suggest certain cognitive actions to savvy readers.

The last limitation of think-aloud protocols that I will consider is the issue of reactivity, which is the extent to which the method shapes the data. Does the act of thinking aloud alter the participants’ cognitive processes? Some question whether the act of communicating while thinking places a second cognitive demand on the participant (Ericsson & Simon, 1993; Stratman & Hamp-Lyons, 1994). Conversely, another possibility is that thinking aloud increases participants’ attention to their efforts (Stratman & Hamp-Lyons, 1994). I watched carefully for signs of each during data collection. Based on personal experience, I believe that the second possibility is more likely. When readers are communicating their thoughts to another, they are more aware of them. Due to the nature of metacognition, however, I do not see this as serious challenge to validity. While the participants’ heightened awareness may have caused them to read at their metacognitive best, they still performed within their metacognitive repertoires. The data from such “best-case” reading experiences validly contributes to our understanding of how books communicate to savvy readers; working in the tradition of good reader research (Dole et al., 1991; Paris et al., 1996; Pearson & Fielding, 1991; Pressley & Afflerbach, 1995; Pressley et al., 1989), I see no reason to believe that the results would be improved at all by “average” performances. I also expect that since I worked with each reader for five sessions, this effect likely lessened over time.

Finally, in any situation where one person collects data from another, there is the possibility that the researcher inadvertently gives verbal or non-verbal cues that influence participants' responses. I limited such cues by using standardized protocol, including prompts and positioning.

My final point of discussion regarding my data collection method is the way in which my use of the think-aloud protocols is unique. Generally, the think-aloud method is used as a window through which to view a participant's thought process. In this study, which looks at text's agency in reading events, I extend this one step further: I am using the protocol as a window through which to view an interaction between the participant and a text. I acknowledge that the text speaks in ways that only a reader can hear. My task is to use the reader's reaction to infer what the text is saying. There is undoubtedly some uncertainty in this method; however, the existence of patterns of response among my fifteen participants, connected to textual cues, will increase the trustworthiness of my assertions. The following chapters will contain specific examples of this process.

### **Data Collection and Management**

Data collection took place in March, April, and May of 2006. Since my goal was to observe patterns in the ways texts communicated to readers, I chose to organize data collection around the texts. To the extent possible, all fifteen readers worked with one text, and then the next. There were occasional variations from the plan due to student absences.

With participant comfort in mind, I began with the easier texts and moved toward the harder texts. With the two hardest books, *Knots on a Counting Rope* and *A Bad Day at Riverbend*, leveling systems gave conflicting information regarding difficulty (See

Table 2). I decided to read *Knots on a Counting Rope* before *A Bad Day at Riverbend* when I sensed some of my readers were losing motivation. The weather was growing warmer and the reading sessions were losing novelty; the mystery and humor of *A Bad Day at Riverbend* seemed more engaging on these challenging last days of the study. The books were presented in this order: *No Such Thing*, *Cinderella's Rat*, *Fly Away Home*, *Knots on a Counting Rope*, and *A Bad Day at Riverbend*.

For each reading session, one participant accompanied me to the library. We shared a table, sitting on adjacent sides about three feet away from each other. This allowed the video camera to capture both of us and the book. I also used audiotape as a backup in case of video failure, but fortunately, none occurred. I used a standard protocol for each session which included an opportunity for the participant to cease participation, a question about whether the participant had already read the book, and reminders of the task. I used standard prompts to remind children to think-aloud and to assist a child who struggled to decode a word. (See Appendix A for the Standard Protocol and Standard Prompts.)

In addition to the videotape and audiotape, I took notes. I kept these field notes minimal, as my first priority was to remain attentive and provide prompts when appropriate. After the think-aloud was finished and the participant returned to the after-school program, I used the field notes to write a detailed contact summary sheet which included description and initial interpretation. I used a checklist to ensure my attention to the following phenomena: instances in which the reader and text had misunderstandings or did not share goals, in which my expectations were not met, or in which unusual circumstances occurred. I transcribed each recording as soon as possible, usually within

seventy-two hours. Often, when viewing the videotape, I would add more observations to my contact summary sheets. My records (field notes, contact summary sheets, videotapes, audiotapes, and transcripts) were labeled with pseudonyms, date, and text title.

At the end of the data collection process, I had transcripts and other materials from seventy-two reading events. With fifteen participants and five picturebooks, I had anticipated seventy-five reading events; however, in three cases the participant had previously read the picturebook, so I did not proceed. These seventy-two reading events underwent a preliminary data analysis.

### **Preliminary Data Analysis**

The purpose of this preliminary analysis was to choose the data that would best address the research question: “If the construction of meaning during reading is framed as a transaction among reader, text, and culture, then what are the characteristics of this transaction?” The criterion for evaluating the utility of data was the overall quality of the interpretation. In the tradition of good reader research, this study aims to identify the elements of successful reading events. My long term goal, to be pursued in further research, is to contribute to instructional methodology by recreating these elements of successful reading events. Within this framework, there was little value of analyzing less successful readings. Using only quality interpretations allowed this study to describe how reader, text, and culture transact in successful reading events.

### **Qualifying Readers’ Interpretations**

Qualifying readers’ interpretations is subjective. To increase the credibility of these judgments, I called upon Mr. Patrick (a pseudonym, per his request), a teacher from

Smalltown School to assist in the process. Mr. Patrick has been teaching for 14 years, with almost a decade of service at Smalltown School. His experiences range from first to fifth grade, which encompasses the range of participants in this study (grades 2-5). He also holds a Master's Degree in Education.

My assertion is that Mr. Patrick and I are well qualified to identify officially sanctioned meaning for the texts in the study. This assertion is based on our experience with this age group of students and with these texts. At the time we completed this task, Mr. Patrick had 14 years of classroom experience with this age group and I had 12. He had previously taught four of the books, and made a point to teach the fifth in with his current students, in order to observe their interpretations. I had previously taught all five books in classroom settings and had read them with individual students up to fifteen times in the course of data collection. These experiences gave us insight regarding age-appropriate expectations for the students. In our positions, we have both received professional training on comprehension, including metacognition, strategic reading, and story grammar, adding to our familiarity with the types of interpretations valued and expected from elementary students. Finally, one could argue that as teachers at the very school (Mr. Patrick) and at a similar school in the county (me), we are exactly the officials who sanction interpretations. As teachers in the community, we possess the cultural capital to determine officially sanctioned meaning. We set out to do so for the five texts in the study.

Mr. Patrick and I independently re-read the titles and developed lists of what we considered desired interpretations. We then compared our work. In most cases, Mr. Patrick and I had identified the same themes for each of the book. In one case, only one

of us had identified a particular theme: Mr. Patrick contributed the idea of the bird as a symbol of hope in *Fly Away Home*. I considered this to be a good addition to the list, as it is both important to the interpretation and present in the data, so it was included.

Mr. Patrick and I agreed that for each book, a literal understanding of the events was one important strand of interpretation. Other interpretations varied according to content. For example, the desired interpretations of *No Such Thing* were: (1) a reasonably accurate literal understanding of the events, including a correct determination of reality in this particular storyworld; (2) an understanding of the parallel structure of the book; and (3) an appreciation of the irony and/or humor of the monster and boy being afraid of each other. (See Appendix B for the desired interpretations of each text.

Having determined the desired interpretations, the next task was to develop a rubric to measure the degree to which readers achieved them. I did this with input from Mr. Patrick and from another colleague, Jeanine Beatty. Ms. Beatty is a fellow doctoral student who also studies reading comprehension and has a qualitative research background. I purposefully sought the input of both an educator and an education scholar in the testing of this rubric, as I wanted it to be credible in both classroom and research settings. Mr. Patrick and I developed drafts of the rubrics. Ms. Beatty and I then piloted them.

Ms. Beatty and I each scored the same randomly selected transcripts of readers reading various texts. After scoring independently, we compared our scores and our notes. Where we disagreed or had questions, we adjusted the rubrics for clarity. We then scored with the revised rubrics until we were satisfied with each. Final versions contain



revisions the scoring scales and criteria. (See Appendix B for the interpretation criteria for each text.)

The most substantial change was to the scoring scale. It changed in two major ways. First, I reduced the range of scores. Originally, interpretations of a theme were rated as “none”, “little”, “some”, or “deep.” In the instrument testing, it became clear that it was not necessary to differentiate between adequate and superior interpretations. The study requires successful interpretations, and adequate qualified as successful. The scoring scale was changed to “no”, “weak”, and “adequate.” At the same time, I revised the descriptors for each score in relation to the criteria. At first, I had quantified each score. For example, little was defined as one or two mentions, showing some understanding of the theme. I found that this type of quantification was not appropriate for all the themes. It was particularly ineffective for scoring literal understanding, which could not be measured by a certain number of statements that referring to it. The final versions of the rubrics contain different descriptors for each score under each theme. For example, the descriptor for adequate literal interpretation of *No Such Thing* reads, “Think-aloud statements demonstrate a functional literal understanding of the story events. Important confusions are cleared up by the end of the story.” Some interpretations were assessed using quantitative guidelines; for example, the descriptor for adequate interpretation of the parallel structure of *No Such Thing* reads, “Think-aloud statements acknowledge the parallel structure three or more times, or use the parallel structure to deepen comprehension at least two times.”

The rubric for *Knots on a Counting Rope* is an example where a criterion was revised. Mr. Patrick and I had included a criterion which required “understanding of the

story within a story.” As Ms. Beatty and I scored, we both noted that this theme was minimally present in the think-aloud statements. Further review of data convinced me that exploration of this theme was not necessary for a quality interpretation, nor was it common. Mr. Patrick agreed, contributing the insight that in a classroom, this theme would be more likely introduced by a teacher than a student. This theme was removed from the rubric. In several other cases, criteria were combined. For example, both *No Such Thing* and *Cinderella’s Rat* contain large elements of fantasy, and require the reader to determine the reality of the storyworld. At first, this determination was considered an independent theme. My collaboration in coding with Ms. Beatty and the conversation that followed convinced me that this determination was better included with the first criteria, “literal understanding.”

Developing, testing, and discussing these rubrics with colleagues helped me clarify not only the rubrics themselves but also the process. For example, I came to the important realization that at this stage of analysis, I was looking at the interpretive product rather than process. Because the purpose at this stage was to identify successful interpretations, I was unconcerned about student misunderstandings along the way, provided that they were corrected before the end of the reading event. In contrast, when I analyze the successful reader’s cognitive and metacognitive behaviors later in the study, in order to describe reader behavior, I am more concerned with intent than result. These differences in protocols reflect the different purposes of each stage of analysis.

Another important point that arose in these scoring dialogues is the acknowledgement that a reader does not need to have adequate scores for each theme in order to have a successful interpretation. Some readers explored one or two themes in

great depth while not addressing another at all, and still achieved high quality interpretations. For example, only Connie achieved “adequate” scores in all three themes of *No Such Thing*. The other readers who were ultimately judged most successful had too few mentions of the humor/irony to achieve adequate for that theme, but their interpretations scored high in the other themes, and overall, their interpretations were quite successful.

### **Identifying Useful Data**

The rubrics for assessing quality of interpretations were put to immediate use. I first used the rubrics to score the interpretations from each of the seventy-two reading events. I then looked at readers to determine who generally was successful. I chose five readers whom I feel provided the most illustrative readings: Brad, Chad, Amy, Connie, and Duncan. The first four were the most successful of all the readers. Duncan was included because he was highly successful for his age group (second grade) and reading level (low, just on grade level). He is the only second grader and only low reader in the group. Reading levels, as in chapter 3, are described as high, average, or low by their teachers, in terms of grade level expectations. (See Table 1 for each reader’s grade and reading level.) With this more manageable set of data, representing twenty-four reading events with effective readers and successful interpretations, I began my formal data analysis.

### **Conclusion**

In this chapter, I presented the methodology for the present study. I began by contextualizing the study with descriptions of the participants and setting. I outlined the processes of collecting and managing data, with special attention paid to the think-aloud

protocol. I also described the process of identifying the data which would best inform the current study.

Next, I present the data analysis methodology which I employed. The conceptualizations and analyses are complex, multi-layered, and at times indirect, and they therefore require much explanation. The next chapter will discuss the evolution and application of coding systems for all three agents (reader, text, and culture) as well as my overall analytic protocols.

## **CHAPTER 4: DATA ANALYSIS**

This work addresses the question, “If the construction of meaning during reading is framed as a transaction among reader, text, and culture, then what are the characteristics of this transaction?” Sub-questions address the separate roles of the agents: reader, text, and culture. In order to address this question, I observed a series of reading events in which elementary school students read picturebooks aloud and shared their thoughts while reading. This collection of think-aloud statements comprised the data for the present study. In this chapter, I will describe in detail the analytic process, including the development of codes, the coding method, and the manner in which I synthesized data patterns into findings.

Data analysis is simpler when precedents exist; however, this work covers new ground in several ways. The cultural theory of reading is young and still in development (Smagorinsky, 2001). There is only a small body of research which explores the transaction of reader, text, and culture in individual reading events, and even less that uses think-aloud data to do so. The examination of the three agents required a novel conceptual framework: this work conflates reading response theory (Rosenblatt, 1978, 1994), sociocultural theories of reading (Vygotsky, 1978), and multiple strands of literary theory (Kress & van Leeuwen, 1996; Rabinowitz, 1987; Volosinov, 1973). This work is also unusual in its focus on elementary readers and children’s fictional picturebooks (Thacker, 2000). These innovations in design required me to develop an original data analysis protocol, which I will present in this chapter.

### **Development of a Coding System**

This study is informed by several theories and strands of research, and as I contemplated the coding system used to describe reading behaviors, I looked to each of them. I reviewed many works in fields such as transactional reading, narrative conventions, and multimodality, considering many of their instruments as possible tools for data analysis. In many cases, I tested the instruments, resulting in numerous passes through the data and multiple preliminary analyses. No one existing instrument was sufficient for the present study. This was not a surprise, as the present study uses a developing theoretical framework and novel methods. The lack of a suitable instrument required me to develop one. I did not begin anew, but rather started with the existing models and noted how they did and did not address my research questions. At times, I was able to modify existing instruments, while in other cases I had to create original instruments, using a grounded theory methodology of labeling that which emerged (Glaser, 1992). The result is a data analysis protocol that is built on existing knowledge of transactional reading, yet adapted to the current study and its focus on children, picturebooks, and a model of reading that includes culture as an agent. This section describes the development of codes and data analysis procedures for this study, beginning with the general and then moving to specifics for each agent: reader, text, and culture.

### **Defining the Unit of Analysis: The Utterance**

I used the pages of written text to define units of analysis. This was appropriate for several reasons: First, it is the most faithful to the intentions of the books' creators. Each decision regarding page breaks was made intentionally; these are the utterances the author and editor thought best. Another strength of this method lies in its utility when it comes to analysis. Page breaks provided a clear, consistent, and generally uncomplicated

guideline. Finally, readers also seemed to consider a single page of written text as an utterance. While readers sometimes interjected a comment while reading a page of text, they almost always spoke at the end of a page.

I began, then, by organizing my data so that I could at simultaneously look at one page of text and the think-aloud statements that readers made while on that page. I then looked at the read-alouds for evidence of the roles performed by reader, text, and culture as they transacted to construct an interpretation. The next three sections describe the development of the codes I used to describe the roles of each agent. I address reader, then text, and lastly, culture.

Readers were the simplest agent in terms of developing a coding system to describe their actions. There are two reasons for this relative ease. Firstly, I drew on the large body of existing scholarship that describes readers' behavior while reading (i.e., Baker & Brown, 1984a; Brown, 1980; Jacobs & Paris, 1987; Pressley, Johnson et al, 1989). The second reason is that think-aloud statements give a direct view of reader behavior. While this view may be incomplete, as discussed in Chapter 3, there is much to learn from what is seen. The reader, in describing what he or she is thinking, gives direct evidence of behavior. For example, while reading *Knots on a Counting Rope*, Duncan stated, "The boy will win the race, or tie" (pp. 23-24). The boy is in a race, and Duncan is predicting its result.

The process of developing a coding system to describe reader behavior began with a review of existing scholarship about strategic reading. Review of pertinent literature yielded a list of previously identified and described strategic reading behaviors that were the foundation of the instrument. These behaviors, which were used as codes,

are: questioning, predicting, making connections (text-to-self, text-to-text, and text-to-world), summarizing, inferring, synthesizing, evaluating a comprehension task, planning strategic action, and regulating cognitive behavior (Baker & Brown, 1984a, 1984b; Brown, 1980; Brown et al., 1996; Feldt, Feldt, and Kilburg, 2002; Jacobs & Paris, 1987; Palinscar & Brown, 1984; Yuill and Oakhill, 1988).

I also allowed codes to emerge from the data. I dedicated many hours to preliminary analysis, passing through my data in its entirety several times. During this preliminary analysis, my methods were influenced by grounded theory (Glaser, 1992). When reader behaviors did not fit the codes developed from existing scholarship, I wrote memos which explored the phenomena. I then sorted through the collection of memos, looking for themes. These themes led to the development of new codes which will be described shortly.

**Reader behavior codes.** As I moved from preliminary analysis toward more formal coding, I used this list of reading behaviors as my codes: questioning, predicting, making connections, summarizing, inferring, synthesizing, self-monitoring, noting unknown words, directly referring to the illustration, sympathizing with the character, interrupting the standard utterance, stating a personal reaction, and experiencing confusion. In the next section, I will define and describe each code. (See Appendix C for a complete list of reader codes, definitions, and examples.)

***Questioning.*** Reader behavior was coded as questioning when the reader asked about the events, characters, or other elements in the text (Keene & Zimmerman, 2007; Pressley & Afflerbach, 1995; Pressley et al., 1989). It was not necessary that the idea be



phrased in the form of a question. For example, the statement, “I wonder how she will solve that problem” was coded as a question.

***Predicting.*** Predicting was defined as presenting an idea of what might happen next or later in the text (Keene & Zimmerman, 2007; Pressley & Afflerbach, 1995; Pressley et al., 1989). There were times when prediction overlapped with questioning. An example is the question “Will the prince use the glass slipper to find Cinderella?” In cases like this, the behavior was coded as a prediction. My guideline in these cases was to label the behavior with the more specific descriptor. While the idea was phrased as a question, this reader was not just asking what might happen but presenting a specific idea of what might happen, making it a prediction.

***Connecting.*** Making a connection was defined as noting a relationship between one’s own knowledge or experiences and the text (Keene & Zimmerman, 2007; Pressley & Afflerbach, 1995; Pressley et al., 1989). Connections were further divided into three sub-codes. Text-to-self connections connect the text with one’s personal experience. Text-to-world connections connect the text with one’s knowledge. Text-to-text connections connect the text at hand to a previously encountered text. These connections can involve text in any media; for example, books, movies, poems, comic strips, paintings and songs can all be considered texts (Keene & Zimmerman, 2007).

***Summarizing.*** Summarizing was defined as retelling, often in a shortened version, the events of the story (Keene & Zimmerman, 2007; Pressley & Afflerbach, 1995; Pressley et al., 1989). It is important to note that when summarizing is performed after reading, it is expected that the reader present a shortened version that includes important information (Dole et al., 1991; Marzano, 2010; Mills, 2009). In the context of

the present study, readers were summarizing as they read, and this was not an expectation.

***Inferring.*** Inferring was defined as making a conclusion not in the text based on information from the text (Keene & Zimmerman, 2007; Pressley & Afflerbach, 1995). It is important to note that any prediction could be considered an inference, as the reader is using textual information to make the prediction. In the present study, however, I followed the guideline of coding with the more specific description, so predictions were coded separately from inferences.

***Synthesizing.*** Synthesizing was defined as combining separate ideas to make a generalization (Keene & Zimmerman, 2007; Pressley & Afflerbach, 1995). The ideas that the reader combines may all come from the text, but often some are extratextual. When the ideas are all from the text, synthesis can look like inference. The distinguishing factor is that when synthesizing, a reader combines separate ideas to make the generalization. I further qualified these codes: When information came from single modality on a single page of text, the reader behavior was coded as inference. To be considered a synthesis the information would have to be (a) written information two or more separate pages; (b) information from two separate modalities (i.e., the illustration and the writing); or (c) information from both the text and outside the text.

***Self-monitoring.*** Self-monitoring is described as noting, planning, or evaluating one's own comprehension process while reading. Self-monitoring, also known as self-management, can be disassembled into the component parts of evaluation, planning, and regulation (Cross & Paris, 1988; Pressley, 2002). I did use sub-codes to note the

component parts of self-monitoring, but there were very few instances of each, and eventually eliminated the subcodes.

***Rereading.*** Reader behavior was coded as rereading whenever the reader returned to text and read a passage again (Pressley, 2002). This sometimes occurred while the reader was in the middle of the page of text; for example, the reader read one sentence and then read it again before advancing to the second sentence. Other times, it occurred in the middle of the think-aloud: the reader was sharing a thought, and returned to reread a passage of text aloud as part of the think-aloud.

***Directly referring to the illustration.*** This is a code I developed based on preliminary data analysis. This code was applied when readers specifically mentioned or pointed to the illustration. It was not used when readers merely referred to information presented by the illustration. This code was created with the intention of learning more about multimodality and how it affects reading transactions that involve picturebooks.

***Stating a personal reaction.*** This code did not come from existing scholarship. I introduced it to label reading behaviors such as stating a personal judgment or expressing an emotional reaction. For example, a reader might say, “I can’t believe it!” or “That’s not a good idea” while reading. In some instances, including the response “That’s not a good idea” these behaviors might also be described as synthesis (Keene & Zimmerman, 2007); however, in the current study, they were coded as personal reactions, because it is a more specific descriptor.

***Sympathizing with the character.*** Sympathizing with the character is another reader behavior identified during preliminary data analysis. I applied this code when a reader noted a shared feeling or commiserated with a character. It is similar to making a

connection, but in the case of sympathizing with the character, the connection is not based on previous experience (like text-to-self connections) or prior knowledge (like text-to-world connections). An example is the statement, “If my sisters were mean to me like that, I’d hate having to help them.” The hypothetical nature of this statement disqualifies it from being classified as a connection. Statements such as this were coded as sympathizing with the character.

***Interrupting the standard utterance.*** This is another new code that I developed based on preliminary data analysis. Earlier in this chapter I discussed how this study defines an utterance in a picturebook to be a complete page in the text. Whenever a reader interrupted that utterance, I applied this code. For example, if a reader stopped reading in the middle of the written text and began to think-aloud, it was considered an interruption to the standard utterance. Another example is if the reader “read” the illustration and began to think-aloud without reading the written text.

**Complexities during coding.** As began coding reader behavior, I saw the need to further develop my methodology. A complexity that emerged early in preliminary coding was overlap among codes. As noted in the previous code descriptions, there is potential for overlap among prediction, inference, and questioning and between inference and synthesis. My guideline in these cases was to label each behavior with the more specific descriptor.

The use of multiple codes came up again, in a different way, when coding longer statements. This was not a question of grammar or hierarchies as in the previous examples, but rather an issue of whether a reader could perform separate cognitive

behaviors in a single statement. One of Duncan's think-aloud statements provides an example:

*Written text:*

"I think there's a monster under my bed," Howard told his mommy when she came in to kiss him goodnight.

Howard's mommy laughed. "This old house is playing tricks with your imagination," she said. "You know there are no such things as monsters."

"Now, be a good boy and go to sleep."

*Illustration:* The boy is standing on bed, holding his teddy, and facing away. Mom is at the end of bed talking to boy. The lampshade hints at a monster shape (Koller, 1997, p. 3).

*Duncan: He's scared and it does look like there's a monster there, sort of...see the teeth? When it gets dark there will be a monster under the bed and he'll see eyes peeking out.*

In his response, Duncan performed three separate reading behaviors. First, he inferred that Howard is scared. He then synthesized information from the illustration and the written text. Lastly, he made a prediction about Howard seeing the monster. This single response was coded as containing all three reader actions. When warranted, think-aloud statements were assigned multiple codes. This usually happened with longer think-aloud statements, as in Amy's response to page twenty-six of *Cinderella's Rat* (Meddaugh, 2002). Amy thought aloud, "I'm guessing that it the movie, because I've seen the movie, her slipper falls off and they don't get home in time and everything turns back to normal." Amy makes a text-to-text connection between the book and the movie *Cinderella*. She then uses this connection to perform a second behavior, making a prediction.

There were instances, however, in which longer think-alouds were assigned only one code, as Connie's response to page twenty-one of *Cinderella's Rat* (Meddaugh, 2002). Connie responded, "When I read 'the newt' I was thinking about a TV show

called *Catscratch* and one of the characters is in love with newts and his name is Waffles. He went to a pet store and he took the newt and ran out of the store.” While this think-aloud statement is lengthy, it performs just one cognitive activity. It was coded as a text-to-text connection.

I also had to make a decision regarding whether the same behavior performed twice in a single think-aloud would be coded once or twice. I decided that if each action could stand on its own, it would be coded twice. Chad’s think-aloud in response to *Cinderella’s Rat* (p. 21) provides an example. Chad said, “The wizard is going to say ‘girl’ next, or something else is going to happen, like she turns into a different animal.” This think-aloud contained two separate predictions: that the wizard would say ‘girl’ and that the girl would turn into a separate animal. It was coded as two acts of prediction. On the other hand, if multiple sentences served to develop a single prediction, it was coded as one prediction.

**Strengths and weaknesses of codes for reader behavior.** As I coded the reader think-aloud statements, I saw both strengths and weaknesses regarding this instrument. The effectiveness of coding by reading behavior was somewhat confirmed when readers behaved in ways that were coded similarly. For example, all of the readers who responded to pages 6, 10, 17, and 20 of *No Such Thing* responded with synthesis statements. The responses to pages 4, 13, 15, 18, and 19 were a combination of syntheses and predictions (which often are a type of synthesis). These clusters of reader behavior pointed toward particular textual cues or narrative conventions that led readers toward these behaviors, and I looked forward to exploring these possibilities when I analyzed the transactions among agents in the reading event.

This coding instrument was less satisfactory in other circumstances. For example, there were times when the difference between one code and another seemed based more on grammar than meaning. For example, in response to page 4 of *No Such Thing*, Brad said, “I guess its like, Howard’s dream, and he’s having a nightmare about monsters.” This was coded as a synthesis. Had he instead asked, “Is this a nightmare? Is Howard dreaming up the monsters?” I would have coded the statement as a question, although the difference between the two statements is trivial in terms of meaning. I considered coding these types of responses by content, but realized that doing so would unintentionally blur the boundaries dividing the agents. Topics like nightmares and monsters fall under the role of text (if it is directly mentioned in the text) or culture (if the statement reflects extratextual knowledge.) Instead, I decided to note the weakness for now and later see how it affects any conclusions I might draw from data

As mentioned earlier, the codes for readers’ behaviors were the easiest to develop. There is a large body of scholarship in general consensus about the cognitive and metacognitive behaviors performed by successful readers. These behaviors were quite clearly evidenced in the reader think-aloud statements, as illustrated in the examples above. Complications arose but were resolved, and the result is an instrument which I am confident reflects elementary reader behavior, picturebooks, and the cultural theory of reading.

### **Describing Textual Behavior**

Describing the role of text is a challenging task, more challenging than describing the role of the reader. While reader behavior is clearly evidenced in reader think-aloud statements, textual behavior is much less visible, and can only be viewed indirectly

through the think-aloud data. Textual behavior also has not been described in a cohesive body of scholarship such as that which exists for reader behavior (Meek, 1998; Snow, 2002). While this poses a challenge, it also adds importance to the current study.

Finally, the behavior of picturebooks is further complicated by their multimodal nature.

Picturebooks are defined by multimodality: the definition of a picturebook is a book in which written and visual text are interdependent (Kiefer, 1995; Moebius, 1986; Sipe, 1999) and the combination of the two is stronger than each is alone (Moebius, 1986; Sipe, 1999; Stewig, 1995).

Being multi-modal, picturebooks convey information in different ways. The most common sources of information are the written language and the illustrations, but there are other ways that picturebooks carry messages. For example, there are visual aspects to the written text: when one word is larger or italicized this affects the way it is read. Meaning can also be expressed through materiality. Physical characteristics such as a book's size, shape, endpapers, paper choice, and binding, as well as the interplay between these features and other modes present, all can contribute to meaning (Arizpe and Styles, 2003; Moebius, 1986; Pahl and Rowsell, 2005; Sipe, 1999).

Below I provide one page of text, from *Cinderella's Rat* (Meddaugh, 2002) and five corresponding reader think-alouds which demonstrate the text's multimodal agency.

*Written text:*

I was born a rat.

I expected to be a rat all my days.

But life is full of surprises.

*Illustration:* A rat sits in front of a pumpkin. The rat's posture and hand gestures suggest he is speaking to the reader. A cat is crouching behind the pumpkin; only ears and tail are visible (Meddaugh, 2002, p. 3)

*Amy: The rat might turn into something.*



Brad: *I guess it is the story of a mouse and his life changes somehow.*

Chad: *Since the cat -- I guess these look like cat ears, and the cat is going to chase the mouse, or the rat*

Connie: *Since I see a cat in the background, I think they're gonna get into a fight, and the cat's going to chase him*

Duncan: *Some cats can chase after them, the rats, and then they run away. And surprise him.*

These pieces of data are from five separate reading events; each reader read with me individually. I present them in aggregated form, however, because as a group they demonstrate how a text may act in several different ways. In Amy's and Brad's reading events, the text contributed information via written text only. (Amy might also be integrating the title and cover illustration, but there is no firm evidence of this in her think-aloud.) When Chad and Connie read the same page, the text acted through illustration only. In Duncan's reading, the text acted through written text and illustration simultaneously. This shows how picturebooks are multi-modal and heteroglossic and demonstrates how the different modes and voices interact differently in each reading event.

This complexity of picturebooks is reflected in the instrument used to describe their behaviors. The conceptual framework of the study required an instrument that could accommodate multimodality, heteroglossia, and the cultural theory of reading. It needed to be child-centered; that is, that all analysis had to stem from the children's readings of the picturebooks, rather than my perception of the reading event. No one existing study provided a satisfactory instrument, so I designed one. I borrowed from different existing instruments and then filled in gaps and made adjustments as needed. I began with Rabinowitz's list of narrative conventions, which describes the way written text acts in adult fiction (1987); preliminary analysis allowed me to test and modify his catalog of

textual behaviors to suit children's picturebooks. Other works addressed the multimodality of text and the roles played by visual elements (Kiefer, 1995; Kress & Van Leeuwen, 1996; Moebius, 1986; Sipe, 1999; Stewig, 1995); I used elements of their work to fill gaps and create a tentative instrument to describe textual behavior.

This initial instrument required much revision. This came as no surprise, for several reasons. I cobbled the instrument together from disparate works, few of which addressed children's literature. None addressed children's literature from a child's perspective; each study consisted of an adult researcher analyzing text, rather than gathering data from actual reading events with young readers (Kiefer, 1995; Kress & van Leeuwen, 1996; Moebius, 1986; Rabinowitz, 1987; Sipe, 1999; Stewig, 1995). Also, none of the prior studies considered text an active agent in a reading transaction. For all of these reasons, this initial instrument was merely a starting point.

It took several passes through all of the data to fully develop the instrument for coding textual behavior. At first, I thought that describing textual behavior would be as simple as coding narrative conventions using a checklist. As I progressed, I saw that multimodality complicated the coding procedure greatly. What followed was a long period of trial and error looking for the most useful way to describe how text acted. After months of studying data and writing memos, I concluded that it was necessary to code textual behavior in four separate ways: the modes of text that were evidenced in the think-aloud statements, the types of textual information that entered the think-aloud statements, the relationships between the modes of text, and specific conventions that acted in the think-aloud statements. Appendices D, E, F, and G present the four categories, codes within each category, and examples of each code.

**Modes of text in action.** The first question I asked as I examined textual agency was, “Which mode or modes are acting?” I looked for references to textual information in the think-aloud statements, and then determined whether that textual information came from the written text, the illustration, neither, or both. (See Appendix D for a list of codes used to describe modes of text in action, as well as definitions and examples.) This example from *Cinderella’s Rat* (Meddagh, 2002, p. 12) is an example of text acting through written text:

*Written Text:*

When we got to the castle the girl ran off to the ball.

Kitchen smells drew me like a magnet.

"Make yourself useful, boy!" Said the cook.

"Bring me some flour from the larder."

*Illustration:* The cook has a big spread of food on the table and is talking to the boy.

*Brad:* He's hungry and he wants food but the cook says "go get me some flour."

In this example, Brad notes that the boy is hungry, which he inferred from the phrase “Kitchen smells drew me like a magnet.” Brad also paraphrases the words of the cook. Both items of textual information point to the agency of the written text. The need for a fifth code emerged, as I discovered that sometimes a think-aloud evidenced textual information with indication of the mode of text that acted, as in this example:

*Written text:*

My parts started to come and go

changing

and rearranging...

until at last I was ME.

But...

*Illustration:* This illustration is a whirlwind that starts with the boy, has 2 boy/mouse transition components, and ends with the boy changed back into a rat.

*Connie:* I’m thinking that the sister will also turn back in to a rat and then they’ll be back to normal again.

The think-aloud statement is based on the textual information that the boy turned back into a rat. This information, however, was communicated through both written text and illustration, and there is no way to determine which mode acted in this particular transaction.

**Types of textual information.** The second question I posed as I examined text's agency was, "What types of information is text communicating, and how?" I found that text presented information about a character, a character's action, a character's words, objects, and setting. (See Appendix E for the complete list of codes used to describe types of textual information, as well as examples of each.) Each of these types of information could be communicated through either the written text or the illustration. Below is an example of information about the character communicated through written text in *No Such Thing* (Kohler, 1997):

*Written Text:* Howard loved the old house he and his family had just moved into. He loved all the neat little nooks and crannies, and the large windows that nearly touched the floor.

He couldn't wait to explore all the funny little closets and cupboards.

*Illustration:* Boy standing on landing of old house, smiling.

*Brad:* He's in love with his new house.

In this example, Brad's think-aloud consisted of a synthesis of information about the character provided through written text. In another instance, Amy responded to information about a character presented through the illustration. While reading *Bad Day at Riverbend*, she stated, "Oh, my goodness. This guy, I think he's the coachman, he's covered in the slime."

**Relationships between modes of text.** The third question I asked as I examined textual agency was "What is the relationship between the written text and the

illustration?” In alignment with existing scholarship, I coded the relationship as complementary, contradictory, or congruent (Kress & van Leeuwen, 1996). (See Appendix F for the complete list of codes used to describe the relationships between modes of text, as well as definitions and examples of each.) When modes have a complementary relationship, they share the same goal. While they usually do not convey exactly the same information, they complement each other. A contradictory relationship, on the other hand, is one in which the written text and the illustration do not share a goal and work against each other. Here is an example of a contradictory relationship from the end of *Bad Day at Riverbend*:

*Written Text:*

But just as they came over the hill, they were frozen in the bright light that suddenly filled the sky.

*Illustration:* There are black and white line drawings of 4 men on horses – all are slimed. Then, on the far right side there is a color, realistic drawing of a young person’s hand coloring one of the horses with a red crayon. (p. 27).

The illustration includes an important element not mentioned in the written text: a child’s hand coloring one of the horses. This information contradicts the information presented by the written text on this page and throughout the book. The final type of relationship is congruency, in which the two modes neither share a goal nor contradict each other; rather, they operate independently toward their own goals.

**Specific textual conventions.** The final question I asked as I examined textual agency was “What specific textual conventions are at work?” As I developed the list of codes to describe specific textual conventions, I referenced theories of fiction (Rabinowitz, 1987), children’s literature (Doonan, 1993; Goldstone, 2001/2002; Meek, 1988, 1996; Sipe, 1999), visual grammar (Kress & van Leeuwen, 1996), and multimodality (Arizpe & Styles, 2003; Kirk, 2000; Pahl and Rowsell, 2005). In the end,

however, the list of specific textual conventions was a combination of conventions described by Rabinowitz (1987) and new conventions that emerged from the data. As I moved from preliminary to more formal data analysis, there were thirty-nine codes for specific textual conventions. These ranged from simple (punctuation) to more complex (false claims) and involved both written text (again, both punctuation and false claims) and illustration (multiple components to illustration). (See Appendix G for the complete list of codes used to describe specific textual conventions, as well as definitions and examples of each.)

**Complexities during coding.** The development of a coding instrument was a long process with many adjustments, as is typical in the grounded theory tradition. Despite the length of the process, there was only one notable complexity. When I began to conceptualize the methodology for this study, I wanted to use the think-aloud statements as my sole source of data. I was critical of other scholarship in which adult readers made judgments about children's reading events, believing that the level of inference was too high. My intention was to view the agency of text (as well as that of reader and culture) entirely through readers' think-aloud statements, removing adult perspective. I succeeded in this goal when examining the agency of reader and culture, but for the agency of text, I only partially fulfilled it. I relied on reader think-aloud statements to provide evidence of the modes of text and the types of information that transacted in a reading event. For the relationships between modes and the specific textual conventions, however, I used my own judgment.

This use of my own judgment for those two categories of codes was required due to a lack of think-aloud data that specifically addressed those categories. In the case of

relationships between modes, there was no data that specifically mentioned or referred to these relationships, and it is likely that the young readers in the study were unaware of the distinctions between complementary, contradictory, and congruent relationships. Yet, it seemed that the relationship between modes influenced the transaction among agents and was worth taking into account. For example, I wondered if readers were more likely to transact with both written text and illustration when the two modes had a contradictory relationship. For this reason, I proceeded to identify the relationships between modes myself, independent of the think-aloud data.

In the case of specific textual conventions, there was also little data that referred to them. Occasionally, a reader mentioned one convention or another, but even in those instances, it seemed that there were multiple conventions at work. This page from *No Such Thing* (Kohler, 1997, p. 20) provides an example of multiple textual conventions on one page:

*Written text:*

"Really?" He said. "My mommy says there are no such things as boys. She never believes me when I hear boy noises at night."

"I know," said Howard. "Mine never believes me either."

Howard and monster sat slowly shaking their heads, when suddenly Howard started to smile.

"Come here," he said.

He leaned close and whispered in Monster's ear. Monster sniggled and nodded.

Monster crawled *on top* of the bed. Howard crawled *under* the bed.

"Oh, Mommy," they both called together. "Mommy, come quick!"

*Illustration:* The boy is whispering in monster's ear, and both are laughing.

On this page of text, there are six textual conventions: character confusion ("Really?"), a false claim ("My mommy says there are no such things as boys."), typeface cues (italics), repeated words (never believes me), words that indicate emotion and excitement (smile, "Come quick!"), and a dialogue tag positioned to provide emphasis ("Oh, Mommy," they

both called together. “Mommy, come quick!”). It was unrealistic to rely on the think-alouds to provide evidence of these multiple conventions, when most think-alouds did not provide evidence of any. It is also likely that readers were unaware of which conventions drew their attention to specific parts of text; this is an advanced metacognitive move. For this reason, I decided it best that I identify the specific textual conventions present on each page of text.

**Strengths and weaknesses of codes for textual behavior.** The above-mentioned shift in data from think-aloud statements to text in the coding of the relationship between modes and specific textual conventions is one weakness of the coding instrument. Another weakness is one that pertained to all coding based on think-aloud statements: think-alouds provide evidence of some of the transactions, but a lack of evidence does not indicate a lack of transaction. Whether analyzing the role of reader, text, or culture, I acknowledge that the think-aloud data does not provide a complete picture of the transactions in a reading event.

Overall, however, this instrument has several strengths. It is the first instrument developed to analyze the role of text that builds on the cultural theory of reading. It is child-centered, evidence-based, and includes multiple modes of text. It was also paired with a preponderance of data: seventy-five reading events, later winnowed to twenty-four. The stability of the instrument through this data analysis provides a certain measure of its credibility in describing the agency of children’s fictional picturebooks.

This section described and provided rationale for my approach to coding and analyzing data related to textual behavior. I explained how I used applicable existing scholarship as a starting point and made additions and adjustments based on the



methodology and data from the current study. I listed and described codes to describe textual behavior, including those which specifically address the multimodal nature of picturebooks. In the next section, I shift to another agent, as I describe analysis of the role of culture.

### **Describing Cultural Behavior**

My final research sub-question asks, “How does culture fulfill its role in the reading event?” Compared to reader and text, culture was the agent for which it was most difficult to develop a coding system. Culture is a broad, complex, and often hidden factor. I chose not to focus on culture in terms of racial background. With only five readers, I would be unable to draw any conclusions regarding culture’s impact on a reading event. Instead, I decided to study only those aspects of culture that were evident in the reading event. In this study, the broad concept of culture is narrowed down to the more specific notion of cultural knowledge (Bourdieu, 1990) as cultural knowledge could be viewed through the reader think-aloud statements. Still, complications arose.

Throughout this work, Latour’s Paradox (1993) has been at play: there will be tension when one tries to examine isolated elements in a hybridized world. In a reading transaction, separate agents work together in ways that change them all; reader, text, and culture become entwined. This hybridization occurs outside of reading events as well: cultures are created by people, and texts are created by people as reflections of culture (Bourdieu, 1990; Vygotsky, 1978). I needed to draw particularly careful lines between text and culture.

The separation between text and culture is complicated by the notion of genre.

Genre, in literary theory, can be described as the culture of texts (Rabinowitz, 1987; Volosinov, 1973). For example, genre intimates that a fictional work will contain the basic elements of story grammar: characters, setting, conflict, and resolution. Genre is essential, as it allows the dialogic communication between reader and text (Rabinowitz, 1987; Volosinov, 1973). For example, a genre allows the reader to assume that a story will contain a conflict, so as the reader begins, he or she looks for clues regarding what the conflict and its solution will be. The text might conform to the norms of the genre, or veer from them in order to surprise the reader; in either case, genre plays a role in the reading event. In this fashion, the reading event depends on both reader and text understanding the genre, or the culture of the text. This study, however, requires that the notion of genre be parsed into distinct notions of the role of culture and the role of text.

This study distinguishes between the cultural information that is located within the text and cultural information which is not. Sometimes, cultural information is directly stated, as in this example from *Knots on a Counting Rope*: “I rode up the canyon fast, to bring the grandmother. It is not a good sign for a child to be born without a grandmother’s blessing” (Martin & Archambault, 1997, p. 13). In cases like this, the direct statement of the cultural norm gives it entry into the reading event. It is made more accessible to the reader, which greatly increases the possibility of codified resonance. In many cases, the text further supports the reader by using narrative conventions. An example of a narrative convention is a word that is typeset in boldface or italics, indicating that the word has a special importance. Rabinowitz listed premonitions, as well as threats, warnings, and promises, as narrative conventions that draw a reader’s attention (Rabinowitz, 1987). In this case, the reference to a “good sign” is a narrative

convention. Had the author written, “The grandmother wanted to bless the child,” the cultural information might be less noticeable. Both directly stated cultural content and the use of narrative conventions to highlight particular cultural content are behaviors of the text.

The role of culture, then, is extratextual cultural information. Often, this cultural information is knowledge about cultural norms that pertain to a specific book. For example, an understanding of Native American spiritual beliefs will allow a reader to more deeply understand *Knots on a Counting Rope*. The text does not directly state other items of cultural knowledge that enter the reading transaction. For example, while the text did state, “It is not a good sign for a child to be born without a grandmother’s blessing,” the text did not directly signpost the blessing, which read “He will walk in beauty to the east...to the west, to the north, to the south, he will walk in beauty...forever” (Martin & Archambault, 1997, p. 16.) The reader who recognized this as a blessing would read it with a ceremonial interpretation. A reader who did not might try to comprehend it literally: Will the boy go on a long walk?

In this way, a reader who possesses and utilizes cultural information from outside of the text will be able to understand portions of the story more deeply. One might consider a reader’s background knowledge as the role of the reader, as Rosenblatt (1978, 1994) did. For this study, however, I am focusing on the agency of reader, text, and culture within the reading event. The focus is on the ways that each agent acts and the description of these behaviors. A reader’s previous experience or knowledge affects his or her actions in the reading event, but does not constitute those actions. Cultural knowledge is conceptualized as an independent agent, for the purpose of describing

culture's role in greater detail.

**Developing a system to code cultural behavior.** I turned to previous research for precedents in analyzing cultural behavior. In research using cultural text analysis, culture's role was described using categories such as value orientations, stereotypes, discourses, presuppositions, frames of reference (Jarve, 2002), responsibility, discipline, isolation, decadence, egotism, control, indifference, reality, social order/ justice, what makes a happy ending, guilt/remorse, the need for a clear resolution (Shaffers, 1998), male/female roles, justice, and reality/fantasy (Slavova, 2002). These categories overlapped with some of those described by Rabinowitz (1987): deviations from societal norms, rules of snap moral judgment (for example, that a character's outward appearance often suggests a moral quality), rules of realism, and rules of inevitability (for example, "foolproof schemes" will not prove to be foolproof and warnings will manifest).

While I was able to borrow many ideas for the description of culture's role in picturebooks, I was unable to use the coding system developed by any one researcher or body of research. In the case of the Cultural Text Analysts, the existing reports do not clearly describe methodology. Moreover, each researcher seems to have use a different coding system. Nor did Rabinowitz's work provide a model of data analysis, as he did not perform a qualitative or quantitative study; rather, his work is anecdotal and theoretical, based on his many years as a professor of literature (Rabinowitz, 1987). Attempts to synthesize these coding systems were unsuccessful, as they differed in important conceptualizations. For example, determinations of reality were considered an outlier in one study (Jarve, 2002), a code in another (Schaffers, 1998), and a category in another (Rabinowitz, 1987).

I also found little analytical guidance in work based on the cultural theory of reading. On one hand, this is surprising, as my conceptual framework relies on this notion. At the same time, there is only one other study based in the cultural theory of reading, and its focus is different. That study considers how meaning is constructed in a classroom when a group of readers are asked to create a new text (an illustration) based on one text (Smagorinsky, 2001).

It became clear that my original use of the cultural theory of reading would require an original coding system and protocol. In the next section, I describe the development of my codes, as well as the theory that guided my decisions regarding them. I then present the final coding system used to analyze the ways in which culture acted in the reading events observed in this study.

**How does a think-aloud statement demonstrate cultural knowledge in action?** The process of developing a coding system which drew on previous research, reflected the theoretical framework of the study, and usefully described the behavior of culture was challenging. I performed many preliminary analyses and made many adjustments before arriving at a final protocol and code list. This preliminary analysis used the all of the data from the study: think-aloud transcripts of five readers reading up to five common texts, for a total of seventy-two reading events. I analyzed the data no fewer than five times during this preliminary analysis period, enough to adequately experience the effectiveness of the coding system and make necessary adjustments.

The first step was to accumulate all of the think-aloud statements that evidenced cultural behavior, defined in this study as extratextual cultural knowledge. The example below illustrates the identification of extratextual cultural knowledge. The chart lists all

five readers' responses to the first page of *No Such Thing* (Koller, 1997). It also names, when present, the extratextual information which was evidence of culture acting. The text on page one reads, "Howard loved the old house he and his family had just moved into. He loved all the neat little nooks and crannies, and the large windows that nearly touched the floor. He couldn't wait to explore all the funny little closets and cupboards." The illustration depicts a boy standing on a staircase landing and smiling (Koller, 1997, p. 1).

Table 3

*Examples of Extratextual Cultural Knowledge Used During a Reading Event*

Think-Aloud Statement	Extratextual Information
Amy: That I've never moved and it seems like he just moved into a new house.	"I've never moved."
Brad: He's in love with his new house.	No extratextual information
Chad: If it's a big house I think he will get lost at some point and find a little door.	"He will get lost at some point and find a little door."
Connie: (After "nooks and crannies"): That makes me think because I like the nooks and crannies in my house, too. I like hiding. End of page: I like to do that too. I like to look and explore. I like to see all the places where my cats hide things, and stuff like that.	"I like the nooks and crannies in my house, too. I like hiding... I like to do that too. I like to look and explore. I like to see all the places where my cats hide things, and stuff like that."
Duncan: He just moved into a new house and everything's clean and it's old. They love the house that they're in.	No extratextual information (Note that Duncan misinterprets "neat" as clean. It is still, however, information from the text.)

Three of the reading events showed evidence of cultural behavior. Connie's and Amy's statements were similar in that the extratextual information was described in the think-aloud as the reader's personal experience. In Chad's case, he simply stated a prediction: "He will get lost at some point and find a little door." The extratextual knowledge implicit in this statement is that this is a likely occurrence in a children's picturebook about a boy who just moved into an old house with lots of nooks and crannies.

**Winnowing potential cultural codes.** After identifying cultural action in the think-aloud statements, I tested potential codes using a modified constant comparison process from the grounded theory approach to qualitative research (Strauss & Corbin, 1990). In constant comparison, a researcher does not begin with fixed codes but rather looks for indicators of behaviors in the data, and generates codes as ways to label the behavior. My process was a modified constant comparison, as I did reference several existing coding systems in my work.

I began with a long list of codes compiled from the cultural text analysis studies and from Rabinowitz's rules (Jarve, 2002; Kovala, 2002; Kovala & Vainikkala, 1996; Rabinowitz, 1987; Shaffers, n.d.; Slavova, 2002). It would have been inappropriate to rely on any one of these existing coding systems, for a variety of reasons: the participants were adults and adult texts, rather than children and children's texts; some pieces were theoretical rather than investigative; and the methodologies and code definitions were not sufficiently described for replication. Instead, I compiled all of the previously used codes into a list, and used this list as a starting point.

I eliminated many codes from this big list immediately, because they did not fit the conceptual framework of the present study. For example, many of Rabinowitz's rules

(1987) refer to the role of the text, rather than the role of culture. Eliminated codes included typographical cues, repetition of words, and semantic gestures such as “suddenly.” Other codes were cut because they did not appear in any of the texts, possibly because they are themes more common in adult literature. These included discipline, isolation, decadence, and egotism (Shaffers, n.d.). I also added codes that emerged from the data. These new codes and the process of identifying them will be described later in this chapter.

I made several passes through the data, adding and subtracting codes as the data indicated. When the think-alouds contained repeated references to extratextual information that was not on the list, I added it. For example, codes added for *No Such Thing* were monsters, dreams, and fear. Some codes were adjusted to fit the current study. For example, what Rabinowitz (1987) called mythic patterns I renamed as familiar storylines, which seemed more aligned with the intertextual references to monster stories and Cinderella.

My first passes through the data focused on developing codes that were appropriate to the texts in this study. As I continued analysis, however, I began to see that culture acted in distinct ways. At this point, analysis began informing the development of codes. Four categories emerged: knowledge about broad cultural elements, genre-related knowledge, knowledge about specific cultures, and knowledge of specific objects or events.

***Knowledge of broad cultural elements.*** Knowledge of broad cultural elements refers to an understanding of a dimension of culture: for instance, knowledge of how people speak with one another (discourses) or knowledge of what is considered insulting.



These types of knowledge were much broader than knowledge of specific objects or events. Knowledge of broad cultural elements may be considered an understanding of a range of behaviors and their significance, while knowledge of specific objects or events is limited to knowledge of facts. (See Appendix H for a complete list and examples of codes used to describe knowledge of broad cultural elements.)

***Genre-related knowledge.*** Genre-related knowledge is knowledge about the typical characteristics of a genre. For example, the readers demonstrated knowledge that in fictional picturebooks, there is usually some kind of conflict. Some genre-related knowledge involves story grammar, or the parts of a story, such as the problem and the solution. Other genre-related knowledge is more specific, such as knowledge that events that occur closely in time are likely connected. (See Appendix I for a complete list and examples of codes used to describe genre-related knowledge.)

***Knowledge of specific cultures.*** This code was used when a reader's think-aloud contained evidence that understanding of a specific culture entered the reading event. Like with the first code, broad knowledge of cultural elements, this code was used to describe actions by broader understandings rather than by specific facts. The difference between knowledge of broad cultural elements and knowledge of specific cultures is that the latter is explicitly about another culture. In the former, there is no mention of cultural difference. (See Appendix J for a complete list and examples of codes used to describe knowledge of specific cultures.)

***Knowledge of specific objects and events.*** Knowledge of specific objects or events was applied to specific facts that entered the reading event. For example, the think aloud statement, "Airports are very noisy and crowded," was coded as containing

knowledge about airports. (See Appendix K for a complete list and examples of codes used to describe knowledge of specific objects or events.)

**Complexities while coding.** Complexities arose during the development and texting of this coding system. This was to be expected, as the system was for the most part original, emerging from the data. I began with more codes than I have listed above, but combined and refined them during preliminary analysis. For example, I had originally used two codes, “knowledge of what makes a happy ending” and “the need for a clear resolution”, but realized in the course of analysis that they described the same actions by culture. “The need for a clear resolution” was then merged into “knowledge of what makes a happy ending.”

Another complexity was that there were many codes regarding specific knowledge of objects or events. In early stages of analysis, I allowed a code for every specific extratextual fact. In later stages of analysis, I eliminated those codes for which there was only one instance.

**Strengths and weaknesses of codes for cultural behavior.** I consider the instrument for analyzing culture to be the weakest of the three instruments, for two reasons. The first is that it is largely original and therefore less tested than the instruments to describe the agency of reader and text. The second reason is that the actions of culture are the least visible in the study. Reader behavior is viewed directly. Textual behavior is viewed indirectly through the think-aloud but once the think-aloud demonstrates how text acted in a particular exchange, we can look to the text itself for further information. Cultural behavior, however, can be seen only indirectly through the think-aloud.

On the other hand, there are some strengths to this instrument which mitigate these weaknesses. The instrument did emerge from the data and therefore paints a much-needed picture of how culture acts in reading events involving young readers and fictional picturebooks. The instrument was reviewed several times as I conducted additional analyses, confirming the instrument and adjusting when necessary.

### **Viewing the Transaction of Agents in Reading Events**

This study used a modified grounded theory research approach and procedure. The inquiry began with questions rather than a hypothesis. Codes to describe data were developed using both a top-down approach (mining previous research for appropriate ways to describe agents) and a bottom-up approach (allowing codes to emerge from the data). Multiple passes through the data allowed for the development of a trustworthy coding system.

I organized the think-aloud statements by book, rather than by reader, to highlight the differences among the reading events. I created a data chart for each page of text and then examined one think-aloud statement at a time. First I coded the reader behavior, then the textual behavior, and finally the cultural behavior, using the codes I had developed, and constantly referring back to my research questions. Beside each think-aloud, I recorded the behaviors of each agent that were evidenced in that think-aloud. (See Table 4 for an example data chart.)

Table 4

*Example of a Data Chart*

<p>Page 1, <i>Knots on a Counting Rope</i> Written Text:</p> <p>Tell me the story again, Grandfather. Tell me who I am.</p> <p style="padding-left: 100px;">I have told you many times,</p> <p>Boy.</p> <p style="padding-left: 100px;">You know the story by heart.</p> <p>But it sounds better when you tell it, Grandfather.</p> <p style="padding-left: 100px;">Then listen carefully. This may be the last telling.</p> <p>No, no, Grandfather. There will never be a last time. Promise me that. Promise me.</p> <p style="padding-left: 100px;">I promise you nothing, Boy. I love you. That is better than a promise.</p> <p>And I love you, Grandfather, but tell me the story again. Please.</p>		<p>Illustration: A landscape (desert mountains and mesa) at night. In the foreground are shadows of a man in headdress, a boy, and horses around a fire.</p>	
Page 1	Reader Behavior	Textual Behavior	Cultural Behavior
<p>Amy: <i>It's about a story.</i></p>	<p>Inference -the reader infers that the book focuses on this story.</p>	<p>Repetition – the text repeats the word story 3x on this page</p> <p>Privileged position – the first sentence mentions the story.</p>	<p>No extratextual cultural information.</p>

		Written text only	
Chad: <i>I think the grandfather is telling the boy legends about his name or who he is.</i>	<p>Summary – that the grandfather is telling the story of who the boy is.</p> <p>Inference – that it will have something to do with his name</p>	<p>Repetition – the text repeats the word story 3x on this page</p> <p>Privileged position – the first sentence mentions the story.</p> <p>Strong statement of import– “tell me who I am” is clearly important.</p> <p>Written text only</p>	<p>Extratextual cultural information:</p> <p>Knowledge of discourse (telling the boy legends)</p> <p>Knowledge of legends</p> <p>Knowledge of names</p>
Connie: <i>They must be Indians and what's interesting about that is that in my class we're doing a unit on Indians.</i>	<p>(Synthesis - Connie combines her outside knowledge of Indians with the information she is reading</p> <p>Connection with world knowledge</p>	<p>Illustration only - there are no verbal references to Native Americans, this is all from the illustration. (Southwestern mesa, campfire, man with feathers in hat)</p>	<p>Extratextual Cultural Information:</p> <p>Knowledge of Native Americans</p>
Duncan: <i>The Grandfather will tell the story to the kid.</i>	<p>Summary - the grandfather agreed to tell the story.</p>	<p>Repetition – the text repeats the word story 3x on this page</p> <p>Privileged position – the first sentence mentions the story.</p> <p>Written text only</p>	<p>No extratextual cultural information.</p>

As I coded, I looked for patterns and themes. When I observed a pattern or theme, I would explicitly describe it, and then search the data for other examples of it. This information would be recorded in a memo. For example, I noticed that when a character’s speech was presented in a speech balloon it seemed to have more impact than when it was included in the written text. I created a separate code for information

presented in a speech balloon so that I could track this observation across the reading events. I also noted contradictions in the data as well as patterns that didn't directly address my research questions but seemed worthy of consideration. During this process, I also frequently referred to my field notes, in which I had jotted preliminary observations and analysis during data collection.

Each pattern or theme noted was recorded in its own memo. I also wrote a memo after reviewing the data for each book. In this memo, I would draw preliminary conclusions about the roles of each agent as they transacted in those reading events. I would also record other questions raised, including contradictions or seemingly unrelated patterns that did not yet warrant their own memos but did merit further consideration.

After reviewing and coding the transcripts, I also performed comparisons across codes, looking for additional patterns. I wanted to see if there were relationships among certain reader, textual, or cultural behaviors. For example, I looked to see if readers were more likely to question themselves when the text asked a question. I also looked to see if readers were more likely to question themselves when the written text and illustration contained contradictory information. I wrote memos regarding each of these inter-agent patterns as well.

I continued to review data and memos, identifying categories of similar behaviors. I knew my coding instrument was sufficiently developed when additional reviews of the data stopped yielding additional information. At that point, ideas from memos were further explored and transformed into findings. These findings are presented in the following three chapters. In this chapter, I presented my method for analyzing the think-aloud data in terms of the actions of readers, texts, and cultures. I described existing

systems and detailed the extent to which each influenced the development of my instruments. I presented my codes, their definitions, examples, and the complexities that arose in the data analysis process. In the next three chapters, I present findings related to reader, text, and culture, respectively.

### **Chapter 5: FINDINGS ABOUT READERS**

This study examines reading events, framing reading as a transaction among reader, text, and culture in which each agent affects and is affected by the others. In order to describe this transaction, I looked first at each agent's individual behaviors and then at the interplay among agents. I began with readers, asking "How do readers respond to texts?" Through analysis of readers' think-aloud statements, I was able to draw conclusions regarding the individual behaviors that readers performed and patterns of reading behavior shown by different readers. This chapter begins with descriptions of the reading behaviors that were most frequently performed in the study. I then present findings from cross-case analyses of data regarding the readers and their cognitive behavior. I conclude by contextualizing these findings within the body of existing research on strategic reading.

#### **Readers' Cognitive Behaviors**

The vast majority of readers' think-alouds consisted of five cognitive actions, all of which are previously recognized and described strategic reading behaviors: summarizing, inferring, predicting, synthesizing, and connecting. (See Table 5 for the most frequently used strategies, the number of times each was used, and examples.) Summarizing and inferring stood out above all other reader behaviors. Each of these was performed two to three times as frequently as the other behaviors. For this reason, I will address summary and inference first.



Table 5

*Behaviors Most Frequently Demonstrated by Readers*

Behavior	Frequency	Example
Summarizing	158	Brad: <i>I guess it is about a dad and a little girl who don't really have a home so they live in the airport.</i>
Inferring	158	Chad: <i>I guess he's wishing that one day he'll go somewhere and live by himself.</i>
Predicting	82	Duncan: <i>I am thinking that the brother and the dad are going to fly to their home.</i>
Synthesizing	63	Connie: <i>I think it's interesting how they both believe different things, the opposite thing.</i>
Making Connections	45	Connie: <i>I'm thinking that it must be hard to be a rat because the cats are always trying to chase you, and I know my cats, I have three cats, and they like to chase animals. They always leave us little presents in the backyard.</i>

**Summarizing**

In the twenty-four reading events observed for this study, readers summarized 158 times, tying summary with inference for the most frequently performed behavior.

Summary was used by all readers, and appeared as one of the top three behaviors in terms of frequency for all five readers. Analysis of how readers used summary revealed patterns regarding the content of their summaries, the sources of information summarized, and the ways that summarizing was combined with other reading behaviors.

**The content of summaries.** Summaries, by nature, are selective. Readers must filter information, identifying the most important for inclusion in a summary. In the context of this study, summaries are even less comprehensive than usual. In many instructional situations, summaries are performed after reading an entire text. In such

situations, effective fictional summaries are guided by narrative structural elements such as main characters, setting, conflict, and resolution (Dole et al., 1991; Marzano, 2010; Mills, 2009). Summary as a reading behavior is somewhat different. When readers summarize while reading, they still need to prioritize information presented by text (Dole et al., 1991; Keene & Zimmerman, 2007). Yet because readers are still reading the work, summaries performed while reading cannot be expected to contain narrative elements from the entire story.

The data showed that readers' summaries while reading included information about the action of the story. More specifically, readers distilled the information that advanced the plot. They generally excluded description of characters and setting as well as dialogue. The example below illustrates these tendencies.

*Written text:*

*"40 feathers of a quail,  
Magic salamander tail,  
wing of bee and toe of gnat,  
take away this voice of cat."*

The wizard was tired.

"It's almost midnight," she said. "Come back tomorrow and I'll try again."

*Illustration:* The girl says "woof" in a speech balloon. The boys seem concerned, and the wizard exasperated (Meddaugh, 2002, p. 25).

Brad: *He turned the brain into a dog instead of a cat.*

In his think-aloud, Brad mentioned only the result of the actions on the page. He excluded the spell, the dialogue, and the written reference to the wizard being tired, as well as any other information he could have gleaned from the illustration. Brad's actions were typical; across all readers and all texts, summaries focused on events.

**Sources of information for summaries.** In keeping with the notion that summaries are selective, I also explored the sources from which readers selected the

information in their summaries. In general, data analysis showed that summaries were more often based on the written text than the illustration. This was visible because the reader think-aloud contained specific language or details from the written text. This summary by Brad provides an example:

*Written text:*

My dad and I live in an airport.

That's because we don't have a home and the airport is better than the streets.

We are careful not to get caught.

*Illustration:* Man and boy, both looking away, in foreground, luggage carousel and airport crowd surround them. (Bunting, 1991, p. 5)

Brad: *I guess it is about a dad and a little girl who don't really have a home so they live in the airport.*

In his summary, Brad stated that the characters did not have a home and lived at the airport. This information was directly provided by the written text and not by the illustration.

While the vast majority of summaries were based on written text, there were several anomalous scenarios that emerged. For instance, there were a handful of pages across the five texts in which there was no written text, only an illustration. In these cases, readers still used summary as their principal behavior, employed in approximately half of these instances. Below is an example from *Knots on a Counting Rope* which illustrates readers summarizing in response to a page of text that consisted solely of illustration.

*Illustration:* The grandfather is outside, holding the baby, and standing very close to two gray-blue horses. The baby reaches for a horse (Martin & Archambault, 1997, p. 11-12).

Amy: *The boy is sticking out his hand because he knows that the horses are there and he wants to pet the horses.*

Connie: *And then there's a picture of the boy reaching up to the blue horses.*

Both Amy and Connie summarize this illustration, and Amy additionally makes an inference.

Another anomaly was those summaries for which it was impossible to know if the information came from the illustration or the written text. The following excerpt and related think-alouds from *Cinderella's Rat* (Meddaugh, 2002) show two instances of this:

*Written text:*

We stepped out into the night.

*Illustration:* A castle stands on a hill in the night. (p. 17)

Brad: *They walked out to go find a wizard.*

Chad: *They are on their way to nearby wizard.*

In this case, it is unclear whether Brad and Chad based their summary on the written text, which stated that the characters were leaving, or the illustration, which showed their possible destination. It is also possible that either reader used both visual and written information to formulate their summary. In all of these cases, the information was presented in both modalities and the reader's language provides no definitive indication toward one or the other. The impact of this unsolved question, however, is small. There were so few of these instances that even if all proved to be completely informed by the illustration, it would not change the overall generalization that substantially more summaries were informed by the written text.

**Summary in isolation and combination with other behaviors.** Sometimes readers used a single behavior in their think-aloud, while at other times they combined behaviors. Below is an example of a think-aloud that consists solely of summary:

*Written text:*

The horses were nervous and breathing hard. They looked terrible, their smooth white coats scarred with the strange stuff that hung from them in loopy ropes or stuck out like stiff wire. The sheriff grabbed a piece with both hands. It was

slippery. He gave it a pull, and the horse jerked away and whinnied in pain. Whatever the stuff was, it stuck to them as sure as their flesh.

"Where's the coachman?" Sheriff Hardy asked.

"Gone," someone answered. "The coach came into town without him."

*Illustration:* The sheriff is trying to pull the "slime" (red scribbles) from a horse. He is straining. (Van Allsburg, 1995, p. 7)

*Brad:* The chief is trying to pull the red stuff off the horses, and the horses are being stubborn.

In his think-aloud statement, Brad shared just one cognitive action, summarizing the main action from the page. Think-alouds that were entirely summary comprised 36% of the think-alouds that contained summary.

More often, readers combined summary with one or more behaviors, such as in the example below.

*Written Text:*

But one morning Sheriff Ned Hardy stood in front of the Riverbend Jail and saw something he never seen before. A brilliant light in the western sky. It lasted a few minutes, then faded away.

Sheriff Hardy went into the jail house. He was sitting quietly at his desk, wondering what the strange light meant, when a loud pounding rattled the jailhouse door go to and

The sheriff opened it and saw Owen Buck, the blacksmith's boy, breathing so hard he could barely speak. In between gasps, Ned Hardy heard the words "stagecoach" and "something awful."

*Illustration:* The sheriff is on a front porch in town, looking off into the distance, frowning. (Van Allsburg, 1995, p. 4)

*Brad:* The blacksmith's boy ran in because something horrible happened to the stagecoach person.

In this think-aloud statement, Brad began with a summary ("the blacksmith's boy ran in") and then followed it with an inference ("something happened to the stagecoach person").

Of all the think-alouds with summaries, 64% contained summary in combination with other behaviors. (See Table 6 for further information about how cognitive behaviors were observed in isolation and combination).

Table 6

Reading Behaviors and Their Uses in Isolation and Combination

Behavior	% of use in isolation	% of use in combination	Behaviors with which it commonly combined (10 instances or more)
Summarizing	36%	64%	Inference Prediction Synthesis
Inferring	69%	31%	Summary
Predicting	69%	31%	Summary
Synthesizing	41%	59%	Summary
Making Connections	70%	30%	Synthesis

In twenty-two instances, more than for any other behavior, readers summarized in conjunction with two or more other behaviors. Sometimes this was done nimbly, as in this think-aloud by Connie:

*Written Text:*

And cats are scarce.

*Illustration:* The sister is at the cottage door chasing cats away and saying “woof woof woof” in a speech balloon (Meddaugh, 2002, p. 31).

*Connie:* I think it’s cool that since the girl has a voice of a dog she can scare away the cats and the mice can have a happy life.

In this example, Connie voices a personal reaction (“It’s cool”), a summary of the illustration (the girl has a dog voice and scares away cats), and an inference (“the mice can have a happy life”). Connie combined these three behaviors in a fluid and effective manner. This, however, was not always the case, as illustrated by the next example:

*Written text:*

Mr. Slocum and Mr. Vail were caught last night.

"10 green bottles, hanging on the wall," they sang. They were as loud as 2 moose bellowing.

Dad says they broke the first rule of living here. Don't get noticed.

Dad and I try not to get noticed. We stay among the crowds. We change airlines.

*Illustration:* Two older men are sitting on a bench, singing loudly. A bottle in a brown paper bag is tucked next to the bench, partially hidden. Two policemen, one at each side, lead the men away. The man and boy look on from background (Bunting, 1991, p. 6).

*Duncan:* *I don't know. They always have commandments, rules. If you break one, something happens. I don't know what happens, though.*

In this example, Duncan first summarizes one part of the text, saying that there are rules to living in the airport. He then makes an inference ("If you break one, something happens") and then self-monitors his thinking ("I don't know what happens.") This think-aloud, compared to the previous one, does not flow from one behavior to another and does not seem nearly as effective. This was the exception, however; the vast majority of think-alouds that combined summary with other behaviors were both fluid and effective.

Summaries were one of the two most frequently employed behaviors. A closer look revealed several characteristics of summaries. They almost always often consisted of events that advanced the plot. Information from written text was included much more frequently than information from the illustrations. Summary was sometimes the only behavior in a think-aloud, but it was more often combined with other behaviors. Summary was most often combined with inference, and was also regularly combined with prediction and synthesis. The dynamics of these pairings will be discussed after the findings about individual strategies have been presented. I now shift to the behavior which equaled summary in terms of frequency, inference.

### **Inferring**

Readers made 158 inferences in the 24 reading events observed for this study. Inference and summary tied for the most frequently employed behavior. Like summary, inference was used by all readers and was one of each reader's top three strategies in terms of frequency. A closer look at readers' use of inference while reading revealed patterns regarding the content of their inferences, the sources of information that they used to infer, and the ways that they combined inference with other reading behaviors.

**The content of inferences.** Analysis shows that readers tended to infer two different types of information: information about plot and information about character. These two different types of inferences were seen in similar numbers.

When readers made inferences about plot, they tended to infer two things: "off-page" actions and possible consequences. Off-page actions are actions that logically may have occurred as part of the plotline but were not depicted in the text. The following example shows a reader inferring such off-page action:

*Written text:*

Once we saw a woman pushing a metal cart full of stuff. She wore a long, dirty coat and she lay down across a row of seats in front of Continental Gate 6. The cart, the dirty coat, the lying down were all noticeable. Security moved her out real fast.

*Illustration:* An old woman in long coat with shopping cart full of brown bags is being led out by two police officers. The boy and the man look on, sadly, from the side (Bunting, 1991, p. 9).

*Chad: I think she bought something and didn't return the cart, or she stole something.*

In this think-aloud statement, Chad offers two possible events that resulted in the episode that is depicted in the text. He suggests that old woman is taken away by the police officers because she either stole something or didn't return a shopping cart when she



should have. Chad inferred two possible off-screen actions that logically support the plot.

Readers also infer possible consequences of the plot, as in the following example:

*Written text:*

On the weekends dad takes the bus to work.

He's a janitor in an office in the city. The bus fare's a dollar each way.

*Illustration:* The boy is standing at bus stop outside the airport, watching the bus pull away (Bunting, 1991, p. 21)

*Chad:* I guess when he goes to work he always has to pay a dollar to get on the bus and the boy has to take care of himself before the dad comes home.

In this think-aloud, Chad first performs a summary ("he always has to pay a dollar to get on the bus") and then an inference ("the boy has to take care of himself before the dad comes home"). Inferences about possible consequences border closely on predictions. The distinction is that a prediction involves a specific event that the reader states might happen in the book. In an inference about possible consequences, there is no such expectation. In this particular case, Chad is making an inference about the family's routine, rather than predicting an upcoming event in the story.

Readers also made inferences about characters. In most cases, the readers inferred a character's thought or feeling at a particular moment in the story. Below is an excerpt from *Fly Away Home* followed by four readers' think-alouds related to the excerpt. In each, the reader made an inference about the boy's thoughts or feelings at that moment in the story.

*Written text:*

Sometimes I watch people meeting people.

"We missed you."

"It's so good to be home."

Sometimes I get mad, and I want to run at them and push them and shout, "why do you have homes when we don't? What makes you so special?" That would get us noticed, all right.

Sometimes I just want to cry. I think Dad and I will be here forever.

*Illustration:* The boy is alone, holding a bag. He is surrounded by people embracing (Bunting, 1991, p. 30).

*Amy:* He wants to have his own apartment.

*Brad:* He feels upset and kind of jealous because everyone else has homes and he has to live at the airport.

*Chad:* He's jealous that some people have homes.

*Duncan:* He thinks he'll be there forever, but he won't. He's sad that he doesn't have a home yet.

The text directly provides some information about the boy's thoughts and feelings, stating that he is mad, that he wants to know why other people have houses and he doesn't, and that he sometimes wants to cry. The readers inferred additional information about the boy's thoughts (wanting his own apartment, thinking he'll live in the airport forever) and feelings (upset, jealous).

Readers also made inferences about character motivation. In these cases, the reader was not inferring a character's thoughts or feelings at a specific moment, but rather inferring why a character does or says something in the text, as in the following example:

*Written text:*

"Will we ever have our own apartment again?" I ask dad.

I'd like it to be the way it was, before Mom died.

"Maybe we will," he says. "If I can find more work.

If we can save some money." He rubs my head. "It's nice right here, though, isn't it, Andrew? It's warm. It's safe. And the price is right."

*Illustration:* The boy, the father, and the Medina family are all sitting together and eating. Other customers are visible in the background (Bunting, 1991, p. 25).

*Brad:* The little boy wants the apartment back because it is not really a home at the airport. It's just a place.

The main character, the homeless boy, asks his father if they will ever have an apartment again. Brad's inference addressed the boy's motivation to ask that question. Brad

inferred that the airport, while providing shelter, doesn't feel like a home, and this is why the boy wants an apartment.

**Sources of information for inferences.** When readers make inferences, they use textual information to draw a conclusion not directly stated in the text. A closer look at readers' think-aloud statements shows that readers used textual information in three different ways as they inferred. The most frequent source of information for inferences was written text, as illustrated in the following example:

*Written text:*

Once we saw a woman pushing a metal cart full of stuff. She wore a long, dirty coat and she lay down across a row of seats in front of Continental Gate 6. The cart, the dirty coat, the lying down were all noticeable. Security moved her out real fast.

*Illustration:* Old woman in long coat with shopping cart full of brown bags is being led out by two police. Boy and man look on, sadly, from side (Bunting, 1991, p, 9).

*Brad:* One old lady tried to do what they are doing but she brought in dirty stuff and she laid down in front of the airgate and that's why she got caught.

*Connie:* She lived in the airport and they caught her laying down, because someone in the airport wouldn't really do that.

In each of these examples, the reference to the old woman lying down across the seats is evidence that the think-aloud was informed by the written text, as the woman is standing in the illustration. Both Amy and Brad made two inferences in their think-aloud statements, and the inferences are quite similar. First, each inferred that the woman is also homeless and living at the airport. Each reader also inferred that the woman was caught because she lay down. Both of these ideas were suggested, but not directly stated, by the written text.

In other instances, readers based their inferences on information from the illustration. For example, upon reading a page of *Knots on a Counting Rope* (Martin & Archambault, 1997, p. 4), Chad commented, "They're in an Indian tribe, or an Indian

family. They are related to Indians. They have Indian blood.” The written text on this page consists of a boy prodding his grandfather to tell a story and the grandfather starting to do so. The illustration shows the boy and the grandfather sitting around a campfire in a desert with a mesa in the background. Chad inferred from the illustration that the characters were Native Americans. The illustration provides hints in the form of the appearance of the characters, their clothing, and the setting. While there is no way to know which of these visual cues Chad used, it is clear that he could not have inferred that the characters were Native American from the written text alone.

The third and final way that readers used textual information to infer was to connect information from the written text and the illustration, such as in this example from *Cinderella’s Rat*:

*Written text:*

We stepped out into the night.

*Illustration:* Castle on hill in the night (Meddaugh, 2002, p. 17).

*Amy: They are going to the castle that the person lives in.*

In this example, Amy connected information from the two modalities in order to make an inference. The written text suggests that the characters are going somewhere. Amy saw the castle in the illustration and inferred that it is their destination.

Most of the inferences readers made were based on information from the written text. There were, however, many inferences made in the study. While inferences drawn from the illustration or from illustration in combination with written text were not as common, they still occurred in substantial numbers.

**.Inferring in isolation and combination with other behaviors.** Readers most commonly made inferences in isolation. Only 31% of the think-alouds that contained an

inference also contained another reading behavior. This first example shows an inference made in isolation:

*Written text:*

Then I remember the bird. It took a while, but a door opened. And when the bird left, when it flew free, I know it was singing.

*Illustration:* Boy is staring out large window at a jet taking off (Bunting, 1991, p. 32).

*Chad:* I guess he's wishing that one day he'll go somewhere and live by himself.

In this example, Chad's think-aloud consisted solely of his inference about what the boy is thinking. Connie's think-aloud in response to the same page showed a combination of behaviors, including inference.

*Written text:*

Then I remember the bird. It took a while, but a door opened. And when the bird left, when it flew free, I know it was singing.

*Illustration:* Boy is staring out large window at a jet taking off (Bunting, 1991, p. 32).

*Connie:* He's probably thinking that maybe he'll be like the bird and maybe he'll get free, and he'll have a home and he'll sing for happiness. I'm surprised that they didn't get a house in the end, because I thought that in the end they were going to have a house

Connie began with an elaborate inference about what the boy thinking. She followed the inference with a personal reaction ("I'm surprised...") and some self-monitoring ("I thought in the end..."). Most inferences took place in isolation, but among the one-third of inferences that coincided with another behavior, summary was the behavior that was most often combined with inference.

Inference, along with summary, was one of the most frequently utilized behaviors. The inferences in the study tended to focus on either character or plot. Inferences about characters drew conclusions about the characters thoughts and feelings at a specific moment, while inferences about motivation hypothesized why the reader performed a

certain action. Inferences about plot addressed either actions that may have occurred “off-page” or possible consequences of actions in the text. Readers drew these conclusions using information from the written text, the illustrations, or the two in combination. Most inferences stood alone in think-alouds, but among the think-alouds that did combine inference with another behavior, the most frequently appearing behavior was summary. Inference and summary together comprised half of all the cognitive behaviors that readers demonstrated in the study. I now present findings regarding three more behaviors, predicting, synthesizing, and making connections, which were used less frequently but still in noteworthy amounts.

### **Predicting**

Prediction followed summary and inference as the third most observed reading behavior. Almost all reader predictions consisted of a possible upcoming event in the story, as in this think-aloud statement that Duncan made at the beginning of *Fly Away Home* (Bunting, 1991): “I am thinking that the brother and the dad are going to fly to their home.” While predictions of possible upcoming events constituted approximately 90% of all predictions, there were other notable trends in the content. At the beginning of the story, readers made predictions regarding the conflict in the story. Later, they predicted the revelation of a truth or the resolution of the conflict.

Another notable finding is that readers generally made predictions in isolation from other behaviors. Combinations with another behavior comprised only 31% of the predictions. When readers combined a prediction with another behavior, that behavior was most often summary. While it is feasible that readers would predict more frequently when they start a story, the data show that the readers predicted at similar levels

throughout the book. Most reader predictions were realized, but even those that were not realized were plausible and based on textual information. This interesting dynamic suggests textual guidance toward certain predictions and will be further explored in the section on findings about interplay among agents.

### **Synthesizing**

Synthesis was the fourth most popular behavior in terms of frequency of use. In most cases, readers synthesized information across pages of the text. For example, in the following think-aloud, Connie synthesized across pages of text to note a parallel between the characters in *No Such Thing* (Koller, 1997): “I think it’s interesting how they both believe different things, the opposite thing.” In other instances, readers synthesized extratextual cultural information with information from the text. Connie’s think-aloud from *Cinderella’s Rat* provides one such example: “I’m thinking that it must be hard to be a rat because the cats are always trying to chase you, and I know my cats, I have three cats, and they like to chase animals. They always leave us little presents in the backyard.” She synthesized her prior knowledge about cats with the rat’s statement about the challenges he faces. (Note that in this example, Connie made a connection and synthesized.) Readers generally used synthesis in combination with other behaviors, most often with summary, and to a lesser extent, with inference and connections. They synthesized for a variety of purposes, according to the text at hand; this finding will be explored later in the discussion of interplay among agents.

### **Making Connections**

Connections ranked fifth in frequency among the reading behaviors observed in the reading events. There was, however, great variation in how often each reader made

connections. Connie relied on it as her primary behavior, with 29 uses. On the other end of the spectrum, Brad and Chad made only one connection each. Most connections were made in combination with another behavior, and the other behavior was usually synthesis or personal reaction. In the example below, from a reading of *Fly Away Home*, Connie combines synthesis and a connection.

*Written text:*

The airport's busy and noisy even at night. Dad and I sleep anyway. When it gets quiet, between 2 and 4 a.m., we wake up.

"Dead time," dad says. "Almost no flights coming in or going out."

At dead time there aren't many people around, so we're extra careful.

In the mornings dad and I wash up in one of the bathrooms, and he shaves. The bathrooms are crowded, no matter how early. And that's the way we like it.

Strangers talk to strangers.

"Where did you get in from?"

"Three hours our flight was delayed. Man! Am I bushed!"

Dad and I, we don't talk to anyone.

*Illustration:* Two men talk in a bathroom. In the background, the man and boy are brushing teeth and changing clothes (Bunting, 1991, p. 19).

*Connie: In real life, someone would notice someone shaving in the airport, and a little boy getting changed.*

Connie made a text-to-world connection by noting that shaving and changing are not typical activities at the airport. She then synthesized this connection with the character's ongoing concern about being noticed.

Readers made connections with personal experience (text-to-self), other texts (text-to-text), and other prior knowledge (text-to-world) in similar proportions.

*Cinderella's Rat*, because of its intentional intertextuality, had a disproportionately high number of text-to-text connections. This will be explored later in the discussion of the role of text.

In general, readers made connections effectively; that is, they connected textual information to their own prior knowledge in ways that helped them understand the text



more deeply. When connections weren't effective, it was for one of two reasons. Either the connection was tangential, or the reader's prior knowledge was contradicted by the text. In these cases, the interaction can be described as a clash among the agents. These cases in which agents disagree will also be addressed in the discussion of interplay among agents.

### **Observations across Reading Behaviors**

The previous section addresses the individual behaviors that readers in this study employed during the observed reading events. I described each behavior in terms of its content, sources of information, and use in combination with other behaviors. In this next section, I integrate findings across the strategies and contextualize them within the body of existing scholarship on strategic reading. I note areas in which the current study confirms existing scholarship, highlight new contributions to the field, and explore areas in which the current study does not align with existing scholarship.

### **Use of Previously Identified Strategies**

In this study, readers' behaviors are viewed through the lens of reading behaviors, which have been widely described as the actions performed by successful readers. Specific reader actions including clarifying reading purposes, using prior knowledge, visualizing, making inferences, generating predictions, asking questions, using text structure, synthesizing information, and summarizing content have all been previously described as effective and teachable reader behaviors (Brown, 1980; Brown et al., 1996; Keene & Zimmerman, 2007; Palinscar & Brown, 1984; Pressley et al., 1989; Yuill & Oakhill, 1988). I expected that the readers in this study, having been identified as successful readers, would perform these behaviors generally attributed to successful

readers. Data confirmed this to be true. The five behaviors that readers in the study most frequently performed were inferring, summarizing, predicting, synthesizing, and making connections to prior knowledge, all of which had been previously described.

Yet, readers did not perform all of the previously identified behaviors. The behaviors of visualizing and clarifying purposes for reading were not observed in the data. The context of the study may have contributed to this finding. The think-aloud protocol in which readers shared their thoughts while reading may not have been well-suited for the sharing of visual images. And since the readers only read the fictional picturebooks I presented to them, clarifying purposes for reading may not have been relevant. Another behaviors, using text structure, was reframed according to the cultural theory of reading. In this study, genre knowledge such as text structure is seen as extratextual cultural knowledge, and falls under the role of culture in the reading event.

### **Logical Connections between Reader Behaviors and Content**

There was a strong pattern between reader behaviors and their content. That is, each example of a single behavior consistently contained a certain type of information. When readers predicted, the content was future events. When readers made connections, the content personal experiences, other texts they knew, and prior knowledge to the text at hand. This finding is unsurprising and entirely logical: the content of each statement merely reflected the definition of the behavior. This finding confirms previous scholarship regarding the utility of the reading strategies and their definitions in terms of describing readers' behavior (Brown, 1980; Brown et al, 1996; Keene & Zimmerman, 2007; Palinscar & Brown, 1984; Pressley et al., 1989; Yuill & Oakhill, 1988).

The examination of content, however, did reveal new details regarding individual strategies. This is the most true for inference, where the data demonstrated that the specific information that readers most frequently inferred was events that took place “off the page”, the consequences of actions, and characters’ motivations, thoughts, and feelings. These specific dimensions of inference may have implications for instruction, and suggest a direct for further research: whether it is useful to teach these separate types of inference to young readers.

### **Varying Frequencies of Reader Behaviors**

The current study presents findings regarding the relative frequency of each reader behavior. Summarizing and inferring were performed much more frequently than the others. Predicting, synthesizing, and making connections to prior knowledge were used less often but still to a noteworthy extent. A review of the existing body of research yielded little information regarding the frequency of individual behavior by readers. This may be because the research that identified and validated individual comprehension strategies took place largely in the 1970s and 1980s (Pearson & Fielding, 1991; Pressley et al, 1989) while more recent comprehension strategy research has focused on the effects of strategy instruction on reader achievement (Dole et al, 1991; Duffy, 1993; Pearson et al, 1992; Pressley et al, 1989). Regardless of the reason, the current study’s findings regarding the dominance of summary and inference and frequent use of synthesis, connections, and predictions appear to be new contributions to the field.

In an attempt to contextualize the frequency of certain reading behaviors, I found it useful to look at the strand of existing reading research focused on reciprocal teaching (Palinscar & Brown, 1984). In this instructional model, four behaviors are identified not

as the most frequently performed, but rather as the most useful to comprehension. They are predicting, questioning, seeking clarification when confused, and summarizing (Palinscar & Brown, 1984).

The findings of the current study overlap with reciprocal teaching in the recognition of predicting and summarizing as important reader behaviors. The current study did not find that readers frequently sought clarification when confused nor asked questions with great frequency. Readers in the study did ask a total of eight questions; however in the context of seventy-four reading events this was not viewed as a frequently behavior. I do wonder whether readers' questioning might be limited in the think-aloud protocol. It is possible that readers might not pose the question, but rather move a step forward and address it in their think-aloud.

Readers in the study also performed some self-monitoring, which includes seeking clarification when confused. There were a total of fourteen instances of self-monitoring in the study, making it a less frequent reader behavior. Self-monitoring is considered essential to comprehension (Pressley & Afflerbach, 1995; Pressley et al, 1989; Pressley et al, 1992; Brown, 1980), so there is no surprise that it is included in reciprocal teaching. The absence of self-monitoring in the current study may be related to the question over whether it is best considered a strategy or a meta-strategy (Brown, 1980; Pressley & Afflerbach, 1995), since a reader who self-monitors and notes confusion still has to perform a specific behavior to clarify the confusion. This characteristic may have made self-monitoring less visible in the think-aloud statements. Readers may have noted the confusion but communicated only the actions they took to remedy the confusion.

These findings regarding most frequently performed behaviors are new contributions to the field, but they are tentative. It was clear that the readers in the study relied primarily on summary and inference, and also used synthesis, connections, and predictions. This study, however, had a very small sample size and it is unclear whether a reliance on these behaviors is typical of young readers or merely a preference of these particular readers. Also unknown is whether the reliance on these behaviors is beneficial, harmful, or neutral. Both questions are worthy of further investigation. There are also questions surrounding the absence of some previously recognized behaviors and whether this may be a weakness of the think-aloud methodology. This possibility should be taken into account when weighing the findings.

### **Reader Behaviors Alone and in Combination**

The data in the current study show that summary and synthesis were usually performed in isolation, while inference, predictions, and connections were usually performed in combination with other behaviors. Overall, readers combined behaviors in approximately one-third of the think-aloud statements. These findings are important when viewed in conjunction with existing findings that many strategy-based instructional programs present strategic behaviors in isolation (Pressley, Bergman, & El-Dinary, 1992) and that readers need explicit instruction on how to coordinate the use of multiple behaviors (Pressley, El-Dinary, and Brown, 1992). For this reason, I include the following two discussions of how behaviors were used in combination.

**Summary as a stepping stone to inference and prediction.** At first, my attention was drawn to the fact that inference and prediction were the two behaviors that are used primarily in isolation. It makes sense that inference and prediction are linked in

the way that they are used, because predictions are in fact a type of inference. When one predicts, one uses textual information and sometimes prior knowledge to infer what might happen in the story.

I also noted that in those cases when inference and prediction were combined with other behaviors, the strategy of choice was summary. Further analysis showed that in these cases, summary was a first step, followed by prediction or inference. This pattern carried over to include synthesis as well. The reader first noted pertinent information in the text, and then used that information to generate an idea (a prediction, inference, or synthesis) not in the text. The use of summary as a precursor to other behaviors is illustrated in the following think-alouds:

*Brad: He saw the light again and he'll go to find out where the light was. He'll wait for it to shine again since it didn't last long (A prediction in response to *Bad Day at Riverbend*, p. 13 (Van Allsburg, 1995).)*

*Brad: The blacksmith's boy ran in because something horrible happened to the stagecoach person (An inference in response to *Bad Day at Riverbend*, p. 4 (Van Allsburg, 1995).)*

*Brad: they change where they sleep every time so they don't get noticed. (A synthesis in response to *Fly Away Home*, p. 12 (Bunting, 1991).)*

The first think-aloud statement combined summary and prediction. Brad appeared to use his summaries of events (“He saw the light again” and “it didn’t last long”) to generate his predictions (“he’ll go find out where the light was” and “he’ll wait for it to shine again.”) The summaries helped Brad gather the information he uses to predict. In the second think-aloud, Brad uses summary in a similar fashion. His brief summary (“the blacksmith’s boy ran in”) was the information on which his inference (“something horrible happened to the stagecoach person”) was based. In the third example, Brad summarized new information from this page (the characters sleep in different areas of the

airport) and then synthesized it with old information (it was important for them to not be noticed) to arrive at a deep understanding of the challenges the family faces. In each of these cases, Brad vocalized the gathering of information that preceded his generation of prediction, inference, and synthesis. I suggest, and the data supports, the idea that summary, whether vocalized or not, is an essential part of predicting, inferring, and synthesizing.

It makes sense that summary could serve as a component piece of other behavior because summary is one of the simpler behaviors on a cognitive level (Bloom, 1956; Palinscar & Brown, 1984). For the purposes of this study, summary is recounting or paraphrasing the events on a single page; if the reader recalls information across pages, then the behavior is considered synthesis. (As previously noted, this definition is based in summarizing *while* reading, which differs from the way summary is used *after* reading. When readers summarize after reading, they do summarize across pages, and that is more cognitively complex.) If we look at Bloom's taxonomy of learning in the cognitive domain (Bloom, 1956), summary requires only knowledge and comprehension, the two lowest levels of cognition. Inference, synthesis, and prediction require application and synthesis, which are higher levels in the taxonomy.

There is another data pattern that supports the idea that summary, as a simpler cognitive activity, plays a supporting role in other reading behaviors. Across all the reading events, there were twenty-two instances in which summary was combined with three or more other behaviors. Below is one such example from Chad during *Cinderella's Rat* (Meddaugh, 2001).

*Written Text:*

An old woman spoke sternly to me:

"take this girl to the castle."

To the girl she said,

"don't forget to be home by midnight."

*Illustration:* The fairy godmother (the old woman) is putting a spell on the girl's (Cinderella's) clothes as she stands outside the pumpkin coach. A boy is sitting at the front of the coach, ready with horses. (p. 10)

*Chad:* Well, I think she's going to a ball with him at a castle and she needs to be back before midnight.

A lot happened in this short think-aloud statement. The summary component is that the girl "needs to be back before midnight." Chad also brought in an intertextual connection to Cinderella when he introduced the idea of a ball. He appeared to synthesize the summarized textual information and extratextual information about Cinderella as he made the prediction that the boy will take Cinderella to the ball. While there were many behaviors in action, however, summary did not appear to complicate the process. Instead, it appeared to be a necessary component, facilitating the use of the more complex behaviors.

There is a possible instructional implication to these findings about summary's role in more complex cognitive behavior. There may be value in emphasizing summary and explicitly teaching students how to use summary as a stepping stone to other behaviors. This assertion is tentative but certain merits further investigation.

**Connections in combination with other strategies.** The combination of connection with other behaviors seems to have an entirely different story. While summary appeared to serve as a component of other behaviors, connection seemed to be more effective when combined with other behaviors. First, I present two examples of connections made in isolation:



*Connie: I've read in a couple of books about little towns like this that are in the middle of nowhere. (In response to *Bad Day at Riverbend*, p. 2 (Van Allsburg, 1995).)*

*Connie: When I read the newt I was thinking about a TV show called Catscratch and one of the characters is in love with newts and his name is Waffles. He went to a pet store and he took the newt and ran out of the store. (In response to *Cinderella's Rat*, p. 21 (Meddaugh, 2002).)*

In each of these examples, Connie noted a connection between what she was reading and another text. The importance of these connections in relation to the text, however, was not explored. It is unclear how the connection added to Connie's interpretation. If Connie had performed an additional cognitive activity, such as a making prediction based on the other texts, it would be evident that the connection enhanced her comprehension. In these examples, however, the connections are made in isolation and there is no evidence that they contributed to her interpretation. For the second example, I wonder if the connection might have actually been detrimental to her reading, as it was so tangential.

When connections are combined with other behaviors, however, they can be very effective in helping the reader interpret a text. Connections were most often combined with synthesis and personal reactions, and both of these combinations proved effective.

*Connie: This is a Cinderella story told by a rat and this is the part where she turns the rat into a boy so he can lead Cinderella to the ball. (In response to *Cinderella's Rat*, p. 10 (Meddaugh, 2002).)*

*Amy: Ew!... I've heard of slime, which is vanilla pudding dyed green, but it wasn't like this. (In response to *Bad Day at Riverbend* (Van Allsburg, 1995).)*

In the first example, Connie made an intertextual connection with the Cinderella story. She synthesized the intertextual connection with textual information from the previous page (that the rat was turned into a boy) and from the current page (the old woman tells

the girl she needs to be home before midnight) to arrive at the understanding voiced in the think-aloud. In the second example, Amy's personal reaction led to her connection. She then noted that her connection (her personal knowledge of slime) didn't apply to this text, and this added to her understanding that the slime in the text was particularly mysterious and significant. In both cases, the combination of connection with another behavior made the connection more effective.

This finding corroborates existing scholarship which identifies the need for readers to not only note their connections but to also ask themselves, "How does this connection deepen my understanding of the text?" (Keene & Zimmerman, 2007). When readers explore how connections inform their interpretations, the question may lead them to perform additional reading behaviors. This dynamic has not, to my knowledge, been the subject of research, and certainly merits further attention.

### **Complexity and Confusion regarding Synthesis**

The data regarding synthesis, in contrast, do not tell a clear story. Instead, the data show few patterns and allow for few conclusions. Many comprehension researchers and teachers consider synthesis the most important reader behavior, as it is synthesis that directly leads to an interpretation (Miller, 2003; Keene & Zimmerman, 2007.) At the same time, and possibly for the same reasons, researchers and teachers often describe synthesis as the hardest behavior to teach (Miller, 2003; Keene & Zimmerman, 1997.)

In this study, synthesis appeared mostly in combination with other behaviors. This was surprising, as synthesis shows some similarity to prediction and inference, both of which were used mostly in isolation by the readers in this study. The isolated use of these two behaviors makes sense considering that summary, even when it is not

vocalized, appears to be part of the inference or prediction process. However, synthesis, according to Bloom's taxonomy (Bloom, 1956), is even more complex than prediction or inference. I would expect to see synthesis used primarily in isolation as well. This was the first mystery regarding synthesis.

I then looked more closely at how synthesis was combined with other behaviors. I found that synthesis, unlike any other strategy, did not have a favorite pairing. While summary sometimes supported synthesis, summary was more often paired with prediction and inference. Synthesis was performed in combination with many other behaviors, without patterns in pairing or the ways the behaviors worked together. I explored whether readers' syntheses might precede other behavior, but again found no conclusive pattern. I examined the content of the synthesis, looking at the number of syntheses that involved the whole text, such as ideas about theme, author's message, or symbolism, as opposed to syntheses which linked information across pages but didn't apply to the work as a whole. Approximately half of the readers' syntheses fell into the first category and half fell into the second; again, this allowed no conclusions to be drawn. I also looked at whether effective readers synthesized more at the end of the book or if they synthesized throughout the reading event, and I found examples of both.

All in all, readers' use of syntheses was the least patterned and generally defied description. It is equally true to say that readers used syntheses for a wide range of purposes, at all stages of the reading event, and in many combinations. Either way, the data fail to contribute new understandings of synthesis, except to highlight its complexity. Given the importance of synthesis to interpretation and the challenges of instruction in

synthesis (Keene & Zimmerman, 2007; Miller, 2003), further investigation is certainly warranted.

### **Different Styles of Reading**

The previously described findings were the result of examining data across reading behaviors. I also took another approach, examining data across readers. I focused on similarities and differences in the ways that individual readers employed strategies. I found three different styles of behavior, which I named the straightforward reader, the bonded reader, and the treading-water reader.

**The straightforward reader.** Brad and Chad fell into the category of the straightforward reader. Brad and Chad were both reading on grade level, so these books fell into their independent reading levels (Fountas & Pinnell, 2005). Yet, both readers relied greatly on just two reading behaviors, summary and inference. In Brad's case, these two behaviors comprised seventy-eight percent of his total use. Both also had narrow ranges of strategy use overall. Ninety-one percent of Brad's behaviors were summary, prediction, or inference, while Chad demonstrated his four dominant behaviors (summary, prediction, inference, and synthesis) ninety-two percent of the time. For comparison, Amy, Connie, and Duncan demonstrated their four dominant behaviors seventy-one, fifty-five, and seventy-one percent of the time, respectively. (See Table 7 for further information about the behaviors used by each reader.) Brad and Chad's think-alouds tended to be short, direct, and concrete rather than abstract. For these reasons, I categorized their reading style as "straightforward." Their interpretations were always adequate, and sometimes strong, though never the strongest of the readers.

Table 7

*Individual Reader's Cognitive Behaviors*

	Summary	Inference	Synthesis	Prediction	Connections	Personal Reactions	Sympathy with Character
Brad	53	50	17	4	1	0	0
Chad	33	40	15	22	1	0	0
Amy	39	39	7	8	8	5	0
Connie	19	19	17	12	29	17	6
Duncan	32	32	6	33	3	1	1

**The bonded reader.** Amy and Connie, according to the data, were a very different type of reader. Like Brad and Chad, Amy and Connie were strong readers and the books in the study fell into their independent reading levels (Fountas and Pinnell, 2005). Amy and Connie's reading style, however, was very different than Brad and Chad's. Amy and Connie relied on behaviors which drew on their personal experiences and their emotions: connections, personal reactions, and sympathy for the character. While the straightforward readers offered short and direct think-aloud statements that focused on action and plot, Amy and Connie spent more time exploring their relationship to the text and relationships within the text. It is this focus on relationships that led me to call their reading style "bonded reading." Connie is a much stronger example of a bonded reader than Amy, but Amy does show similar tendencies, especially in contrast to the straightforward readers. Amy and Connie used many cognitive behaviors effectively; of the five most common behaviors (summary, inference, synthesis, connection, and prediction), Amy and Connie were the only readers to use each more than 5 times.

Interestingly, their behaviors occurred mostly in combination with the behaviors with more personal content. Amy and Connie also consistently had the strongest interpretations in the study.

**Gendered readings.** The straightforward readers were both boys, and the bonded readers were both girls. (Duncan, another boy, was an outlier. His case will be described after this discussion.) The division by gender is consistent with Cherland's work about gendered reading responses (1992). According to Cherland, girls often respond with a "discourse of feeling", focusing on how events and relationships influence character development. Boys often respond with a "discourse of action", finding meaning in the story's plot. Cherland's work focused on reading response after reading, rather than behaviors while reading, but the gendered differences she described seem to align with cognitive behavioral patterns while reading as well (Cherland, 1992). Amy's and Connie's use of connections, personal reactions, and sympathy for the character support a focus on how events and relationships influence character development. Brad's and Chad's use of summary and inference support their focus on plot.

In this study, the bonded readers consistently achieved deeper interpretations than the straightforward readers. There is not enough data to draw a conclusion, but this certainly raises the question of whether one style is more effective than the other. An interesting facet of gendered behavior in this study is that the two groups did not perform entirely different behaviors. The bonded readers performed the same behaviors as the straightforward readers, but they also performed other behaviors. Cherland (1992) suggests instructional activities (generally formal written responses that take place after reading) that can encourage readers to extend their thinking past typically gendered

responses. Questions for further consideration are whether gendered patterns of behavior result in gendered interpretations, and whether instruction focused on diversifying reading behaviors can help overcome gendered readings.

**The treading-water reader.** The fifth reader in the study was an outlier, falling into a category not influenced by gender. I place Duncan in a category named the treading-water reader. Among the readers in the study, he was the youngest and had the lowest reading level. In fact, only two of the books in this study, *No Such Thing* (Koller, 1997) and *Cinderella's Rat* (Meddaugh, 2002) were within Duncan's independent reading level. The other three were difficult enough to be described as within Duncan's frustrational level (Fountas and Pinnell, 2005). Yet Duncan still managed to achieve interpretations that were adequate or strong for each book. For this reason, I describe him as treading water – he is not quite swimming but he is also not sinking. Duncan relied primarily on summary, prediction, and inference, which kept him focused on the action in the story. Duncan shared this focus on action and use of summary and inference with the straightforward readers. He did not, however, show the narrow range of behaviors or the short think-alouds statements that were also seen in the straightforward readers.

Duncan's style seemed to work for him in some situations more than others. It was effective for *Cinderella's Rat*, *No Such Thing*, and *Bad Day at Riverbend*, which were the easier texts to decode and the simpler texts in terms of theme. His style was less effective for *Fly Away Home* and *Knots on a Counting Rope*, which were more sophisticated texts.

Duncan showed other behaviors which set him apart from the other readers. He referred to the illustrations often, more than any other two readers added together. This use of the illustrations makes sense as a tactic for a struggling reader and probably served him to a point, supporting his interpretations of the easier texts while contributing to his superficial interpretations of the harder texts. Duncan's other notable behavior was a change in his think-alouds when challenged. When text became hard for him, Duncan said much less. In *Knots on a Counting Rope* (Martin & Archambault, 1997) which was the most difficult text, Duncan only provided two think-aloud statements. As Duncan struggled, he became less communicative. When prompted to share his thinking, he generally replied, "I don't know." This leads me to believe that Duncan had stopped thinking strategically.

One possible instructional implication of this finding is to teach students specific behaviors for when they are in a "treading-water" situation. Behaviors such as summary or questioning can support basic comprehension. Further research might examine the effects of instructing readers to behave in certain ways when they struggle.

### **Conclusions about the Agency of Readers in the Context of Transactional Reading**

This chapter described findings regarding the agency of readers in the reading event, addressing the question, "How do readers respond to texts?" I first presented findings regarding the individual behaviors that readers demonstrate most frequently: summarizing, inferring, predicting, synthesizing, and making connections. I then presented findings that emerged across behaviors and readers, exploring their context within the body of existing scholarship on strategic reading and noting areas for future scholarship. These findings paint a detailed picture of reader behavior, adding to our



understanding of how readers respond to texts. The next two chapters will similarly explore the behavior of the other two agents in a reading event, text and culture.

## **Chapter 6: FINDINGS ABOUT TEXTS**

In this study, reading is framed as a transaction among reader, text, and culture in which each agent performs a role. In the previous chapter, I described the specific actions that the readers performed. In this chapter, I turn to the agency of text, presenting findings that address the question, “How do texts guide readers toward certain interpretations?” I present a range of findings that describe textual agency in terms of modalities, information communicated, and textual conventions. I then describe the most frequently used conventions as well as others of note. The chapter concludes with patterns seen in the reader-text transaction that support the notion of text as teacher.

### **Textual Agency Described**

#### **Textual Modalities in Action**

Picturebooks are defined by multimodality. Written text, illustration, and other sign systems work in combination to convey meaning (Sipe, 1999). My first step in describing textual agency was to identify and examine the textual modalities at work.

Overall, the data showed evidence that written text participated in more transactions than illustration. (See Table 8 for numerical data regarding textual modalities in action.) Textual modalities observed acting in reading events.) Of the instances for which the acting modality was identifiable, the written text acted in 71% of them. Illustration informed 35% of the think-alouds in which the acting modality was identifiable. This number, while smaller, still represents an important role. In some cases, there was evidence that text acted through both the written text and illustration. (This accounts for the sum greater than 100 %.)

Table 8

*Textual Modalities Observed Acting in Reading Events*

Modality or combination of modalities	Frequency	Percentage	Percentage of instances in which modality is identifiable
Illustration only	94	23%	28%
Written text only	214	53%	64%
Written text and illustration	24	6%	7%
Mode indeterminable	64	16%	N/A
Other	1	0%	0%
No modalities evident	6	1%	N/A

There were relatively few instances in which there was evidence of both illustration and written text acting in a single transaction. This occurred in just 8% of the reading events in which the acting modality was identifiable. Unfortunately, I believe that the methodology does a disservice to this category. Think-aloud data is by nature incomplete. Readers do not voice every thought. I suspect that in many cases, readers were informed by both the written text and the illustration, but only voiced enough to give evidence of one modality at work. Here is one example of a place where only one modality is evidenced, but two are possible:

*Written text:*

Ned Hardy wasn't sure what to do. He scratched his head. "Well," he finally said. "Guess I'll go look for him."

The sheriff rode out of town, following the wagon's trail west. Before long he stopped his horse. The ground was covered with the same marks that were on the

horses. Whatever happened must have happened here. He didn't see any signs of the driver, but he heard a muffled sound.

*Illustration:* Hardy is on horseback in the desert. The ground has red “slime” marks (scribbles) and the cacti have green ones. (Van Allsburg, 1995, p. 9)

Duncan: *He's going to see the person that did all these things, all this stuff.*

Duncan's statement that Hardy is going to see the person who caused the markings shows that the textual statement, “Guess I'll go look for him,” entered the reading transaction.

There is no evidence that the illustration was active at this point in the reading event. At the same time, however, there is no evidence that the illustration didn't enter the transaction, as the illustration reinforced all the information in the written text. It is possible that both the written statement and the illustration acted here.

The text that showed the most evidence of illustration and written text acting in combination was *Cinderella's Rat* (Meddaugh, 2002). This text stood out as the one in which the two modalities simultaneously communicated different information, and this is why the actions of both modalities were evident. The following excerpt is an example in which the written text and illustration are communicating somewhat different information:

*Written text:*

I was born a rat.

I expected to be a rat all my days.

But life is full of surprises.

*Illustration:* The rat is sitting in front of pumpkin, gesturing. Cat ears and tail are visible behind pumpkin. (Meddaugh, 2002, p.1)

In this case, the two modalities are complementary; that is, they do not contradict each other. The information conveyed by each, however, is considerably different. The written text tells of the rat's life and expectations, while the illustration shows that a serious danger is present. It is the difference in the information conveyed by each

modality that makes their individual actions more visible. When both modalities communicate similar information, the effort of each is less likely to be evidenced. This was often the case. My suspicion is that some percentage of the think-alouds in which textual agency was coded as just written text or just illustration actually involved both modalities. Yet, in the end, I could only code the modality that was evidenced in the think-aloud, regardless of my inference that multi-modal action may have taken place.

There is another situation which I believe results in the underrepresentation of textual agency that includes both written text and illustration. At times, it was not possible to determine whether textual information came from the written text, the illustration, or both. The example below, from *Bad Day at Riverbend* (Van Allsburg, 1995), illustrates this situation:

*Written text:*

The horses were nervous and breathing hard. They looked terrible, their smooth white coats scarred with the strange stuff that hung from them in loopy ropes or stuck out like stiff wire. The sheriff grabbed a piece with both hands. It was slippery. He gave it a pull, and the horse jerked away and whinnied in pain. Whatever the stuff was, it stuck to them as sure as their flesh.

"Where's the coachman?" Sheriff Hardy asked.

"Gone," someone answered. "The coach came into town without him."

*Illustration:* The sheriff is trying to pull the "slime" (red scribbles) from a horse. He is straining. (Van Allsburg, 1995, p. 7)

Chad: *I think something is controlling them, maybe a ghost.*

Connie: *I love horses and I know that horses get really scared if they have something on them and you try to take it off. They'll back away and whinny.*

Both Chad's and Connie's think-alouds reflect information that might have come from the written text, the written illustration, or both. Because the source is unknown it is coded "mode indeterminable." There were 64 such instances (15% of the total think-

alouds) in the study. It is likely that in at least some of these instances, both written text and illustration entered the transaction.

For these two reasons, I argue that written text and illustration work together in the reading transaction more frequently than is evidenced in the think-aloud data. My assertion is that there are three important modalities through which text enters the reading transaction: through the written text, through the illustration, and multi-modality through written text and illustration in combination.

One finding worth noting was that in this study, text did not display noteworthy agency through modalities other than written text and illustration. It is characteristic of picturebooks that they are able to convey meaning through their physicality, such as their shape, size, endpapers, paper choice, or binding (Arizpe and Styles, 2003; Moebius 1986; Sipe, 1999). In this study, there was only one instance of a book's physicality entering the reading event. In that instance, a reader commented on an endpaper illustration.

### **Relationships between Modalities**

Another aspect of textual agency in terms of modalities is the relationship between the modalities on a given page of text. On most pages of the picturebooks in the study, written text and illustration coexist. The few exceptions were pages that consisted purely of illustration. Because the two modalities generally coexist, it made sense to examine the relationships between them.

An analysis of the relationships between the written text and illustration demonstrated that on almost all of the pages of text where both were present, there was a complementary relationship between the two. (See Table 9 for further data regarding the relationships among textual modalities.) A high rate of complementary relationships

(93%) confirms previous research that written text and illustration generally work in collaboration (Kress & van Leeuwen, 1996). Data from the current study also corroborates previous findings that while the information communicated by written text and illustration is generally complementary, it is not identical. The two different modalities often communicate different types of details. The two modalities can also, while generally complementing each other, also communicate different information. The first page of *Cinderella's Rat* (Meddaugh, 2002) provides illustrations of both characteristics:

*Written text:*

I was born a rat.

I expected to be a rat all my days.

But life is full of surprises.

*Illustration:* The rat is sitting in front of pumpkin, gesturing. Cat ears and tail are visible behind pumpkin. (Meddaugh, 2002, p.1)

Each modality gives the reader information about the main character. From the written text, a reader can learn that the character is a rat and had never anticipated being anything other than a rat. From the illustration, a reader can also know that the character is a rat, that he is grey with pink ears, nose and tail, and that he talks with his hands. Information from the two sources differs, but is complementary.

Table 9

*Relationships among Textual Modalities*

Relationship	Frequency	Percentage
Complementary	346	93%
Contradictory	23	6%
Congruous	3	1%

While the overwhelming majority of relationships between written text and illustration were complementary, about 6% were contradictory. The contradictory relationships occurred in just two of the books, *No Such Thing* (Koller, 1997) and *Bad Day at Riverbend* (Van Allsburg, 1995). In both books, it is clear that the contradictory relationships were intentionally created by the authors and illustrators. The contradictory relationships served slightly different purposes in each book.

In *No Such Thing* (Koller, 1997), the contradictory relationships revolved around the question of whether monsters exist. At first, the main character's mother insisted that there were no monsters, while the illustrations contained subtle cues suggesting otherwise. Further into the text, the existence of monsters was made clear to the reader, and the purpose of the contradictory relationship shifted. Both the human mother and the monster mother continued to insist that the other did not exist. There was information in the illustration that proved their existences, but was unseen by the mothers. This continued confusion took on the story's parallel pattern and became a source of humor. None of the readers noted all of these contradictory cues, but all noted some. More consistent attention to the contradictions might have enhanced their appreciation of the



humor in the story, but it wasn't necessary in order to construct a quality interpretation, as the written text eventually confirmed the existence of both monster and boy.

It is important to note that in this study, readers were reading each text for the first time. It is common for children this age, whether they are reading at school or home, to read texts multiple times (Meek, 1988). I suspect that readers might have noted more of these contradictory cues in subsequent readings.

In *No Such Thing* (Koller, 1997), the contradictory relationships between illustrations and written text added to the humor of the text, but were not essential to the interpretation. In contrast, contradictory relationships between modalities in *Bad Day at Riverbend* (Van Allsburg, 1995) served an essential role. Through most of the book, the written text describes a slimy substance that mysteriously covers the town. The contradiction lies between the threat expressed by the written text and the whimsical feel of the illustrations, which depict this slimy substance as crayon scribbled over the otherwise black-and-white line drawings. At the end of the book, the perspective changes, and the entire book is depicted as a coloring book on a young child's desk. It is absolutely necessary that the reader understand that the slime was really a child's coloring. If the reader does not understand this, there is no resolution to the book, and the final pages are incomprehensible.

Amy's think-alouds during reading show the role of the contradictions. Amy noticed the contradictions earlier than other readers. She noted the unusual illustration style on page 6, stating, "The great stripes of the greasy slime stuff is like coloring that a kid did." She continued to note the contradiction in many of her subsequent think-alouds. At times, however, she put the contradiction aside and thought about other aspects of the

text. For example, her think-aloud in response to page was a prediction: “The coach driver is going to stay at the hotel for a little bit.” It might be fair to say that at these times, Amy temporarily suspended disbelief. While she primarily thought that the marks looked suspiciously like crayon, she was willing to engage in the story as it was illustrated.

Amy noted the contradictions between the written text and illustration early, but all readers noted them by the end of the book. The text ensured that the contradiction was resolved in two ways. On the penultimate page, the illustration greatly widened in perspective. This page contained no written text, so the contradiction was temporarily suspended and the illustration dominated. Reader think-alouds from this page demonstrate that all the readers integrated the new perspective into their interpretations.

*Illustration:*

A bird’s eye view of a child in a hat coloring in a coloring book. The picture in the coloring book is identical to the illustration on the last page of text, consisting of four horses and riders. The child sits at a table covered with crayons and additional stick drawings of cowboys and horses.

Amy: *That the cowboy person's paper was touching the book, so the cowboy got in the story.*

Brad: *And there's a picture. I was right – you can see the boy coloring over everything and there's the guy, he drew it, it's the guy coming over the hill.*

Chad: *She was drawing it all along.*

Connie: *It's cute. I like that. It's funny, because it looked like crayon at the beginning. It's just a little kid trying to color in a picture book*

Duncan: *It was a kid who did all the gooey stuff to them.*

Each of the readers understood that the slime had been crayon scribble all along. Some readers embellished their interpretation with additional possibilities, but all made sense of the contradiction, as was necessary to construct a sound interpretation.

The two texts used contradictory relationships between the modalities in different ways. In *No Such Thing* (Koller, 1997), the modalities eventually came into alignment

and were complementary. If a reader did not note the relationship between the modalities, he or she could still arrive at the desired interpretation. In *Bad Day at Riverbend* (Van Allsburg, 1995), the contradictions became much stronger at the end, and were essential to understanding the story. It seems reasonable to say that *No Such Thing* (Koller, 1997) utilized the contradictory relationship in a manner that was more supportive of a younger reader. The reader could have a successful reading experience without noting the contradiction, and might do so in a subsequent reading.

I had expected to see a third relationship, congruency, appear in the data. A congruent relationship between text and illustration is one in which each modality tells a separate story. The separate stories are not contradictory, but rather fit together in the overall interpretation. I had expected that congruency appear in think-alouds for one particular text, *Knots on a Counting Rope* (Martin & Archambault, 1997).

A notable characteristic of *Knots on a Counting Rope* (Martin & Archambault, 1997) is its use of a story-within-a-story structure. A boy asks his grandfather to tell a story, then the perspective shifts to that interior story, and at the end of the book shifts back to the boy and the grandfather. When the grandfather is telling the story, the illustrations sometimes depict his telling of the story, and at other times depict the events from the interior story. The think-alouds showed some evidence that readers understood the shifts, but none of the readers noted that the relationship between illustration and written text changed. I can think of several possible reasons for the lack of evidence regarding this textual action in the think-alouds. One is that the shift between stories was multiply cued. When something is multiply cued, it is hard for readers to list every cue. They may not be aware of every cue, as cues act quickly, and particularly so when a

second or third cue confirms what one cue suggested. It is also possible that the readers understood the cue quite easily and therefore did not consider it worth mentioning.

Lastly, the understanding of the story-within-a-story may have developed over time rather than in one moment. If that is the case, readers may be less likely to note the each cue in the progression that built to the understanding.

In this section, I presented findings about textual modalities in regard to textual agency. Some of these findings were strong and corroborated with findings regarding reader action. For instance, analysis of reader behavior showed that readers respond to written information more than visual, and the analysis of textual behavior showed that written text acts much more frequently than illustration. Other findings seemed less credible and may point to methodological weaknesses. For example, data showed little multimodal activity by text. Think-aloud data can lack the specificity and the completeness necessary to demonstrate multimodal activity. For these reasons, it is important to view textual agency from several different vantage points. In the next section, I shift to describing textual agency in terms of the information communicated.

### **Types of Information Communicated by Text**

The previous section reported findings regarding the modalities through which texts communicated information to readers. In this section, I report on the interesting patterns that were revealed when I analyzed the types of information communicated by each modality. To my knowledge, this is the first study to look at the types of information communicated by different modalities in a picturebook or any other literature.

Certain types of information entered the reading events more frequently, as evidenced by the presence of the information in the think-aloud statements. The information that most commonly entered the reading events was the characters' speech in the written text, with 127 instances. This was followed by the characters' action in written text (78 instances), the characters' action in the illustration (43 instances), and the character's speech in the illustration, usually through speech balloons (38 instances). (See Table 10 for further information about the types of textual information evidenced in think-aloud statements.)

Table 10

*Types of Textual Information Evidenced in Think-Aloud Statements*

Types of textual information	Frequency	Percentage
Character's speech in written text	127	32%
Action of character in written text	78	20%
Character's action in the illustration	43	11%
Character's speech in illustration	38	10%
Character's physical representation in illustration	36	9%
Representation of object in the illustration	27	7%
Description of character in written text	20	5%
Description of object in written text	14	4%
Description of setting in written text	9	2%
Representation of setting in illustration	1	0%

These data indicate that the text acts more strongly through the characters' speech than through their actions. Information communicated through characters' speech represented 42% of the textual information that entered reading transactions, while information communicated through characters' action represented only 31%. It is important to make a methodological note here. *Knots on a Counting Rope* (Martin & Archambault, 1997), *Fly Away Home* (Bunting, 1991), and *Cinderella's Rat* (Meddaugh, 2002) were all first person narratives. There is an argument for coding any information conveyed through their written text as character speech, but I decided otherwise. Instead, I looked beyond the narrative voice. If the narrator described action, it was coded as such, and only when the narrator presented specific character's words was in the information coded as character speech. I made this decision because it provided more specific and useful information. Coding these entire written texts as character speech would overrepresent character speech and underrepresent the other content within the narration.

Even when narration was disregarded, character speech was more of a force than character action. I found this somewhat surprising in light of Cherland's work on gendered reading responses. She found that boys' responses focus on action, while girls' responses focus on both action and relationships (Cherland, 1992). Given these findings, I would expect that information regarding characters' actions would take a more prominent role in the reading events. I especially thought that the boys would more information regarding character action than character speech. This was not the case: all three boys used more information about character speech. A key difference between the current study and Cherland's work, however, is that this study looks at the reading event

as it occurs, while Cherland studied reading responses completed after reading (Cherland, 1992). The data indicate that while reading, characters' words are very important to the interpretations being constructed. This finding applies to speech expressed both through written text and through speech balloons in illustrations.

The characters' words were more frequently communicated through the written text than through speech balloons in the illustration; however, information from speech balloons was almost always evident in the corresponding think-alouds. This indicates that speech balloons are a particularly powerful means through which picturebooks can act in a reading event.

There was also evidence of text communicating other types of information to the reader. Other types of information that frequently entered reading events were the appearance of the character conveyed through the illustration (36 instances), the appearance of an object in the illustration (27 instances), the description of a character in the written text (20 instances) and the description of an object in the written text (14 instances). This data suggest that illustrations act more frequently than written text to communicate appearances. This finding is unsurprising. An illustration that contains an object must depict its appearance, while text can refer to the same object yet offer no mention of its appearance.

This analysis of textual information that enters reading events yielded the strong finding that information about character speech and action acts most frequently. Findings about the power of speech balloons and the tendency of illustration to communicate physical description are also important. The analysis of textual agency according to type of information conveyed contributes new information to our current understanding of

textual agency. In the next section, I continue to explore textual agency as I shift focus to the specific textual conventions utilized by text.

### **Textual Conventions**

My description of textual agency began by addressing the actions of modalities within text, exploring multimodality and the relationships among modalities. I then presented a view of textual agency which focuses on the information being communicated by text. In this final section, I address textual agency more specifically, identifying the individual textual conventions through which texts act. I begin by listing and describing the textual conventions that acted most frequently, as well as a handful of conventions that acted less frequently but are notable because they acted powerfully. I then present findings regarding themes and categories which emerged from analysis across conventions. Finally, I discuss findings that address the transaction between reader and text, specifically the guidance that certain textual conventions appear to provide their readers.

The most frequently acting textual conventions were words that signal emotion or excitement, character confusion or questioning, typeface cues, references to routines or constants, pronouncements, punctuation cues, high level of detail, speech balloons, word layout, repeated words, and textual patterns. Chapter 4 described in detail how a think-aloud statement can provide evidence of a textual convention acting in a reading event. The think-aloud data showed evidence of each of these conventions entering reading transactions at least twenty times. The next section describes and provides examples of each of these frequently acting textual conventions.



Table 11

*The Most Frequently Acting Textual Conventions*

Textual Convention	Total	<i>No Such Thing</i>	<i>Cinderella's Rat</i>	<i>Bad Day at Riverbend</i>	<i>Knots on a Counting Rope</i>	<i>Fly Away Home</i>
Words that signal emotion or excitement	71	47	7	4	3	10
Character confusion or questioning	59	22	15	3	10	9
Typeface cues	63	29	29	0	5	0
References to routines or constants	41	0	3	4	0	34
Punctuation cues	36	15	14	0	7	0
Pronouncements	31	2	16	0	0	13
High level of detail	30	5	0	0	6	19
Speech balloon	29	2	27	0	0	0
Word layout	29	7	19	0	3	0
Repeated words	23	11	0	1	11	0
Textual patterns	20	20	0	0	0	0

**Words that signal emotion or excitement.** Certain words directly signal emotion or excitement, leading the reader to attend to an emotional or exciting, and potentially important, action in the book. Words that signal emotion or excitement were the most frequently acting textual convention in the study, with think-alouds providing

evidence of 71 transactions. (See Table 11 for further information regarding the frequency of use for textual conventions.)

Sometimes these signal words directly refer to emotions (angry, happy, scared) and other times they describe the emotion less directly ("I feel it...in my heart!" from *Knots on a Counting Rope*, p. 16). When the words signal excitement, they might directly reference the excitement ("He couldn't wait..." from *No Such Thing*, p. 1) or suggest it indirectly ("Mommy, come quick!" from *No Such Thing*, p. 20). The following example from *No Such Thing* (Koller, 1997) illustrates textual agency via two different sets of words that signal emotion or excitement.

*Written text:*

"Really?" he said. "My mommy says there are no such things as boys. She never believes me when I hear boy noises at night."

"I know," said Howard. "Mine never believes me either."

Howard and monster sat slowly shaking their heads, when suddenly Howard started to smile.

"Come here," he said.

He leaned close and whispered in Monster's ear. Monster sniggled and nodded.

Monster crawled on top of the bed. Howard crawled under the bed.

"Oh, Mommy," they both called together. "Mommy, come quick!"

*Illustration:* The boy is whispering in monster's ear, and both are laughing (Koller, 1997, p. 20).

*Amy: I think that they're trying to get their moms back for saying "no such thing as boys and monsters" and they don't really like it so they're kind of playing a prank.*

*Brad: I guess they were setting a prank on their parents, because they both said there was no such thing, so they were proving them wrong.*

*Chad: I think they switched places because they are going to prove to their mothers that there are such things as boys and monsters and they're trying to freak them out.*

There is an important advancement of the plot on this page: once the two characters realize that each of their mothers has been telling them that the other doesn't exist, they decide to play a prank. This plot development was signaled in part by two phrases that

indicated emotion or excitement: “Suddenly Howard started to smile” and “Mommy, come quick!” (It was also signaled by the character’s actions.) In each of these three think-alouds, the readers note that the boys are switching places with the intention of playing a prank on their mothers. The inclusion of this textual information in the think-aloud indicates that the textual conventions successfully performed their role.

The frequent action by words that signal emotion or excitement, compared to its absence in existing scholarship, might be explained by the current study’s focus on literature for children. Rabinowitz’s work (1987), the only work to specifically describe a catalog of conventions, focused on adult literature. The increased activity in fictional picturebooks by words that signal emotion or excitement may suggest that explicit naming of emotions and more heavy-handed signaling of emotions are characteristics of children’s literature. Perhaps this is a scaffold typical of the genre: the picturebook is more likely to clearly communicate emotion, while adult literature leaves more for the reader to infer. This is merely speculation at this time, though given the high frequency with which this convention acted, I believe that further investigation is warranted.

**Character confusion or questioning.** The second-most common textual convention was character confusion or questioning, with data providing evidence of fifty-nine transactions. Character confusion or questioning appeared in several forms: a character directly asking a question, the text stating that a character was wondering about something, or a character stating something that a reader knows is false. In each case, the reader’s attention was drawn to the issue that was questioned, wondered about, or incorrectly stated. Here is one example from *Cinderella’s Rat* (Meddaugh, 2002) in which the text acted through character confusion.

*Written text:*

The truth was out.

"This is the end of us," I thought.

Finally the boy spoke.

"That must have been some powerful magic spell to turn your sister into a rat," he said. "Come. What we need is a wizard."

*Illustration:* Boy is holding his sister mouse, facing the other boy, in conversation. (Meddaugh, 2002, p. 17)

*Amy:* They are going to see the person who changed him into a human.

*Brad:* The boy wanted to change the rat back into human but he didn't know the rat was changed into a human.

*Chad:* I think the boy is taking the other boy to a wizard, and the boy thinks that the sister turned into the rat

*Connie:* The one boy thinks the total opposite of what happened, because it was the rat who actually turned into a boy, and not the sister that turned into the rat.

In this example, the boy revealed his confusion when he said that magic turned the lead character's sister into a rat. The real event was that the lead character was a rat who had been turned into a boy, and that the sister had always been, and should remain, a rat. All four readers noted the character confusion and specifically commented on it, showing that the text acted successfully through this convention.

When text included character confusion or questioning, readers that noted the convention tended to perform one of three behaviors: confirming their own understanding, sympathizing with the character, or pondering the question themselves. The example above, from *Cinderella's Rat* (Meddaugh, 2002), illustrates the textual action of presenting character confusion followed by the reader action of confirming one's own understanding. Each reader's think-aloud presents evidence that the character's confusion, the mistaken belief that the sister had been turned into a rat, entered the reading event. This confusion is part of the plot, so understanding the

misunderstanding is critical to building a successful interpretation. Each reader made moves confirm his or her own understanding of the situation before continuing to read.

In other cases, character questioning correlated to a different reader behavior: sympathy with the character. Below is one such example from *Fly Away Home* (Bunting, 1991).

*Written text:*

"Will we ever have our own apartment again?" I ask dad.

I'd like it to be the way it was, before Mom died.

"Maybe we will," he says. "If I can find more work.

If we can save some money." He rubs my head. "It's nice right here, though, isn't it,

Andrew? It's warm. It's safe. And the price is right."

*Illustration:* Boy and dad and the Medina family are all sitting together and eating. Other customers are visible in the background (Bunting, 1991, p. 25).

Brad: *The little boy wants the apartment back because it is not really a home at the airport. It's just a place.*

Chad: *Their mom died, and before they used to live in an apartment, because they could afford to live in an apartment.*

Duncan: *They are wishing they had a mother, he wishes he had his mother, because she died.*

The readers think-alouds all reflect information from the character's question, "Will we ever have our own apartment again?" In this case, the convention guided each reader to sympathize with the character.

In the following example from *Bad Day at Riverbend* (Van Allsburg, 1995), the textual action of character questioning precedes yet another reader behavior:

*Written text:*

But one morning Sheriff Ned Hardy stood in front of the Riverbend Jail and saw something he never seen before. A brilliant light in the western sky. It lasted a few minutes, then faded away.

Sheriff Hardy went into the jail house. He was sitting quietly at his desk, wondering what the strange light meant, when a loud pounding rattled the jailhouse door.

The sheriff opened it and saw Owen Buck, the blacksmith's boy, breathing so hard he could barely speak. In between gasps, Ned Hardy heard the words

"stagecoach" and "something awful."

*Illustration: The A sheriff is standing on a front porch in town, looking off into the distance and frowning.* (Van Allsburg, 1995, p. 17)

*Chad: The brilliant light was aliens, or the stagecoach exploded.*

In this case, the character's questioning is not relayed as a direct quotation, but rather stated: "He was sitting quietly at this desk, wondering what the strange light meant..." (Van Allsburg, 1995, p. 17). The character's wondering was followed by the reader asking himself the same question. While this reader behavior is not essential in order to arrive at the desired interpretation, it is a productive behavior. The reader thinks of two possible explanations for the strange light.

These findings differ from existing scholarship. Rabinowitz did not use the term "character confusion and questioning" but did report findings that two conventions, (1) factual conflicts within a work and (2) character proclamations of known errors, drew readers' attention to the significance of the conflict (Rabinowitz, 1987). (See Appendix L for a thorough comparison of textual codes from the current study to Rabinowitz's "rules of reading.") Rabinowitz's descriptions of the convention dovetail with one aspect of the current study's description of character confusion or questioning: when a character states something that the reader knows is false. Rabinowitz, however, described these factual conflicts and proclamations of known errors as devices that signal irony. This was sometimes but not consistently the case in the present study and merits further discussion.

First, it is important to note that dramatic irony differs from sarcastic irony. Dramatic irony can be defined as an "incongruity between a situation developed in a drama and the accompanying words or actions that is understood by the audience but not by the characters in the play" (Merriam-Webster, 2011). Analysis shows that readers did

in fact use character questioning or confusion to explore irony in thirty-four of the fifty-nine instances in which the convention acted. There were two picturebooks in the study that contained irony. In *No Such Thing* (Koller, 1997), the ironies are that each character is scared of the other and that each mother insists that the other is imaginary. In *Cinderella's Rat* (Meddaugh, 2002), the irony is that while the main character wants to be changed from a boy back into a rat, other characters assume that his sister was changed from a girl to a rat, and try to reverse it. In many instances, character questioning or confusion guided readers to textual information related to the dramatic ironies in the way described by Rabinowitz (1987).

Also notable, however, are the twenty-five instances in which character confusion or questioning guided readers to interact with textual information unrelated to irony. In *Bad Day at Riverbend* (VanAllsburg, 1995), character questioning about what was attacking Riverbend and what should be done guided readers to wonder the same. In *Fly Away Home* (Bunting, 1991), the boy's questioning about why he didn't have a home led readers to further explore his situation and sympathize with him. In cases such as these, the topics addressed were serious and critical to the story.

**Typeface cues.** The next textual convention in terms of the frequency was typeface cues, with 63 transactions observed. Typeface cues refer to easily visible changes in a book's typeface, and include italics, bold print, larger or smaller fonts, and capital letters. As the following passage and think-alouds demonstrate, these typeface cues can draw a reader's attention to a particular part of the text.

He even liked his big, old-fashioned bed. *Until it got dark...*

*Illustration:* The boy is jumping on the described bed, gleeful. (Koller, 1997, p. 2)

Amy: *I don't understand what he means, "until it got dark." Maybe it's like when he jumps with dirty feet.*

Brad: *I guess he thought the bed it was for a King, and was so great. Then when it got dirty, he didn't like it as much, because he was laying in dirt.*

Chad: *He's probably going to imagine things under the bed.*

Connie: *I agree because I hate the dark. I'd be afraid.*

Duncan: *If it gets dark there will be a monster under his bed. It will grab his foot and pull him down under the bed.*

The words “Until it got dark...” were in a larger font and italicized. (There were additional cues: an indentation in the word layout, an ellipse, and words that signal suspense). The cues successfully performed the function of drawing the readers’ attention to that phrase; every think-aloud contained evidence that readers considered what might happen when it got dark or how the character was feeling as it got dark.

Analysis of the data showed a notable characteristic of typeface cues: that two or more typeface cues often coexist in a single textual utterance. Because typeface can be modified in several ways, it is possible to apply this code to the same utterance in several ways simultaneously. The passage above is an example of this: “Until it got dark...” was in a larger font and italicized. This information was doubly cued, providing even more potential guidance to a reader.

Another notable finding is that typeface cues appeared with frequency in just two of the picturebooks, *Cinderella’s Rat* (Meddaugh, 2002) and *No Such Thing* (Koller, 1997). There was one instance of typeface cues in *Knots on a Counting Rope* (Martin & Archambault, 1997) and none in either *Fly Away Home* (Bunting, 1991) or *Bad Day at Riverbend* (VanAllsburg, 1995). *Cinderella’s Rat* and *No Such Thing* were the two easiest texts in the study. This may indicate that typeface cues provide a great deal of support for younger readers and that they may be found more frequently in books for younger readers.



Three types of typeface cues were seen in the study: italics, large font, and whole-word capitalization. Italics were used most frequently (11 uses) and were seen in each of the three books that contained typeface cues. Whole-word capitalization was seen on five pages of text, all in *Cinderella's Rat*. Large font was only seen two times, both in *No Such Thing*, and both of these uses were in combination with italics. Each of these typeface cues was quite effective; the information that was cued appeared in the think-aloud statements in the majority of reading events (72% for whole-word capitalization, 72% for italics, and 60% for large font.) Given that each type of typeface cue was quite effective, the differences in use are more likely stylistic preferences of each author: Meddaugh seems to prefer whole-word capitalization, and Koller seems to prefer large font, while all three authors utilized italics.

There is precedence for listing typeface cues as a convention. Rabinowitz noted that deviations in typography, namely the italicization of certain words, unusual capitalization, and the inclusion of parentheses around certain utterances, can signal importance and contribute to a signal of changed speaker (1987). The addition of large font as a typeface cue appears to be a new contribution to the field. It may be that the picturebook is especially conducive to this convention: picturebooks, compared to novels, contain fewer words on each page and more space in which to adjust font size.

**Textual references to routines or constants.** Another convention through which text frequently acted was reference to routines and constants. The code “reference to routines or constants” was applied when a text mentioned things that characters regularly did or things that always happened. When texts referred to a routine or constant, readers noted it, and the information entered the transaction. This was evidenced through think-

aloud statements forty-one times. The example below illustrates textual action through this convention:

*Written text:*

Riverbend was a quiet little town -- -- just a couple dozen buildings alongside a dusty road that led nowhere. Though the stagecoach occasionally rolled through town, it never stopped because no one ever came to Riverbend and no one ever left. It was the kind of place where one day was just like all the rest.

*Illustration:* A black and white line drawing with a bird's eye view of a small town surrounded by empty land & mesas in distance. (Van Allsburg, 1995, p. 2)

Brad: *I think it's about this town that no one's ever heard of because no one ever goes there.*

Chad: *I think Riverbend is like, you can never leave, and it's a boring town, and nothing ever happens.*

Duncan: *Something will happen and everything will change. A lot of people will come and it will be loud and crowded.*

In this example, the text provided information about several constants: that the stagecoach never stopped, that no one ever came or left, and that one day was just like the rest. All of the readers' think-alouds demonstrate that these actions had an effect, as each reader noted at least one of the constants. Brad noted that no one ever comes to Riverbend, Chad noted that no one ever leaves and that the days are uneventful, and Duncan predicted that constants would change: something would happen and that people would come.

Previous scholarship does mention this convention. Specifically, Rabinowitz refers to routines and conventions as part of "rules of undermining." According to the "rules of undermining," when a text states that something is impossible, it will occur, or if the text states that something will always continue, then it will stop (1987). Duncan's statement from the previous example, "Something will happen and everything will change. A lot of people will come and it will be loud and crowded" is one example of a reader using the "rules of undermining" to interpret a textual reference to a routine or

constant. There were, however, examples of textual references to routines or constants that were not governed by the “rules of undermining.” Many such examples came from readings of *Fly Away Home* (Bunting, 1991), as illustrated below:

*Written text:*

The airport's busy and noisy even at night. Dad and I sleep anyway. When it gets quiet, between two and 4 a.m., we wake up.

"Dead time," dad says. "Almost no flights coming in or going out."

At dead time there aren't many people around, so we're extra careful.

In the mornings dad and I wash up in one of the bathrooms, and he shaves. The bathrooms are crowded, no matter how early. And that's the way we like it.

Strangers talk to strangers.

"Where did you get in from?"

"Three hours our flight was delayed. Man! Am I bushed!"

Dad and I, we don't talk to anyone.

*Illustration: Two men talk in a bathroom. In the background, the father and boy are brushing their teeth and changing clothes. (Bunting, 1991, p. 19)*

Brad: *Other people are talking and they always overhear them because they are washing up.*

Chad: *They always use the bathroom in the morning, and they try not to talk to anyone.*

Connie: *In real life, someone would notice someone shaving in the airport, and a little boy getting changed.*

In these examples, and many others, readers do not perceive the reference to routine as a signal that the routine will be broken; rather, they appear to integrate into their understanding of the characters' lives. This function of textual references and routines, leading readers toward further character development, appears to be a new contribution to our understanding of how textual references and routines operate as a convention.

**Punctuation cues.** Punctuation cues are unusual uses of punctuation that can stand out to a reader and therefore can guide the reader toward specific content. Typical uses of punctuation, such as punctuating the end of a sentence or using commas in a list, do not provide such guidance and therefore are not considered punctuation cues.

Question marks and exclamation points are used quite frequently in children's fictional

picturebooks, so considering every use as a textual convention would have been excessive. Question marks and exclamation points were only considered textual conventions when (1) there were multiple uses of them on one page; (2) the reader referred specifically to the punctuation mark; or (3) the written text of a page consisted of just one sentence, and it contained a question mark or exclamation point. Ellipses are rather uncommon; therefore, any ellipse was considered a textual convention. In total, punctuation cues highlighted textual information that entered reading transactions thirty-six times in the study. Below is an example of text using the punctuation cue of an ellipse:

*Written text:*

So the three of us wandered back to the castle, where we all said goodnight. As I climbed onto the coach, a clock began to chime. At the stroke of 12, once again...

*Illustration:* The boy and girl are at the castle and standing by the coach. The friend is leaving. In the background, Cinderella is exiting the castle. (Meddaugh, 2002, p. 26)

*Amy: I'm guessing that like in the movie, because I've seen the movie, her slipper falls out and they don't get home in time and everything turns back to normal.*

*Brad: He's turning back into a rat and the boy is finally going to find out that he's really a rat.*

*Chad: I think he's going to turn back into a rat.*

*Connie: I'm thinking that maybe the boy and sister might turn back into rats again.*

In each of these transactions, the think-aloud shows that the ellipse cued the reader to believe that something important would happen.

Punctuation cues, like typeface cues, can be used in multiple ways simultaneously. The next example shows text using a combination of ellipse, multiple question marks, and multiple exclamation points in a single text:

*Written text:*

*Blue?... blue?*

*Blue is the morning...*

the sunrise...  
the sky...  
a song of the birds...  
oh, I see it!  
*Blue! Blue!*  
*Blue* is happiness, Grandfather!  
I feel it...  
in my heart!

*Illustration:* The boy's face is shown in close-up, lit by the fire. His eyes are wide open and his hands are beside his face (Martin & Archambault, 1997, p. 16).

Chad: *Now I'm certain that he is blind and he's trying to imagine what day is like and what is in it*

Connie: *It's kind of weird that they didn't know the color blue, but it must be kind of hard to teach a kid what a color is.*

This is the most extreme example of text's use of punctuation cues in the study. Indeed, this particular page of text contains the highest number of textual conventions of any page in the study. There are five ellipses, two question marks, and five exclamation points. There are also typeface cues, words that signal newness or change, words that signal emotion or excitement, character questioning, a high level of detail, and figurative language. This particular passage, in my opinion, is the hardest in the study, so the heavy use of conventions is appropriate. The multiple punctuation cues support the reader in noticing the importance of this page. The ellipses recreate the boy's speech and at the same time create a feeling of uncertainty and slow the reader down, supporting the reader in unraveling the uncertainty. The question marks and exclamation points cue the reader to the boy's emotion and to his progress in understanding the color blue. Punctuation cues worked to draw readers' attention to specific content which then entered the reading transaction, as evidenced by the think-alouds.

Punctuation cues only appeared in three of the texts: *Cinderella's Rat* (Meddaugh, 2002), *No Such Thing* (Koller, 1997), and *Knots on a Counting Rope* (Martin

& Archambault, 1997). Ellipses and exclamation points were used by all three of these texts, while only *Knots on a Counting Rope* used question marks. *Knots on a Counting Rope* had the most uses of punctuation cues, and most of these were used in the single passage quoted above, which was the most difficult passage in the book. As with typeface cues, punctuation cues appeared most consistently in the two easiest texts (*Cinderella's Rat* and *No Such Thing*). This suggests that punctuation cues provide a high amount of support and are helpful to younger readers who require higher levels of support.

Ellipses and exclamation points were effective in bringing specific information into the reading transaction in just over half of their appearances. They successfully drew reader attention in 56% and 53% of instances, respectively. In contrast, question marks were much more effective textual conventions, with the information cued by question marks entering 88% of the reading transactions in which they appeared. I suspect that the reason for this is that the use of question marks often coexisted with the previously described convention of character confusion or questioning.

**Pronouncements.** Another convention that the text used frequently was the pronouncement. Pronouncements consisted of generalizations, stated as truths with an authoritative voice, and were observed in action thirty-one times. Texts used pronouncements to signal importance to readers, as in the example below:

"Delta, TWA, Northwest, we love them all," dad says.

He and I wear blue jeans and blue T-shirts and blue jackets. We each have a blue zippered bag with a change of blue clothes. Not to be noticed is to look like nobody at all.

*Illustration:* A man with luggage reads a newspaper. The father and boy walk by with their bags and blue clothes. (Bunting, 1991, p. 8)

Amy: *They're just trying to stay ordinary – but I barely ever see people in all blue.*

Chad: *I guess that wearing all blue is like a disguise to them, not to get noticed.*

Connie: *I think that would kind of stand out because if they wore all blue, because not everybody wears all blue. I think they should wear what everyone else wears.*

Duncan: *Every time, they won't be noticed because they always wear the same clothes, and everything that they wear is blue.*

In this example, the text makes the pronouncement, “Not to be noticed is to look like nobody at all.” All four think-aloud statements show that this textual action was successful in drawing the readers’ attention to this statement.

Existing scholarship does not make mention of pronouncements; however, Rabinowitz does name maxims and “direct statements of importance, often by the narrator” as conventions (Rabinowitz, 1987). Of all the textual utterances that were coded as pronouncements in the current study, only two might be considered maxims: “Life is full of surprises” from *Cinderella’s Rat* (Meddaugh, 2002, p. 1) and “There are no such things as monsters” from *No Such Thing* (Koller, 1997, p. 3). Other pronouncements (for example, “Not to be noticed is to look like nobody at all” from *Fly Away Home* (Bunting, 1991, p. 8) might fall under Rabinowitz’s category of “direct statements of importance.” During preliminary analysis for the current study, I tested the code “direct statement of importance” but found it insufficiently descriptive. The code “pronouncement” with its definition as a generalization, stated as a truth with an authoritative voice, seemed a more precise description of the data.

**High level of detail.** The think-aloud data demonstrated that text often successfully communicated importance by providing a high level of detail about a subject. For the purposes of the study, a high level of detail was defined as three or more details when one would have been sufficient in terms of plot. Texts used high levels of

detail to attract reader attention, as evidenced in the think-aloud statements, thirty times in the study. Below is an example of text using a high level of detail to support a reader:

*Written text:*

Once a little brown bird got into the main terminal and couldn't get out. It fluttered in the high, hollow spaces. It threw itself at the glass, fell panting on the floor, flew to the tall metal girder, and perched there, exhausted.

"Don't stop trying," I told it silently. "Don't! You can get out!"

For days the bird flew around, dragging one wing. And then it found the instant when a sliding door was open and slipped through. I watched it rise. Its wing seemed okay.

"Fly, bird," I whispered. "Fly away home!"

Though I couldn't hear it, I knew it was singing. Nothing made me as happy as that bird.

*Illustration p. 16:* A little brown bird is perched on a ledge.

*Illustration p. 17:* The boy is looking as the bird flies through an automatic door. There are other people walking in the doorway but no one else is looking at the bird. (Bunting, 1991, p. 16)

*Amy: The boy likes nature and animals.*

*Brad: The bird flew away and the boy felt pretty happy but he would be happier if he were the bird, because then he would be getting away.*

*Chad: The boy is trying to help the bird, and one day the door is sliding open, and the bird escapes.*

*Connie: I think that they boy is happy because of the bird, because it made him feel that maybe someday he'll be free.*

*Duncan: They get lost, the boy and the father. Because the boy was too busy watching the bird trying to get out. So the boy is lost.*

In this example, the text successfully led all five readers to note that the bird was important. The text acted through a high level of detail about the bird and its escape as well as through words that signal emotion and a reference to title.

Existing scholarship does refer to a high level of detail as a textual convention.

Rabinowitz included "details at climactic moments" among his catalog of textual conventions (1987). The example above from *Fly Away Home* illustrates details used at a climactic moment drawing reader attention to the significance of the scene. In the current study, however, there were many instances in which high levels of detail guided



reader attention in moments that were not climactic. For example, when reading *Fly Away Home*, all five readers' think-alouds contained information about the characters' choice of blue clothes and duffel bags, even though this was not a climactic page of the story. Of the thirty instances in which high level of detail acted as a textual convention, eleven involved climactic scenes and nineteen did not.

**Speech balloons.** Speech balloons are conventions commonly used by texts, with think-aloud evidence showing twenty-nine instances of them drawing reader attention to specific textual information. In addition, the data show that speech balloons were one of the most powerful conventions through which texts acted. When text included a speech balloon, approximately seventy-five percent of the think-aloud statements showed evidence that the information in the speech balloon entered the reading transaction. Most of the remaining twenty-five percent fell into the grey area where it is possible, but not evident, that the speech balloon entered the transaction. Here is an example in which the page of text contains written text, an illustration, and a speech balloon:

*Written text:*

I became a COACHMAN.

Well, more of a Coach Boy.

*Illustration:* The boy is sitting and looks confused. The boy's speech balloon says "My tail. Where's my tail?" A confused mouse (sister) looks on.

(Meddaugh, 2002, p. 9)

*Brad:* I guess he was asking his sister where his tail went because he turned into a boy.

*Duncan:* The tail is right there (points to whip). He became a human instead of being a coach boy and the rat will follow him wherever he goes.

In this example, both think-alouds show evidence that the information from the speech balloon entered the reading transactions. In Brad's think-aloud, there is evidence that text acted through the speech balloon and the illustration. In Duncan's think-aloud, there

is evidence that text acted through the speech balloon, the illustration, and the written text.

Of the eleven textual conventions that acted with frequency, only two involved illustration. These are speech balloons and word layout. Speech balloons are unique in that they consist of written text within the illustration. Sometimes, as in the example above, a page contains written text, an illustration, and additional written text in a speech balloon within the illustration. In other instances, the contents of the speech balloon represent the entirety of the written text for the page. Below is one such example:

*Illustration:* Boy is shouting, hands up. In his speech balloon: “STOP! That's my sister!” (Meddaugh, 2002, p. 17)

*Amy:* *He knows it's his sister for sure.*

*Brad:* *He's telling him to stop because he doesn't want his sister to get killed.*

*Chad:* *He wants the boy to stop trying to stamp on the rat.*

*Connie:* *He's probably going to get himself into trouble because he just said that.*

In this example, the only written text is within the illustration, in the form of the character's speech inside the balloon. The think-aloud statements by these four readers show evidence that the information from the speech balloon entered the reading transactions. Further analysis showed that speech balloons were powerful textual actions whether used with just an illustration or with additional written text; the difference in effectiveness between the two uses was minimal.

**Word layout.** Text also communicated to readers through changes in the layout of written text on the page. There were three different forms of word layout cues: (1) the use of a blank line to break up the written text; (2) the configuration of written text around an illustration; and (3) indentation other than paragraphing. This example from

*Cinderella's Rat* (Meddaugh, 2002) shows how text can use a blank line to communicate with readers:

*Written text:*

At the wizard's cottage, the boy asked the wizard to change my sister back into a girl. I was hopelessly confused. If I explained the *real* problem, the wizard would turn us both into food for cats.

Maybe Ruth would like being a girl. (Meddaugh, 2002, p. 20)

*Illustration:* The two boys and mice are talking to the wizard at his cottage door.

Amy: *He's not going to stop the other boy.*

Brad: *The boy wanted his sister to be a girl because if he told the real truth, then he would be a rat, and they'd want to kill him too.*

Chad: *He wants his sister turned into a human, be a girl, because then they don't have to run away from cats.*

Connie: *I think that Ruth would like being a girl and not being chased by cats.*

Duncan: *He's going to turn her (the rat) into a girl, instead of turning the boy into a rat.*

The blank line that preceded "Maybe Ruth would like being a girl" drew reader attention to the importance of that statement. Each of the above think-aloud statements showed evidence that this textual information entered the reading transaction.

Of all the textual conventions that occurred with frequency, only word layout and speech balloons involved the illustration; the other conventions involved the written text only. In fact, of the three types of word layout, only one involves the illustration: when the written text is configured around one or more illustrations. The following passage from *Cinderella's Rat* and two corresponding think-aloud statements show how this convention can draw attention to specific content:

*Written text:*

My sister Ruth and I were always hungry.  
One day hunger drove us to do a foolish thing...

and we were caught!

*Illustration:* The top picture shows the mice smelling cheese and moving toward the trap. The bottom picture shows the trap closing on them (Meddaugh, 2002, p. 5).

*Amy:* They were hungry and they fell into a trap with cheese in it.

*Brad:* I guess he got caught in a mouse trap, because he was hungry and there was cheese in there.

The written text in this passage is broken into two parts, each corresponding to an illustration. The think-aloud statements contains information from each part of the text. This shows that the variation in word layout helped guide readers to note specific content. (It should be noted that this page of text contained another convention, the use of multiple illustrations on one page of text, which also provided guidance to readers.)

Changes to standard layout occurred in only three texts: *Cinderella's Rat* (Meddaugh, 2002), *No Such Thing* (Koller, 1997), and *Knots on a Counting Rope* (Martin & Archambault, 1997). *Knots on a Counting Rope* used only indentation, and used it in a unique manner that merits discussion. Throughout the text, the author used indentation to signal a change in voice from one character to another. The boy's voice was printed along the left margin, while the grandfather's voice was significantly indented. This indentation and the change of voice it signaled, however, only entered the reading transactions related to the first page in which they appeared. It appears that once the readers noted that the indentation signaled the change of voice, this convention no longer entered their think-aloud statements.

*Cinderella's Rat* and *No Such Thing* used word layout conventions in the typical manner: to draw readers' attention to specific information in the text. The use of a blank line to offset text was the most common word layout convention, entering eighteen reading transactions which surrounded five different pages of text. Blank line was the

most effective word layout convention, with the offset textual information entering reader transactions in seventy-two percent of instances. Text configured around an illustration appeared slightly less, entering eleven reading transactions surrounding four pages of text. The configuration of written text around an illustration resulted in the information entering reading transactions in fifty-five percent of instances. Indentation was only used once outside of its atypical use in *Knots on a Counting Rope*. It was used by *No Such Thing*, in combination with a blank line. This one use was highly effective: the information cued with by indentation and a blank line entered all five of the readers' think-alouds.

**Repeated words.** Another convention that texts used to guide readers was repetition. This code was applied when the text repeated selected words and the think-aloud demonstrated that these words entered the reading transaction. Texts used repeated words to signal important information twenty-three times. The passage and corresponding think-alouds below show one use of repeated words:

*Written text:*

I already have crossed  
some of the dark mountains.

There will be more, Boy.

Dark mountains  
are always around us.

They have no beginnings and...

... they have no endings.

But we know they are there, Grandfather,  
when we suddenly feel afraid.

Yes, Boy... afraid to do  
what we have to do.

Will I always have to live in the dark?

Yes, Boy.

You were born with a dark curtain  
in front of your eyes.

But there are many ways to see,  
Grandfather.

Yes, Boy, you are learning  
to see through your darkness  
because you have  
the strength of blue horses.

*Illustration:* The grandfather and the boy are outside, sitting around a fire. The horses are shown in the periphery of the illustration. The boy's face is visible, but the grandfather's is not. The boy is smiling. (Martin & Archambault, 1997, p. 15)

*Amy: I'm thinking that the boy is blind. It said, "Will I always have to live in the darkness?"*

*Chad: Now I'm thinking that he's blind because of what the grandfather said about the dark curtain in front of his eyes.*

*Duncan: The blue horses give strength to the boy and he sees better in the darkness from the blue horses.*

In this example, the text repeats the words “dark” and “darkness” five times in one page of text. The text uses the repetition to draw the reader’s attention to this important concept. In this story, it is essential that the reader understand that the boy is blind; however, the concept is not expressed directly but rather through the metaphor of darkness. In all three think-alouds, the text successfully directed the readers’ attention to the darkness. In Duncan’s case, he has yet to understand the metaphor but it is still clear that he noted its importance.

Rabinowitz did name repetition in his catalog of textual conventions (1987). He did not, however, differentiate between repeated words and larger-scale repetitions such as textual patterns. As I defined my codes, I found it useful to distinguish the two. The code “repeated words” was used to describe the repetition of a single word or variation of a word on a single page. The code “textual patterns”, in contrast, was used for repeated phrases that appear across pages of text.

**Textual patterns.** Text also acted through the use of textual patterns. Textual patterns are similar to repeated words, with one important difference. Textual patterns refer to repetitions of phrases that occur across multiple pages of text. (Repetitions that

are limited to a single page were coded as repeated words.) Think-aloud data showed twenty instances of textual patterns guiding readers toward specific information. I present the following two pages of *No Such Thing* (Koller, 1997), along with the think-alouds that followed the second page, as an illustration of how text acts through such patterns.

*Written text:*

"I think there's a monster under my bed," Howard told his mommy when she came in to kiss him goodnight.

Howard's mommy laughed. "This old house is playing tricks with your imagination," she said. "You know there are no such things as monsters.

Now, be a good boy and go to sleep."

*Illustration:* The boy is standing on the bed, holding a teddy bear, facing away. The mother is at end of the bed talking to the boy. The lampshade hints at a monster shape (Koller, 1997, p. 3)

Monster's mommy came in to kiss *him* goodnight. "I think there's a boy on top of my bed," Monster told her.

Monster's mommy sniggled. "Oh, monster," she said, "you know there are no such things as boys. Go to sleep now."

*Illustration:* Under the bed, the monster's mommy is tucking the young monster under his cobweb blanket. The young monster is pointing up at bed (p. 4)

Amy: *He thinks that the monsters under his bed are like people, like him and his mom are real.*

Brad: *She's kind of saying the opposite thing. I guess it's like, Howard's dream, and he's having a nightmare about monsters.*

Chad: *I think that the boy on the bed is scared of the monsters below the bed, and the monster below the bed is afraid of the boy on the bed, Howard.*

Connie: *That's funny. It's funny how there really is a monster under the bed and they're saying, "there's no such thing as boys" and the boy's mother is saying, "there's no such thing as monsters".*

Duncan: *He's saying that he's going to peek under the bed and the boy will peek under the bed and then they will both scream and then they will both call their mommies and say there's a boy on top of the bed and there's a monster under the bed.*

There were several repeated phrases on these two pages: "I think there's a monster/boy under my bed," "You know there are no such things as monsters/boys," and "Go to

sleep.” Each think-aloud indicates that these textual patterns entered the reading event. The patterns were interpreted differently by different readers (Brad’s interpretation particularly stands out), but in all cases, the readers’ statements provide evidence that the text successfully communicated through the pattern.

All twenty instances of textual patterns occurred in a single book, *No Such Thing* (Koller, 1997). While I cannot offer even the most tentative assertions with a finding based on just one book, I will mention the possibilities that come to mind as suggestions for possible future research. First, textual patterns by definition consist of multiple occurrences. The pattern continues through a text or at least through a section of it. This may explain the high number of instances (twenty) in a single book. I also speculate, based on personal experience, that textual patterns are more likely to appear in books for younger readers, such as enduring favorite *Brown Bear Brown Bear* (Martin, 1983). *No Such Thing* is the book in the study with the easiest reading level, and most likely to be read by the youngest readers.

As noted in the previous sub-section, Rabinowitz named repetition in his catalog of textual conventions, but did not distinguish between repeated words and larger-scale repetitions such as textual patterns (1987). Preliminary data analysis led me to separate repeated words from textual patterns. Repeated words sometimes guided reader attention to a small concept and sometimes to a larger theme. The textual patterns that acted in this study, on the other hand, all guided reader attention to a larger theme. Specifically, all twenty instances of textual patterns in *No Such Thing* guided readers to further appreciate the parallel beliefs and experiences of the boy and monster.



**Other notable textual conventions.** There were other textual conventions that did not act with great frequency yet deserve mention. For a handful of conventions, their relatively low number of appearances in the think-aloud data was entirely explained by their low number of appearances in the text. Yet, these conventions appear to be particularly potent; that is, when they are present in the text, they enter the reading transaction at high rates. These conventions are: abrupt utterance, return to an earlier reference, reference to the title, threats and promises, and figurative language. Each of these conventions was also noted by Rabinowitz as a textual convention that acted in adult literature (Rabinowitz, 1987). Another convention was noteworthy because it so closely resembles one of the more frequently acting conventions. In addition to words that signal emotion or excitement, I also noted that words that signal newness or change were at work in some reading transactions. Finally, I wish to highlight other conventions of illustration that appeared in the think-aloud data: drastic changes in style or medium, close-ups, and multiple components on one page of illustration. My interest in further describing conventions of illustration is a result of a current imbalance; there is much more known about the conventions of written text. This is a largely due to previous scholarship with a focus on adult literature (e.g. Rabinowitz, 1987). Each of the conventions named in this paragraph are worthy of additional attention; while they did not appear frequently in this study, they may appear more frequently in reading transactions with different texts or readers, and they all warrant further exploration.

**Lack of agency exhibited by visual grammar.** I had expected to see illustrations acting in ways described by Kress and van Leeuwen in their seminal work on visual grammar (1996). This work described how elements in visual texts work

conceptually, attributing symbolic meanings through a subject's position and surroundings, as well as presentationally, communicating information about the subject through framing, angle, lighting, credibility of style, and other visual elements. Yet, my analysis of the think-aloud data showed very little evidence of the picturebook illustrations acting in these ways. In fact, the only visual convention from Kress and van Leeuwen's work that appeared in data from the present study was a close-up illustration.

I can offer several possible explanations. First, Kress and van Leeuwen were not working with children's fictional picturebooks. They generally worked with individual visual texts, often magazine advertisements. Kress and van Leeuwen's brief work with children's books was limited to board books for infants and toddlers, and still focused on individual illustrations (1996). A defining characteristic of picturebooks is that the written text and the illustration both contribute to an ongoing narrative, and it is understandable that different conventions are at play in this situation.

I also propose that visual grammar, like story grammar, is different than conventions. In written text, story grammar consists of narrative elements such as character, setting, introduction, conflict, climax, and resolution. These narrative elements do not act in the same way as narrative conventions: while narrative conventions signal importance to a reader, narrative elements are always present. Sometimes knowledge of narrative elements does enter the reading event, but when it does so, it is extratextual knowledge of genre, and considered the agency of culture. It is possible that knowledge of visual grammar could act in a similar way; for example, if a character's gaze was directed at the left side of an illustration, it might signal to a reader that the following page will reveal the object of the character's gaze. There was no such evidence,

however, in the data from the present study. The agency of illustration was evident in three conventions: drastic changes in style or medium, close-ups, and multiple illustrations on one page.

### **Categories of Textual Conventions**

After identifying the specific conventions that acted in the reading events, I looked for patterns that emerged across the conventions. One possibility was that the textual conventions that appeared in this data might align with the categories of conventions previously identified by Rabinowitz (1987). In the previous section, I noted alignment between conventions from the present study and from Rabinowitz; I have not, however, addressed categories of codes. Rabinowitz organized his long list of textual conventions into four categories, the “rules of reading.” These are (1) rules of notice, which help a reader determine which details are important; (2) rules of signification, which help a reader determine how to interpret elements of the text such as symbolism; (3) rules of configuration, which guide readers in developing an interpretation of the work as a whole; and (4) rules of coherence which guide the reader’s retrospective interpretation of the text (Rabinowitz, 1987).

Differences between the conceptual frameworks of Rabinowitz’s work and the current study made Rabinowitz’s rules unsuitable for use as categories in the current study. The current study frames reading as a transaction among reader, text, and culture. In contrast, Rabinowitz described conventions as a contract between reader and text, without including culture or breaking down individual roles. As a result, some of Rabinowitz’s rules fall under the role of culture in this study. For example, one rule of configuration is that fictional stories generally have a problem and a solution. Examples

of rules of coherence are that stories often teach valuable lessons about life and that patterns or parallels within the story are meaningful. In terms of this study, these rules represent extratextual cultural knowledge and therefore fall under cultural rather than textual agency.

When I analyzed data in relation to Rabinowitz's rules of notice and rules of significance, I found that all the textual conventions from the present study qualified as rules of notice. That is, the textual conventions acted by drawing readers' attention to specific information. This might be a limitation of using think-aloud data to view textual behavior: readers will only comment on the things that draw their attention. Regarding rules of significance, I did identify some relationships between textual action and reader action that suggest that texts use the conventions to guide readers toward particular interpretations. These relationships are discussed in the sections describing each convention. I then began anew in searching the data for patterns that might form categories. The patterns that emerged addressed the ways in which different conventions attract a reader's attentions. Some conventions act in a purely visual manner. With these conventions, one can note the visual differences without reading a single word. Examples of these visual conventions include typeface cues, punctuation cues, speech balloons, and word layout. Other conventions act on a word-based or syntactic level. These cues can be seen and heard in individual portions of the text. These syntactic cues included word repetition and textual patterns. A reader would not need to know the meaning of the repeated words or phrases to note that they are repeated. The final category consists of those conventions that require the reader to think about the meaning of the information signaled by the convention. These meaning-based cues included

words that signal emotion or excitement, character confusion or questioning, textual references to routines and constants, high level of detail, and pronouncements. All of the textual conventions fall into one of these three categories.

While these three categories emerged organically from the data, the concept of visual, syntactic, and meaning-based cues is not a new one. These three categories of cues have been previously identified in relation to the cues used by readers as they decode (Goodman, 1973). The possible implications of this connection will be discussed in chapter 8.

### **Textual Conventions in Action**

Earlier in the chapter, I identified and described the most frequently acting textual conventions. Conventions were presented separately in the order of their frequency. In reading events, however, textual conventions do not always appear in such an orderly fashion. Think-aloud data show that different textual conventions enter different reading transactions, and to different effects. In the following example, the think-aloud statements that followed one page of text demonstrate different textual conventions acting in a range of ways.

*Written Text:*

Howard loved the old house he and his family had just moved into. He loved all the neat little nooks and crannies, and the large windows that nearly touched the floor.

He couldn't wait to explore all the funny little closets and cupboards.

*Illustration:* Boy standing on landing of old house, smiling. (Koller, 1997, p. 1)

*Amy:* That I've never moved and it seems like he just moved into a new house.

*Brad:* He's in love with his new house.

*Chad:* If it's a big house I think he will get lost at some point and find a little door.

I identified four textual conventions that are present on this page: repeated words

(loved), words that signal newness or change (just moved in), words that signal emotion

or excitement (couldn't wait), and a high level of detail (house description). The think-aloud statements show that the text used these conventions differently as it transacted with different readers. In Amy's think-aloud, we see that text acted through words that signal newness and change. Brad's think-aloud shows that text acts through repeated words in addition to words that signal newness or change. In Chad's case, there were two other textual conventions in action: words that signal emotion or excitement and a high level of detail. This range of activity by textual conventions shows that there is a sizeable difference between the textual conventions present on a page and the textual conventions that act in the reading event. It further demonstrates that analysis of think-aloud statements can provide information how texts use conventions to act in reading events.

There are also think-aloud statements in which text showed no action through conventions. In these cases, there were no identifiable conventions present on the page of text. This passage and corresponding think-alouds from *Cinderella's Rat* provide an example:

*Written text:*

We stepped out into the night.

*Illustration:* A castle stands on a hill in the night (Meddaugh, 2002, p. 19).

*Amy:* They are going to the castle that the person lives in.

*Brad:* They walked out to go find a wizard.

*Chad:* They are on their way to nearby wizard.

*Duncan:* They are going to walk all the way and they will go from house to house and say, "is there a wizard anywhere here?" and people will say "No."

None of the identified conventions were present on this page of text; however, the think-alouds still show evidence that textual information entered the think-aloud. In Amy's case, her use of the word "castle" shows that information from the illustration entered the reading transaction. In Brad, Chad, and Duncan's cases, it is unclear whether the think-

aloud statements were informed by the written text or the illustration, but it is clear that information from one or the other, and possibly both, entered the transaction. It is clear that readers are making meaning from the text; however, the think-alouds provide no evidence of specific conventions that guide readers toward certain content.

When there are no identifiable textual conventions, a question arises: is it that the text does not contain conventions, or that we have not successfully recognized them? Both alternatives are possible. Future researchers will almost certainly identify additional conventions. This can be expected for several reasons. There is little existing scholarship which examines the reading event as a transaction among reader, text, and culture; additional research will add to and refine its findings. This study examined just twenty-four reading events involving just five readers and five books. More data would likely add to the catalog of conventions. Finally, think-alouds are by nature often incomplete. Readers may not say everything that they are thinking. While think-alouds may provide the only window into these unseen processes, the picture they provide is imperfect. Additional data will yield additional information that will contribute to additional understandings. This study is again a preliminary attempt to describe the roles of reader, text, and culture in the reading event.

On the other hand is an argument which asserts that conventions that do not enter think-aloud statements are not conventions at all. In Chapter 2, I discussed how conventions as a system are created through the dialogic of reading transactions. Conventions that acted in one reading event are brought into action for another. The more the conventions act, the stronger they become. When data do not provide evidence

of conventions acting in reading events, it may indicate that the convention is weak.

Again, future research with additional data will add to our understanding.

### **The Challenge of Identifying Textual Conventions in Illustrations**

In an earlier section of this chapter, I described the textual conventions that most frequently acted in reading events. These textual conventions are, for the most part, performed by the written text. Only two codes, speech balloons and word layout, involve the illustration. Speech balloons are interesting because they consist of written text within the illustration, and this written text in the balloon sometimes shares a page with traditional written text. Word layout sometimes involves the illustration, when the written text is configured around one or more illustrations, but this is just one type of word layout variation. There were other textual conventions performed exclusively by illustrations – multiple components in illustrations and facial close-ups – but neither of these entered the reading transactions with substantial frequency. The majority of identified textual conventions involve only written text. These findings compelled me to ask: why do the textual conventions for written text dominate the dialogue to such an extent?

The question was complicated when I looked at textual modalities rather than textual conventions. Data from this study regarding the textual modalities in action also indicate that written text acts more frequently than illustrations. In those think-alouds for which the acting modality was identifiable, written text informed seventy-seven percent and illustration informed thirty-eight percent of think-alouds. (The sum is greater than one-hundred percent because in some transactions, both modalities acted.) Written text acted successfully twice as often as illustration.



I then compared the findings regarding modalities to the findings regarding conventions. While written text as a modality acted twice as often as illustration, the conventions involving written text acted *nine times* as often as the conventions involving illustration. I have no reliable explanation for why the information communicated by illustration does not appear to utilize conventions to do so. In this study, information from the illustrations is entering the think-aloud, but acting in ways unseen.

I can speculate as to why the actions of illustrations are less visible than the actions of written text. One reason is that many previously identified textual conventions of illustrations did not act in ways that were evidenced in the think-aloud statements. For example, one way that illustrations can convey meaning is through page layout. A previously identified convention is that when two images are side by side, the left image is the status quo and the right image shows a change (Kress & van Leeuwen, 1996). This convention did not appear in any of the books in this form, although it did appear in a similar form: when there were multiple illustrations, the illustrations progressed, in terms of time passing, from left to right and from top to bottom. Yet, this convention did not visibly enter any of the reading transactions; that is, none of the think-alouds contained any reference to information relayed through this convention. It may be that readers have internalized left-to-right directionality and other conventions of illustrations to the degree. When readers have internalized concepts, they perform them with automaticity. They do not have to think about the process, and are therefore unlikely to note the process in their think-alouds (Pressley & Afflerbach, 1995).

There is also the possibility that using a verbal think-aloud protocol for data collection privileges verbal information. Information from the illustrations is not verbal,

while information from the written text is. When readers were asked to give a verbal response, they may have found it easier to compose an answer within that sign system. Talking about information provided visually from the illustration may have required an extra step of converting visual information to verbal. Given the choice of remaining within one sign system or converting an idea into a different sign system, it is understandable that readers might default to verbal information.

### **Interplay Between Reader and Text**

The previous sections of this chapter examined textual agency in isolation. The conceptual framework of this study, however, considers text to be one of three agents (reader, text, and culture) that operate transactionally, constantly affecting and being affected by the others. As mentioned in previous chapters, this can be explained with Latour's paradox of modernity (Latour, 1993). Latour asserts that there are two characteristics that define our modern world: (1) that everything in our world is a hybrid of separate elements, and (2) the only way to understand these elements is to examine them individually. This chapter began by examining textual agency in isolation, using several different lenses. I described textual agency in terms of modality, information communicated, and conventions. I then focused specifically on conventions, identifying important conventions as well as common themes in their functions. In this final section I make connections between reader behavior and textual behavior to further address my sub-question: How do texts guide readers toward certain interpretations?

When I looked across agents make connections between reader agency and textual agency, I was pleased to see areas in which the two data sets complemented each other. For example, both data sets gave evidence that reader-text dialogue involved

information from written text much more frequently than information from illustrations. Both data sets also indicated, however, that the role of information from illustrations comprised a sizeable portion of reader-text dialogue.

Further analysis showed several important findings about the way that texts guide readers. Two of these relate to the guided release of responsibility (Pearson & Gallagher, 1983; Vygotsky, 1978). The categories of conventions identified in the previous section (visual, syntactic, and meaning-based) provide degrees of support to readers in ways that mimic the gradual release of responsibility model. Simultaneous use of multiple conventions also appears in patterns which reflect the gradual release of responsibility. Finally, there are interesting patterns among specific conventions and the reader behaviors that result from their transaction. Each of these findings is described in the following section.

### **The Gradual Release of Responsibility as Seen across Texts**

One purpose of this study is to explore the notion that texts can act as teachers for their readers. One way that texts can do this is by locating and acting within their readers' zones of proximal development (Vygotsky, 1978; Wells, 2002). Reader-text dialogue in the ZPD results in learning. The teacher, which in this case is the text, must then gradually release responsibility to the reader (Pearson and Gallagher, 1983) so that the reader can independently perform these interpretive processes and transfer them to future reading events.

**Gradation in categories of conventions.** The previously discussed categories of visual, syntactic, and meaning-based cues again proved meaningful to the current study when viewed in terms of their relationship to their presence in texts and the targeted

audience of those texts. The three categories are present in different ratios in different texts, and these ratios align with text difficulty. The easier texts, *No Such Thing* (Koller, 1997) and *Cinderella's Rat* (Meddaugh, 2002), successfully used visual cues much more often than the harder texts. Think-alouds from the easier texts contained 132 instances of visual cues, such as typeface and word layout cues, while the think-alouds from other three texts showed a total of fifteen instances. It may be that visual cues provide a great deal of scaffolding and are used primarily by books designed for younger readers (first- and second-graders).

Easier texts also showed more use of the syntactic cues, repeated words and textual patterns. The two easiest texts used fifty syntactic cues in the reading transactions, while the other three texts combined used only fifteen. Syntactic cues may also be a category of convention that is used primarily to support younger readers and fades as text difficulty increases.

The pattern changes when it comes to meaning-based cues, such as pronouncements and character confusion or questioning. The text for which think-alouds showed the most activity by meaning-based cues is *Fly Away Home* (Bunting, 1991), which is one of the harder texts. There were eighty-six instances. Yet, the hardest text, *Knots on a Counting Rope* (Martin & Archambault, 1997), showed a much lower number of nineteen meaning-based cues in action. *Bad Day at Riverbend* (Van Allsburg, 1995), which is in the center of difficulty range, had the fewest meaning-based cues, with four. The easier texts had moderate numbers of meaning-based cues: twenty-four for *No Such Thing* and thirty-three for *Cinderella's Rat*. While these numbers don't follow the same pattern as the other two types of cues, there are some trends. The easier books did use

meaning-based cues. They used them less frequently than other cues, but the use was still noteworthy. The harder books did not show a pattern in their use of meaning-based cues. This may be because each book was harder in a different way.

For example, *Bad Day at Riverbend* (Van Allsburg, 1995) consistently stands out for its lack of cues. The story is quite simple, which might explain the infrequent cueing. The challenge in understanding *Bad Day at Riverbend* (Van Allsburg, 1995) is contained at the end of the book, when the reader must reconcile the two modalities. In contrast, the challenge in understanding *Fly Away Home* (Bunting, 1991) is to understand the boy's life, which is likely very different from the reader's. It is logical, then, that the text would rely heavily on meaning-based cues to support the reader in making sense of the context of the story. In *Knots on a Counting Rope* (Martin & Archambault, 1997), the challenge is to realize that the boy is blind. This is a difficult challenge and is supported by all three categories of textual conventions.

It is presumptuous to say that these five texts in some way act together as one teacher, gradually releasing responsibility to a reader. I suggest a more modest idea: that the body of children's fictional picturebooks, as a genre, does use patterns of textual conventions in a way that provides and then gradually removes scaffolds to readers as textual difficulty increases. Additional support for this idea comes in the earlier reported patterns of textual conventions: in texts for younger readers, there are many more conventions used, and there are more likely to be multiple conventions attracting a reader's attention to important information. The current study does not provide enough data to assert this idea as a finding; rather, it presents a small amount of data that suggests further research may be warranted.

**Layering of textual conventions as a scaffold.** According to the conceptual framework of this study, text actively participates in reading transactions by using textual conventions to give support to readers. Data showed that the texts often used more than one textual convention at a time. The use of multiple conventions can strengthen the agency of text analysis shows that texts use multiple conventions strategically in accordance with the abilities of their intended audiences.

It was noted that the easier books in the study used combinations of multiple conventions much more frequently than the more difficult books. In *Cinderella's Rat* (Meddaugh, 2002) and *No Such Thing* (Koller, 1997), it was highly unusual for a page to contain just one convention, and most think-alouds showed that the information cued by multiple conventions was the information that entered the transaction. In contrast, *Fly Away Home* (Bunting, 1991), contained more pages in which a single convention acted in isolation than pages with multiple conventions. This also confirms the notion that text's use of multiple conventions results in a higher level of support; easier texts provide readers with more multiple cues, making it more likely that they will note important information and achieve the desired interpretation. Multiple cueing was also used by all five texts to support readers in understanding difficult or important parts of the story. This further confirms the notion of multiple cueing as a scaffold for developing readers.

I was curious as to whether texts might use multiple conventions more frequently at certain parts of the story, such as the beginning or the resolution. I found only a slight pattern related to climax. In *No Such Thing* (Koller, 1997) and *Knots on a Counting Rope* (Martin & Archambault, 1997), the climaxes contained the most multiple cues of any page in the texts. In *Bad Day at Riverbend* (Van Allsburg, 1995) and *Cinderella's*

*Rat* (Meddaugh, 2002), however, the climaxes did not contain a high amount of multiple cueing. The low number of cues identified might be related to the fact that these climaxes relied primarily on visual information. I have already reported that this study has described conventions of written text more strongly than those of illustrations. It is possible that additional visual conventions in these two texts remain unidentified. In *Fly Away Home* (Bunting, 1991), there is no traditional climax: the conflict in the story was the family's homelessness and it remains unresolved. There was, however, an emotional climax in the story, which was when the boy's symbol of hope, the bird, escaped from the airport. In this scene, three different textual conventions acted together to support the reader's comprehension.

### **Conclusions regarding Textual Agency**

In this chapter, I have explored the agency of text in many ways. Textual agency was described through three different lenses: textual modalities, types of information communicated by text, and textual conventions. I presented a catalog of frequently-occurring and otherwise notable conventions as well as patterns regarding their actions. Lastly, I described patterns observed in the transaction among reader and text, including alignment with the gradual release of responsibility and relationships between specific conventions and reader actions. These descriptions, taken together, further elucidate the agentive role of the text in the reading transaction. In the next chapter, I address the third agent in the reading event, culture.

## **Chapter 7: FINDINGS ABOUT CULTURE**

This study frames reading as a transaction among three agents: reader, text, and culture. The previous chapters described the roles of reader and text. I now address the third agent, culture. I begin by presenting four categories of extratextual cultural knowledge that emerged from the data and were used for analysis. These categories are genre-related knowledge, knowledge of broad elements of culture, knowledge of specific cultural groups, and knowledge of specific objects or phenomena. I present findings and data to support the findings for each category of extratextual cultural knowledge as well as patterns of transaction with the previously described dimensions of reader and textual behavior.

### **Describing Cultural Agency in Terms of Extratextual Knowledge**

Data analysis showed that these specific items of cultural knowledge fall into four categories. These categories of cultural knowledge are genre-related knowledge, knowledge about broad elements of culture, knowledge of specific cultural groups, and knowledge of specific objects or phenomena.

The first category of extratextual cultural knowledge is genre-related knowledge. Examples of genre-related knowledge that appear in the think-aloud statements include these generalizations about stories: stories have conflicts, mysteries will be solved, and there will be a happy ending. These generalizations are based on knowledge of story grammar, or the knowledge that for the most part, stories share common elements: characters, setting, plot, climax, resolution. Research has shown that classroom activities in which young readers work with these elements before, during, and after a read-aloud help the readers to relate one part of the story to another and integrate information across



a reading event (Pellegrini & Galda, 1982; Morrow, 1985). The codes for these generalizations were drawn from Rabinowitz's rules of reading, in which they were considered part of the unstated contract between text and reader. In the present study, this is considered extratextual knowledge and falls under the agency of culture.

The second category, knowledge of broad elements of culture, includes knowledge of reality versus fantasy, basic causality, discourse patterns, humor, and what is considered insulting within a culture. The decision to form this category was informed by scholarship in cultural text analysis (Jarve, 2002; Kovala, 2002; Kovala & Vainikkala, 1996; Shaffers, n.d., Slavova, 2002); however, the codes used in this study are original. Codes from cultural text analysis include broad themes of culture such as isolation and egotism that adult readers offered in their interpretations after reading. The current study, focusing on young children and the cultural knowledge that entered transactions while reading, uses codes that reflect the extratextual knowledge of broad elements of culture that appear in the readers' think-aloud statements.

The third category is knowledge of specific cultural groups; in the case of the texts read in the study, this consisted of knowledge of Native Americans (applicable to *Knots on a Counting Rope*) and of people living without homes (applicable to *Fly Away Home*). In previous research, this type of knowledge has been considered "prior knowledge" that belongs to a reader and must be "activated" (by the reader or with help from a teacher) in order to enter the reading transaction (Rosenblatt, 1978). In the current study, such knowledge is considered to be the agency of culture.

The final category is extratextual knowledge of specific objects or phenomena, such as knowledge about horses, airports, or being afraid of the dark. This category of

knowledge is similar to knowledge of specific cultural groups, and has likewise previously been considered part of a readers' prior knowledge (Rosenblatt, 1978). The difference between knowledge of specific cultural groups and knowledge of specific objects or phenomena is one of scale: the latter is a much narrower type of knowledge. All of the extratextual knowledge that appeared in the think-alouds fit into one of these four categories. In the next section, I present findings and examples of how each category of extratextual knowledge transacted with reader and text in the reading events.

### **Findings regarding Genre-Related Knowledge**

The first category of cultural knowledge that entered reading events was knowledge of genre. Genre-related knowledge can be defined as understandings of how a genre typically operates. Readers of a genre develop these understandings over the course of multiple readings (Rabinowitz, 1987; Volosinov, 1973) and often with the support of instructional activities before, during, and after reading (Pellegrini & Galda, 1982; Morrow, 1985). For example, readers of adult mystery novels come to know that when the mystery is solved midway through the book, that solution is likely erroneous. What would fill the second half of the book? Readers familiar with the genre know that the characters will discover that the initial solution is a false solution and that the efforts to solve the mystery will continue through the final pages of the novel. It should be noted that writers sometimes deviate from these norms, but when they do so, they do it with intention to create a specific effect (Rabinowitz, 1987). For example, a book might begin with the main character dying, and then unfold as a series of flashbacks. In my experience, however, there are very few children's fictional picturebooks that make use of these more complex story structures.

The codes used to describe genre-related knowledge in this study were inspired by Rabinowitz's rules of reading (1987). I have previously described the way in which Rabinowitz's rules, when viewed through the lens of the cultural theory of reading, consist of behaviors by reader, text, and culture. The behaviors performed by culture can all be described as genre-related knowledge; that is, knowledge of the usual way that a text in that genre unfolds. In Rabinowitz's work, this knowledge is referred to as "the rules of configuration" (1987). One example is the rule of "imminent cataclysm": if a historical novel opens on the eve of war, then the reader can assume that war will be central to the plot.

In general, data analysis showed that much of the genre-related knowledge identified by Rabinowitz was not applicable to children's fictional picture books; however, data analysis revealed other genre-related knowledge that was more applicable to children's picturebooks. Genre-related knowledge was the type of extratextual cultural knowledge that acted most frequently, with 91 transactions. These transactions involved the following 7 types of genre-related knowledge, which became codes: stories have conflicts, stories have action, repetition will continue, close events are connected, mysteries will be solved, the truth will be revealed, and problems will be solved. These seven codes fall into two categories: knowledge of how plots develop and knowledge of how stories end. (See Table 12 for the frequencies of transaction for each type of genre-related knowledge.) In the next section, I will describe each of these categories of genre-related knowledge and the ways that they transacted with text and culture in the reading event.

Table 12

*Frequency of Transactions by Genre-Related Knowledge*

<i>Genre-Related Knowledge</i>	<i>Number of Transactions</i>
Knowledge of how plots develop	38
Repetition will continue	16
Stories have a conflict	8
Stories have action	8
Close events are connected	6
Knowledge of how stories end	53
Problems will be solved	26
Mysteries will be solved	16
Truth will emerge	11

**Knowledge of how plots generally develop.** The data contained 38 instances of transactions that include knowledge of how the plot of children's fictional picturebooks generally develops. Within the category are four specific types of knowledge about plots: repetition will continue, stories have a conflict, stories have action, and close events are connected. These four types of genre knowledge about how plots develop often demonstrated common patterns of transaction, so I will present findings for the category as a whole, noting when one type of knowledge varied in its patterns of transaction.

**Transaction with readers.** While all five readers transacted with some type of knowledge of how plots develop, there was a wide range of frequencies for individual readers. Chad transacted with knowledge of how plots develop most frequently, with 18

instances involving all four specific types of knowledge. Brad transacted with knowledge of how plots develop only once, involving knowledge that plots require action. The other three readers' frequency and variety of transaction with knowledge of how plots develop lay between these extremes. (See Table 13 for more information about each reader's use of genre-related knowledge.) Data analysis provides no link between the use of knowledge of how plots develop and readers' levels or styles; I can offer no explanation for the wide range of frequencies.

There was, however, a strong pattern in reader behavior when transacting with knowledge of how plots develop. Prediction was the dominant reader behavior, acting in 79% of these transactions. This finding makes sense, as readers can use their knowledge of how plots develop to make predictions about future events, as in the following example from Chad's reading of *Cinderella's Rat*: "*I think they're going to keep going on and on all night trying to fix her.*" In this case, Chad's prediction is informed by genre-related knowledge that repetition will continue.

**Transaction with text:** There was variation in the ways that genre-related knowledge about how plots develop transacted with text. First, the individual texts differed in the frequencies with which they transacted with genre knowledge. The easier texts had many transactions with genre-related knowledge: *Cinderella's Rat* had eighteen, *No Such Thing* had thirteen, and *Bad Day at Riverbend* had nine. The example below illustrates how *Cinderella's Rat* participated in transactions genre-related knowledge of how plots develop:

*Written Text:*  
The wizard tried again.  
*Eye of bat and tooth of newt*  
*Magic beeberry root.*

*Now I give my wand a twirl.*

*Give us, please, a lovely...*

*Illustration:* The wizard aims his wand at the cat. Both the boy and the cat appear concerned.

*Amy: I'm guessing the wizard will change his sister into a duck.*

*Chad: Like a different animal, like a cheetah or something.*

*Duncan: He is going to turn her into a different animal than a rat, maybe a person.*

In this case, the three think-aloud statements provide evidence that *Cinderella's Rat* participated in transactions with the genre-related knowledge that repetition will likely continue. At the other end of the spectrum, the harder texts, *Knots on a Counting Rope* and *Fly Away Home*, each had only one instance of transacting with genre-related knowledge. There were also differences in which texts transacted with which types of genre-related knowledge. For example, only *Cinderella's Rat* and *No Such Thing* transacted with the knowledge that repetition will continue. This is easily explained as these were the only texts to contain patterns.

There seem to be no substantial differences, however, in the ways that genre-related knowledge about how plots develop transacted with different modalities of text or different types of information from text. Nor were there differences in the way that genre-related knowledge interacted with pages that had contradictory, complementary, or congruent relationships between written text and illustration. The proportions among different types of transactions were similar to the proportions across the study.

***Transaction with other elements of culture.*** There were few notable patterns in the way that genre-related cultural knowledge transacted with other categories of extratextual cultural knowledge. The only notable correlations involve knowledge that stories need a conflict, stories have action, and that close events are connected. These

three types of genre-related knowledge transacted with items of specific cultural knowledge four to five times as often as did other types of extratextual cultural knowledge. One such example took place in a reading of *Bad Day at Riverbend* (VanAllsburg, 1995, p. 4). The text described a bright light flashing in the sky, followed by a boy running into the hotel, gasping “stagecoach” and “something awful.” Chad’s think-aloud response was “The brilliant light was aliens, or the stagecoach exploded.” Three actions of culture are visible in this think-aloud: genre-related knowledge that close events are likely connected, specific knowledge of aliens, and specific knowledge of explosions. There were many similar examples in which readers transacted with specific extratextual knowledge as they tried to make predictions or explain events from the text.

Table 13

*Reader Use of Genre Related Knowledge*

	Knowledge of How Plots Develop				Knowledge of How Stories End		
	Repetition will continue	Stories have conflicts	Stories have action	Close events are connected	Problems will be solved	Mysteries will be solved	The truth will be revealed
Amy	1	1	1	1	3	3	2
Brad	0	0	1	0	3	4	2
Connie	0	0	2	2	7	3	0
Chad	9	5	1	3	6	2	2
Duncan	6	2	3	0	7	4	5

**Knowledge of how stories generally end.** The think-aloud data contained 53 instances of transactions that included knowledge of how stories, and more specifically, children's fictional picture books, generally end. There were three different types of knowledge about story endings present in the data: mysteries will be solved, the truth will be revealed, and the problem will be solved. Knowledge that problems will be solved acted most frequently, with twenty-six transactions. Knowledge that mysteries will be solved acted sixteen times, and knowledge that the truth will emerge acted eleven times. As was the case with knowledge of how plots develop, the three types of knowledge about how stories end behave in similar ways, so I will present findings for the category as a whole, and note substantial variations for each code when applicable.

**Transaction with readers.** All five readers used knowledge of how stories end, with a range of frequency from eight to sixteen instances. The dominant reader behavior that transacted with knowledge of how stories end was prediction, with thirty uses, followed by synthesis, with sixteen uses. These correlations seem very logical: readers predict how the story will end. This example from Brad's reading of *Bad Day at Riverbend* provides an illustration: "He'll find out now. He saw the light again and he went to find out where the light was. He'll wait for it to shine again since it didn't last long." Synthesis was particularly active in transactions with knowledge that mysteries will be solved, as in the following example from Connie's reading of *Bad Day at Riverbend*: "They'll figure it out. I definitely think that it has something to do with the light that's making this green slime appear on everything and on all the people." This correlation also seems logical: when readers know that a mystery will be solved, they often attempt to solve it by synthesizing clues from the text.



**Transaction with text.** Knowledge of how stories generally end entered reading events involving all five texts, but there were differences among the three types of knowledge. Knowledge that the problem will be solved was the only type to transact in reading events with all five texts. Connie's think-aloud from *Cinderella's Rat* provides an example of how knowledge that a problem will be solved enters the reading event: "I'm thinking that the sister will also turn back in to a rat and then they'll be back to normal again." The prevalence of action by knowledge that a problem will be solved is logically considering that all of the stories did contain a problem and a solution. On the other hand, only *Bad Day at Riverbend* contained a mystery, and only *Cinderella's Rat* and *No Such Thing* contained hidden truths that one character could reveal to another. Brad's think-aloud from *Cinderella's Rat* provides an illustration: "He's turning back into a rat and the boy is probably finally going to find out that he's really a rat." This quote shows transaction between a textual mystery, a reader prediction, and genre-related knowledge that mysteries will be solved.

Another pattern that emerged regarding knowledge that problems will be solved is that this knowledge was used more frequently in the easier texts than in the harder texts. This knowledge acted in readings of *Cinderella's Rat* and *No Such Thing* twice as often as in readings of *Bad Day at Riverbend*, *Knots on a Counting Rope*, and *No Such Thing*. I believe that this is due to the fact that the easier texts conform more closely the standard happy ending. In each of the three harder texts, the ending is more complicated. In *Bad Day at Riverbend*, the solution involved a post-modern reframing of the problem. In *Knots on a Counting Rope*, there were several layers of problem: the race, the boy's blindness, and the grandfather's looming death. The boy lost the race, but learned his

own strength, while the grandfather is still nearing death. *In Fly Away Home*, the problem of the character's homelessness was not solved, although the character and reader were left with a sense of hope due to the bird's escape from the airport. Connie's think-aloud from the end of *Fly Away Home* illustrates her awareness of the complexity of this text's ending: "He's probably thinking that maybe he'll be like the bird and maybe he'll get free, and he'll have a home and he'll sing for happiness. I'm surprised that they didn't get a house in the end, because I thought that in the end they were going to have a house." Connie had previously predicted that the boy would save enough money from his odd jobs at the airport to help his dad rent an apartment.

The three different types of knowledge of how stories end transacted with modes of text in different ways. Knowledge that problems are solved transacted with written text in 73% of the instances (the average for the study was 53%). This may be explained by the notion that an illustration represents a single moment in time, and therefore does less to advance the plot of a story than the written text, which can convey a progression of events. Knowledge that mysteries will be solved transacted with illustration frequently, in 56% of its transactions, compared to an average in the study of 23%. This finding loses impact, however, when one considers that all of these transactions involved a single text, *Bad Day at Riverbend*. The mystery in this text was the appearance of slime that was revealed to be a child's crayon scribbles. For this reason, I think that the link between knowledge that mysteries will be solved and the agency of illustrations may be idiosyncratic to this text.

A surprising finding was the link between knowledge that the truth will be revealed and the actions of textual modes. There were two unusual patterns: there were

no instances in which knowledge that the truth will be revealed transacted with just the illustration (the average for the study was 23%), while at the same time, in 36% of the transactions, the think-aloud gave no evidence regarding the mode with which it transacted. This inconsistency suggests that knowledge that truth will be revealed may have transacted quite frequently with the illustration, but there is a lack of evidence. I would expect a high frequency of transactions between knowledge that truth will be revealed and the illustration, owing to the fact that the misrepresentation of truth usually lay in the written text. A possible explanation is that readers transacted this cultural knowledge that the truth will be revealed in ways that pertained to the ongoing conflict rather than a particular page of text. If this is the case, it would explain the lack of evidence that directly links this cultural knowledge and the illustration.

There were also differences in the way that these three types of knowledge transacted with specific types of textual information. For knowledge that problems will be solved, there was a strong pattern of transaction with character speech and character action in the written text. The transaction with character action in the written text aligns with the previously mentioned tendency to transact with written text in general, which I attribute to the power of written text to convey progression of events on a single page. The character actions embody this progression of events. The tendency to transact with character speech caused an initial confusion, but this was explained by closer look at the data. When knowledge that a problem will be solved transacted with character speech in the written text, the particular passages of character speech all performed one of two functions. In some cases, the character stated the intent to perform a specific action, as in the following example from *Bad Day at Riverbend*: "Whatever evil thing has done this is

out in those hills," he said, pointing in the direction of the light. "I aim to ride out there and put an end to it" (p. 20). In other cases, the character stated a specific need, from which further action could be inferred, as in this example from *Cinderella's Rat*: "That must have been some powerful magic spell to turn your sister into a rat," he said. "Come. What we need is a wizard" (p. 18). In each example, as well as the other instances in which character speech transacted with knowledge that a problem will be solved, the character speech communicated or suggested a progression of events related to the solution of the problem.

Knowledge that the truth will be revealed showed one notable pattern in its transactions with different types of information. Throughout the study, there were more transactions that involved character speech than character action. When the transaction involved knowledge that the truth will be revealed, however, character action in the written text acted much more frequently, entering 45% of the transactions. (For the entire study, character action in the written text acted only 20% of the transactions.) A possible explanation is that when readers know there is a hidden truth, they trust less in the characters' words, and instead pay more attention to the characters' actions.

In another analysis, I examined how the relationships between modalities affect the transaction between text and knowledge of how stories end. For knowledge that problems will be solved and knowledge that mysteries will be solved, the ratios of complementary and contradictory relationships between written text and illustration were typical for the study, with over 90% complementary and less than 10% contradictory relationships. For knowledge that the truth will be revealed, however, there was a higher frequency of transactions with pages of text in which the relationship was contradictory.

18% of these relationships between written text and illustration were contradictory, as opposed to only 6% across the study. A closer look at the particular pages of text involved resulted in the explanation that when the reader knows a truth that a character doesn't, the truth is often visible in the illustrations. This is evident, for example, in several illustrations from *No Such Thing*, in which the monster mother under the bed and the human mother on top of the bed deny each other's existence.

My final analysis regarding knowledge of how books end and its transactions with text focused on how it transacted with specific textual conventions. Analysis showed that these transactions frequently involved typeface cues, repeated words, words that signal emotion or excitement, punctuation cues, and word layout. As these particular textual conventions acted frequently across the study, I attach no particular importance to this finding. Some frequently acting conventions transacted infrequently with knowledge of how books end. These are textual references to routines or constants, high level of detail, and textual patterns. This makes sense, as data shows that these three conventions generally serve to develop plots rather than end them. For example, *Fly Away Home* (Bunting, 1991) had a high concentration of references to routines and constants in the first half of the book, in order to help the reader understand the homeless family's circumstances. The second half of the text was more plot-oriented. Similarly, *No Such Thing* (Meddagh, 2002) contained an extended pattern of the boy and the monster repeatedly calling their mothers, and the mothers denying the existence of the other character. At the end of the book, the pattern was disrupted, as the boy and monster became friends and schemed to shock their mothers with the truth.

***Transaction with other elements of culture.*** I closely examined each think-aloud in which knowledge of how stories end transacted with other elements of culture. There were very few such interactions. In the case of knowledge of specific cultures, there were none. A possible explanation is that the transaction between reader, text, and knowledge of how stories end is already rich and does not require or readily allow for action by other forms of cultural knowledge.

**Conclusions about genre-related knowledge.** Data analysis identified two clear categories of ways in which genre-related knowledge transacted in the reading events. Of the two categories, knowledge of how plots develop and knowledge of how stories end, the latter acted more frequently. Specific findings about transactions involving texts of varying difficulty and reader behaviors that transact with genre-related knowledge hold more specific implications and will be discussed in the final chapter.

### **Findings Regarding Broad Understandings of Culture**

The second category of cultural knowledge is broad understandings of culture. This can be described as knowledge about “how the world works.” Codes for this category are reality versus fantasy, basic causality, discourse patterns, insult, and humor. Several other codes for broad cultural understandings were used in preliminary analysis but the data did not support them and they were eliminated. The codes that were eliminated are knowledge of how people dress, of typical activities, and of traditions.

Broad understandings of culture ranked second among the types of extratextual cultural knowledge in terms of frequency and impact on interpretations. In the next section, I present the specific types of broad cultural understandings and findings about

their agency. (See Table 14 for the frequencies of transaction for each type of broad cultural understandings

Table 14

*Transactions between Texts and Broad Cultural Understandings*

	TOTAL	<i>No Such Thing</i>	<i>Cinderella's Rat</i>	<i>Bad Day at Riverbend</i>	<i>Knots on a Counting Rope</i>	<i>Fly Away Home</i>
Knowledge of reality/fantasy	14	6	0	6	2	0
Knowledge of basic causality	11	3	2	1	1	4
Knowledge of discourses	8	4	2	0	2	0
Knowledge of what is insulting	6	6	0	0	0	0
Knowledge of humor/irony	5	4	0	1	0	0

**Knowledge of reality and fantasy.** The type of broad cultural understanding that acted most frequently in the think-alouds was knowledge of reality versus fantasy. Knowledge of reality versus fantasy entered reading events fourteen times in the study. Readers used their understanding of reality and fantasy to make sense of the textual reality. For example, on page six of *No Such Thing*, the mother monster tells her child that “boys are only pretend” and Amy responded, “Boys are *not* pretend.” Another example occurred in *Knots on a Counting Rope* when the grandfather recounts the

moment that the blue horses visited the ailing boy and gave him the strength to live. Chad's think-aloud in response was "I think that the grandfather had a dream...", indicating that Chad thought the grandfather's story was not reality. In each of these cases, and others in the study, there was evidence of readers using extratextual knowledge of reality and fantasy to determine reality in the storyworld.

Extratextual knowledge of reality and fantasy most frequently transacted with the reader behaviors of synthesis and inference. This coincidence makes sense, as both synthesis and inference require that the reader make connections between separate pieces of information. In these cases, knowledge of reality and fantasy were one of those pieces of information.

There was only one noteworthy pattern between knowledge of reality and fantasy and textual behavior and that involved Amy's reading of *Bad Day at Riverbend*. Amy was the only reader who noted throughout her reading that the mysterious slime in *Bad Day at Riverbend* looked like crayon. She returned to this observation several times while reading the story, but did not fully commit to this interpretation. Instead, she simultaneously built an interpretation in which the slime was a real threat. When the textual provided irrefutable information that the slime was indeed crayon, she reverted to her original interpretation. The presence of the crayon-like slime was coded as the specific textual convention of a medium change in the illustration as well as a contradictory relationship between written text and illustration. There were six instances in which Amy's think-alouds gave evidence of knowledge of reality and fantasy acting in conjunction with a medium change in the illustration and a contradictory relationship



between written text and illustration; however, because these six instances involved just one textual situation, their significance is unclear.

Knowledge of reality and fantasy was used by four readers (all but Duncan) but most frequently by the bonded readers, Amy and Connie, who I have previously identified as the most flexible and sophisticated in terms of reading behavior. Connie demonstrated a particularly sophisticated use of this knowledge while reading *Knots on a Counting Rope*. After the grandfather recounted the moment that the blue horses visited the ailing boy and gave him the strength to live, Connie said, “They must believe in these spirits because they believe that these horses have given the boy life.” In this think-aloud, Connie demonstrates an understanding that what she believes to be real may be different than what the characters believe, and she integrates the characters’ belief into her interpretation.

Knowledge of reality and fantasy entered reading events for three of the texts, *Bad Day at Riverbend*, *No Such Thing*, and *Knots on a Counting Rope*. These three texts all contain nuances regarding reality and fantasy. In contrast, *Cinderella’s Rat*, with a talking rat as a protagonist and a plotline based in a fairy tale, was clearly a fantasy, and *Fly Away Home* was a particularly realistic text. Knowledge of fantasy and reality, then, was the most frequently acting type of cultural knowledge and it was used most frequently by the more sophisticated readers and for the more nuanced storyworlds. These three findings suggest that culture acts through knowledge of fantasy and reality when the reading events involve texts which offer variations on standard realities.

**Knowledge of basic causality.** The second most frequently acting type of extratextual knowledge about broad cultural elements is knowledge regarding causality.

Knowledge regarding causality refers to knowledge of typical consequences of actions. This type of knowledge entered twelve think-aloud statements in reading events involving all five texts and all five readers, making it the most broadly used type of cultural knowledge. Readers used knowledge of basic causality in several different ways: to evaluate events, to explain events, and to predict future events.

The most frequent use of knowledge of causality was to evaluate events. Five think-alouds provide evidence that knowledge of causality acted in this way. For example, the emotional climax of *Fly Away Home* is when the bird that was trapped in the airport escapes. After reading that passage, Brad thought aloud, “The bird flew away and the boy felt pretty happy but he would be happier if he were the bird, because then he would be getting away.” Brad used his understanding of basic causality to infer the character’s feelings in the existing situation as compared to a hypothetical one.

Knowledge of causality also entered reading events when readers drew on it to explain events in the story. This action is evident in four think-aloud statements. In one instance, a passage of *Fly Away Home* depicts a woman who lives in the airport being taken away by the police. Chad’s think-aloud after reading this page was, “I think she bought something and didn’t return the cart, or she stole something.” He uses his understanding of causality to explain the woman’s arrest.

The third way that knowledge of causality acted was to inform a reader’s predictions. There were three instances in which knowledge of causality acted in this manner. For example, while reading *No Such Thing* Amy stated, “Uh-oh! Because it says ‘Howard decided to take one more look. Monster decided to take one more look’ so when Howard looks underneath and monster looks up they’ll see each other I think.” In

this example, Amy used a very basic knowledge of cause and effect to predict the next action.

These three uses of knowledge of causality have three different outcomes: evaluation, explanation, and prediction. There is a hierarchy among these outcomes that is reflected in their corresponding reader behaviors. Evaluation is the most sophisticated of the outcomes (Bloom, 1956) and corresponds to the more sophisticated reader behaviors of synthesis and to a lesser extent, personal reaction. The bonded readers, Connie and Amy, most frequently used synthesis and personal reaction to transact with knowledge of causality, and the results were impressive. Explanation ranks second in terms of complexity and corresponds to the slightly less demanding reader action of inference. The straight-forward readers, Brad and Chad, participated in these transactions. Brad's and Chad's interpretations were consistently satisfactory but less impressive in terms of sophistication. At the simpler end of the spectrum is the prediction of future events (Bloom, 1956; Keene & Zimmerman, 2007), which, as expected, corresponds to the reader behavior of prediction. Duncan, the treading-water reader, as well as Brad and Chad, used prediction to transact with knowledge of causality. There were no strong patterns of interplay between text and knowledge of causality. These findings suggest that culture fulfills its agency in an important way by introducing knowledge of causality to a reading event, and that the outcome of its action is dependent on related reader behavior.

**Knowledge of discourse.** The third type of broad cultural knowledge, in terms of frequency, was knowledge of discourse. Such knowledge of common patterns of communication acted in reading events eight times. These transactions appeared in

transactions with four readers and three texts. Knowledge of discourse was used in three ways: to make inferences about the character who spoke, to predict, and to make connections.

There were three instances in the data in which readers transacted with knowledge of discourse to infer the feelings or the motives of the character participating in the discourse. For example, after reading a page of *No Such Thing* in which the mother again attempts to convince her child to sleep, Amy responded, "I think Howard's mom is serious, because she said, 'Now, if I have to come in here again, you are going to be punished' and it says goodnight with an exclamation mark thing." Amy used extratextual knowledge of discourse between parents and children at bedtime to infer the mother's level of intention. In each of these instances, the reader behavior was inference.

Knowledge of discourse also contributed to predictions. The following passage and think-aloud statements from *Cinderella's Rat* illustrate how knowledge of a specific discourse can transact to create a prediction.

*Written text:*

The wizard started to chant.

*"eye of newt and tooth of bat,*

*Magic brighter than any pearl.*

*Take away this loathsome rat*

*and give us back a pretty...*

*Illustration:* The wizard waves a magic wand and sprinkles powder on the rat. The boys look on, concerned. Background shows lots of potions.

Brad: *He's trying to turn the rat back into a girl but it won't work because she was never changed into a rat*

Chad: *The wizard is going to say "girl" next, or something else is going to happen, like she turns into a different animal.*

Each think-aloud demonstrates knowledge of the discourse of magic spells. Brad's think-aloud includes knowledge that when spells are not accurate, they can backfire. In Chad's

think-aloud, knowledge of the rhyming pattern in spells informed his prediction. As expected, for each instance in which knowledge of discourse informed a prediction, the reader behavior was prediction.

The final contribution of knowledge of discourse was to inform readers' connections. There were two instances of this, both involving Connie. On one of these occasions, after reading the section of *No Such Thing* in which the mother puts her son to bed for the first time, Connie thought aloud, "It's kind of similar. When I was younger, I would say to my mom, 'I'm being afraid' and she would say, 'go back to sleep.'" Connie transacted with her personal extratextual knowledge of discourses to note the familiarity of the situation. For both instances in which knowledge of discourse informed readers' connections, the reader behavior was making connections.

In one light these findings seem redundant or overly obvious: it is predictable that when a reader acts through prediction and transacts with knowledge of discourse, the result is a prediction. The part of the finding that seems most meaningful, however, is that some predictions required more than a reader's act of predicting; they also required extratextual cultural knowledge of discourse. In these eight instances, knowledge of discourse was a critical agent in the construction of inferences, predictions, and connections. These eight instances represent small fraction of the total number of inferences, predictions, and connections but a larger fraction of the actions of extratextual cultural knowledge.

**Knowledge of insult.** Knowledge of what is considered insulting was a fourth type of broad cultural understanding that acted in reading events in the study. There were six instances involving this type of knowledge, and they all occurred during readings of

*No Such Thing*. In fact, three instances involved one page of text and three instances involved another.

The first set of transactions involving knowledge of insult occurred when the boy in *No Such Thing* told the monster child that his mother says that there is no such thing as monsters. The monster had been laughing but suddenly stops. Below are three reader think-alouds in response:

*Amy: I think that since Howard said "my mommy said there were no monsters," that the monster stopped laughing because feels like he's not real.*

*Brad: I guess the monsters kind of insulted that his mom says there's no such thing as him, and they both started laughing because they thought it was the other way around.*

*Duncan: He might get a little mad or something because the mom didn't believe there's a such thing as monsters.*

In each of these think-aloud statements, there is evidence of transaction by extratextual knowledge of fairness and insult. All three readers understood that being told you are not real is insulting. Amy and Brian then used this understanding to infer why the monster stopped laughing, while Duncan used it to make a prediction.

The second set of transactions involving knowledge of insult occurred at the end of *No Such Thing* when the boy and monster scheme together to scare their mothers and simultaneously show them the truth:

*Amy: I think that they're trying to get their moms back for saying "no such thing as boys and monsters " and they don't really like it so they're kind of playing a prank.*

*Brad: I guess they were setting a prank on their parents, because they both said there was no such thing, so they were proving them wrong.*

*Chad: I think they switched places because they are going to prove to their mothers that there are such things as boys and monsters and they're trying to freak them out.*

In these think-aloud statements, all three readers transact with knowledge of insult as they

discuss the boy and monster's action in terms of the mothers' actions that preceded it. In all three cases, the reader behavior was synthesis. In all six cases, the transactions resulted in effective contributions to the interpretations, and ones that went beyond the texts.

**Knowledge of humor.** Knowledge of humor was another type of broad cultural understanding that entered reading events. Connie was the only reader to transact with knowledge of humor in the study, with five transactions. Another pattern is that in each transaction, Connie's reading behavior included a personal response. In the following example from a reading of *No Such Thing*, Connie's response demonstrates that her personal reaction to the text, combined with her understanding of what is funny, results in a deeper understanding. She thought aloud, "I think it is funny the way they are both on different sides of the thing and one of them thinks that the other one is bad and the other one thinks that the other one is bad." Connie's transaction with knowledge of humor helps her to arrive at a more universal interpretation.

Connie was the only reader to transact with knowledge of humor. It does surprise me that no other readers appreciated the humor of *No Such Thing* or *Cinderella's Rat*. It is possible that this is due to the setting of the study: reading a book for the first time and reading it alone with a teacher. I speculate that readers would appreciate the humor more if the book were read aloud in a classroom setting or if the reader had the opportunity to read it again without my presence.

**Conclusions about broad elements of cultural knowledge.** In this section, I presented findings that describe how culture acts through extratextual understandings of broad cultural elements. Data provided evidence of culture acting through six different

types of broad cultural knowledge, and showed that they most often transacted with the reader behaviors of synthesis, inference, personal reaction, and prediction. While most of types of broad cultural knowledge transacted with many readers, knowledge of humor transacted with only one reader, Connie. There is a notable pattern of this type of cultural knowledge transacting with the more sophisticated reader behaviors and the most sophisticated reader.

### **Findings about Knowledge of Specific Cultures**

The third category of extratextual cultural knowledge that appeared in the data was knowledge of specific cultures. Think-aloud statements included extratextual knowledge about Native Americans, in response to *Knots on a Counting Rope*, and about people in a state of homelessness, in response to *Fly Away Home*. There were only six instances in which extratextual knowledge about specific cultures entered reading events. By comparison, knowledge of broad cultural elements acted in forty-four instances. Moreover, none of these items of extratextual knowledge seemed to have a strong effect on the interpretation. The knowledge of Native Americans present in the transactions around *Knots on a Counting Rope* often consisted solely of identifying the characters as Native Americans, something which the text did not explicitly do. The following think-alouds are representative of the specific knowledge of Native Americans that appeared in think-alouds:

Connie: *They must be Indians and what's interesting about that is that in my class we're doing a unit on Indians.*

Chad: *They're in an Indian tribe, or an Indian family. They are related to Indians. They have Indian blood.*



While the think-alouds do provide evidence that the readers had extratextual knowledge about Native Americans, that extratextual knowledge did not have great impact on the interpretations. The extratextual knowledge that appeared in think-alouds about *Fly Away Home* contained slightly more specific information, as seen below:

*Amy: They're in the airport to stay warm during the winter.*

*Connie: It's horrible that some people don't have homes and they have to live in places like that and they have to act like hobos.*

While this extratextual information was more specific than the extratextual information about Native Americans, it too did not seem to affect the overall interpretations. In general, the finding of this study is that extratextual cultural knowledge of specific cultures did not play an important role in the reading events.

### **Findings regarding Knowledge of Specific Objects or Events**

The fourth category of extratextual knowledge was specific knowledge of objects or events. This category resembles the previous category, knowledge of specific cultures, in that the codes for both emerged entirely from the think-alouds data and are generally related to textual topics. The difference between these two categories is the scope of the extratextual knowledge. Extratextual knowledge was coded as knowledge of specific cultures when it was related to the ways of a specific group of people, such as Native Americans or people who are homeless. Knowledge of specific objects or events is much narrower in scope as it relates to just one specific item rather than a culture. Examples of codes within this category are knowledge of schools, the fairytale Cinderella, cats, or monsters.

The data showed that all readers used knowledge of specific objects or events, and that stronger readers used this knowledge more often than weaker readers. (See Table 14

for the frequencies of reader transactions with knowledge of specific objects for events.) The data also showed that knowledge of specific objects and events transacted with all five texts. (See Table 15 for the frequencies with which each text transacted with knowledge of specific objects or events.) The ways that knowledge of specific objects and events transacted with different types of textual information, modalities, and conventions and with other categories of cultural knowledge were in alignment with patterns of transaction for the other categories of cultural knowledge. Knowledge of specific objects and events appeared to transact with other agents in ways that supported interpretation. This example below, from Connie's reading of *Cinderella's Rat* (Meddaugh, 2002), provides an illustration. The written text on this page is "Being a rat is no picnic. Cats are plentiful and food is scarce." Connie's think-aloud response was "I'm thinking that it must be hard to be a rat because the cats are always trying to chase you, and I know my cats, I have three cats, and they like to chase animals. They always leave us little presents in the backyard." The think-aloud data shows that knowledge of a specific object, cats, entered the reading transaction. This extratextual cultural knowledge contributed to Connie's reading behaviors: making a text-to-self connection and sympathizing with the character.

Table 15

*Reader Use of Knowledge of Specific Objects and Events*

Reader	Number of Transactions
Amy	31
Brad	17
Chad	25
Connie	38
Duncan	9

Table 16

*Transactions by Knowledge of Specific Objects and Events across Texts*

Title	Transactions with Knowledge of Specific Objects and Events
<i>No Such Thing</i>	16
<i>Cinderella's Rat</i>	28
<i>Bad Day at Riverbend</i>	27
<i>Knots on a Counting Rope</i>	24
<i>Fly Away Home</i>	28

The data showed clear patterns of frequency with which the knowledge of specific objects and events transacted with other agents. A closer look at the data, however, complicated these findings. Transactions by knowledge of specific objects or events did not always visibly contribute to the construction of the desired interpretation. In fact, transactions involving knowledge of specific objects or events often seemed to lead the reader away from the desired interpretation, at least temporarily. The following think-aloud statement, made by Connie in response to page 18 of *Knots on a Counting Rope*,

provides an illustration: “In my barn there was a horse that someone owned and it had a baby. It was really cute and if you put your hands in the stall it would nip your fingers.” This transaction by extratextual knowledge did not advance Connie’s interpretation. One of Connie’s think-alouds from *Cinderella’s Rat* (Meddaugh, 2002), shows how cultural action can lead a reader away from the desired interpretation. The wizard in the story began to recite a spell, saying, “eye of newt and tooth of bat” (p. 21). This prompted Connie to reply, “When I read the newt I was thinking about a TV show called *Catscratch* and one of the characters is in love with newts and his name is Waffles. He went to a pet store and he took the newt and ran out of the store.” This reader-culture transaction did not contribute to Connie’s interpretation and may have even distracted her. Overall, about forty percent of the transactions involving knowledge of specific objects and events seemed irrelevant and potentially distracting. If almost half of the transactions involving this type of knowledge were not demonstrably effective, I wondered, then why would this type of knowledge correspond to reading skill?

Both the transactional theory of reading and the cultural theory of reading embrace the notions that readers bring extratextual cultural knowledge to a reading event and that this knowledge, which varies according to the individual, contributes to the reader’s unique interpretation (Rosenblatt, 1978, 1994; Smagorinsky, 2001). In the above example in which Connie draws on knowledge of newts, she makes a text-to-text connection that communicates her extratextual cultural knowledge. It is not surprising that not every transaction shows a direct link to an effective interpretation. I was surprised, however, to see that almost half of the transactions with knowledge of specific objects or events did not demonstrably contribute to the interpretation. This surprise was

amplified by the finding that stronger readers used knowledge of specific objects or events more frequently than weaker readers. This suggested that readers' transactions with knowledge of specific objects or events were more effective than the data revealed. I performed a closer analysis and uncovered patterns that better explain how knowledge of specific objects and events contributes to effective interpretation.

There were three conditions under which knowledge of specific objects or events transacted in ways that contributed to the construction of an effective interpretation. The first condition is that the general topic is introduced by the text. An example is Amy's think-aloud in response to page 24 of *Fly Away Home*. The main character said that he was saving money in his shoe, and Amy's think-aloud was "A shoe is a good place to keep money. If you put it in a bag, when you put it down, someone could unzipper it and steal it." The extratextual knowledge about good and bad places to store money helped Amy understand the character's action. A second and related condition under which knowledge of specific objects or events contributed to the interpretation was when the knowledge entered a transaction later in the text. Knowledge that entered early sometimes appeared quite random; for instance, think-alouds from the first three pages of *Bad Day at Riverbend* included references to explosions, murderers, and ghosts as potential explanations for the mysterious green slime. Knowledge that entered in the middle or end of the reading event tended to relate more to the reader's final interpretation. This seems logical since when readers are further into the story they can better contextualize transactions with extratextual cultural knowledge.

The third condition under which knowledge of specific objects or events was effective was when it simultaneously transacted with two reader behaviors: making a

connection and performing another reading behavior. The connection could be of any type: text-to-self, text-to-text, or text-to-world. The second behavior varied, but was most often synthesis. In this example from a reading of *Cinderella's Rat*, Amy both predicts and makes a text-to-text connection as she transacts with extratextual knowledge of Cinderella: "I'm guessing that like in the movie, because I've seen the movie, her slipper falls out and they don't get home in time and everything turns back to normal." It is important to note that the extratextual knowledge needed to occur simultaneously with both a connection and another behavior in order to contribute; extratextual knowledge that transacted with only a connection was notably ineffective. One example is from a reading of *Knots on a Counting Rope*. In the story, the grandfather explains that he was the one to name the boy. Connie responded, "For our class, in our unit on Indians, we had to pick a name for ourself." Extratextual knowledge of specific objects and events, in transaction with connections only, tended to be related to the reader and not to the text. When extratextual knowledge of specific objects and events transacted in one of these ways, its agency was powerful.

### **Conclusions Regarding Cultural Agency**

In this chapter, I presented my finding that culture acted in this study through four different types of cultural knowledge: knowledge about broad elements of culture, knowledge of specific cultural groups, genre-related knowledge, and knowledge of specific objects and events. Genre-related knowledge was the most important in terms of the frequency and power with which it acted. Knowledge of broad elements of culture followed. Knowledge of specific cultures, objects, and events had very little impact on the reading events.. For genre-related knowledge and knowledge of broad elements of

culture, I also presented findings regarding their patterns of transactions with other agents. All of these contribute to our understanding of reading as a transaction among reader, text, and culture. In the next chapter, I highlight the most important findings of the study and discuss their implications.

## **Chapter 8: DISCUSSION AND IMPLICATIONS**

This research study addressed the question, “If the construction of meaning during reading is framed as a transaction among reader, text, and culture, then what are the characteristics of this transaction?” The previous three chapters presented findings regarding the specific actions of agents in reading events. In this chapter, I review key findings regarding the agency of readers, texts, and cultures, as well as some insights gained regarding the think-aloud methodology as used to view agency in reading events. I then discuss the importance and possible implications of these findings.

### **Findings and Implications about Reader Behavior**

The most general finding about readers in this study was that they performed five different cognitive behaviors (sometimes referred to as reading strategies) with great frequency. These behaviors are summarizing, inferring, predicting, synthesizing, and connecting. The first two behaviors, summarizing and inferring, comprise over half of all reader behaviors. In one way, this finding confirms previous scholarship that identified each of these behaviors (Brown, 1980; Brown et al, 1996; Palinscar & Brown, 1984; Pressley et al., 1989; Yuill & Oakhill, 1988) as well as previous scholarship that confirms the value of teaching students multiple reading behaviors (Palinscar & Brown, 1984).

It is interesting to compare these findings to scholarship on reciprocal teaching, a popular and effective strategy-based instructional activity in which students, working in small groups, are directed to perform the following four behaviors: summarize, predict, question, and clarify (Palinscar & Brown, 1984). The findings from the current study overlap with studies of reciprocal teaching regarding the focus on summary and prediction, but differ in the other identified reading behaviors. It is important to note the



differences in methodology and purpose between the reciprocal teaching studies and the current study. Reciprocal teaching is an instructional method in which students, after reading, engage in dialogue about the text. This dialogue is structured by the direction to use the four abovementioned behaviors and is guided by a teacher who models more sophisticated transaction with the text. The four behaviors were chosen by the researchers because the cognitive demands required by the behavior appear to promote comprehension (Palinscar & Brown, 1984). In the present study, I observed reader's behaviors as they read and without providing guidance. The behaviors identified in the present study are those which readers of their own accord, while reading.

The difference between the four behaviors used in reciprocal teaching and the five behaviors observed most among the good readers in this study provokes the question of which behaviors are most effective and therefore merit instructional focus. One direction for future research is to see if the five behaviors performed most often in this study remain most frequent in reading events that include more readers and readers of different socioeconomic groups and ages, as well as more and different texts. A second direction for future research is to compare the effectiveness of instructing different behaviors. It has been demonstrated that teaching readers to use four behaviors in a reciprocal teaching structure improves their comprehension performance when reading independently. Would it also be beneficial to focus reading comprehension instruction on the small group of behaviors most frequently used by the readers in the present study?

Another interesting finding from this study is that readers frequently performed several combinations of behaviors. Summary was performed in conjunction with inference, prediction, and synthesis, and synthesis was also frequently combined with

making connections. Pressley reported that the flexible combination of behaviors is a hallmark of effective reading, and also noted that these behaviors are typically taught in isolation (Pressley, Bergman & El-Dinary, 1992; Pressley, El-Dinary, and Brown, 1992). Reciprocal teaching directs students to use four behaviors in a dialogue about text, but does not direct students to combine the behaviors as they are reading and thinking (Palinscar & Brown, 1984). Future research might seek to confirm that the four combinations of behaviors seen in this study remain the most frequent in a larger scale study, and if so, whether explicitly teaching students to combine these behaviors improves their reading performance.

This study also found that when behaviors were combined, one behavior served as a “stepping stone” to another. The use of summary preceded and supported prediction, inference, and synthesis. Making a connection preceded and supported making a synthesis. In all of these cases, the information articulated when performing the first behavior was a premise for the performance of the second behavior. It would be worthwhile to investigate whether these patterns apply to wider groups of readers and texts, and if so, whether teaching these reading behaviors improves students’ reading.

Specific findings about inference and synthesis are also potentially important. These two behaviors are instructionally challenging because of their abstract nature (Keene & Zimmerman, 1997; Miller, 2003). Inference requires a reader to identify what is unsaid, and synthesis requires a reader to make connections across a text to form an unsaid generalization. This study described inference in terms of its results: readers used inference to gain information about plot (events that occurred between the events portrayed in the text as well as consequences of the events portrayed in the text) and

information about characters (their thoughts, feelings, and motivations). It is possible that instructional guidance regarding goals for inferring might improve readers' ability to infer; further research could confirm or deny this.

This study presents no similar finding regarding synthesis. It was observed that synthesis was used mostly in combination with another behavior and that reader syntheses sometimes involved the whole of the book and sometimes involved just sections. Perhaps further research could describe synthesis more clearly in terms of when, why, how, and to what result it can be effectively used. Or, perhaps what we now call synthesis could be reframed in a more tangible and useful manner.

Beyond individual behaviors and their use, this study found that its readers fell into three categories of reading styles. Two readers, both boys, were described as "straightforward readers" who used a narrow range of behaviors, mostly summary and inference. Two other readers, both girls, were described as "bonded readers" who used a wide range of behaviors but notably used many behaviors that connected the text to their personal experience and emotions: connections, personal reactions, and sympathy for the character. In general, the bonded readers generated deeper interpretations than the straightforward readers. This confirms previous scholarship that asserts that making connections and examining one's own relationship to the text are qualities of an expert reader (Pearson et al., 1992). Further research might investigate whether the higher effectiveness "bonded reader" style holds true in a broader context, and if so, whether there is benefit to instructing all students in this style. Also of note is that the distinction between the "bonded readers" and "straightforward readers" in this study followed a gendered pattern which echoes the gendered patterns of interpretation previously

identified by Cherland (1992, 2008). Perhaps there are broad differences in the ways that girls and boys perform specific reading behaviors as they construct meaning.

These findings and potential implications all build on the large body of knowledge regarding readers' cognitive actions while reading. They further describe how readers behave and to what effect. While the findings are tentative due to the small scope of the study, and further research is necessary, they also offer many possibilities for improving reading instruction: focusing instruction on specific cognitive behaviors, explicitly teaching the use of certain behaviors in combination, and the teaching of certain styles of reading. In the next section, I summarize and discuss findings regarding the agency of text.

### **Findings and Implications about the Agency of Text**

Important findings about textual behavior fall into three categories. There are findings about picturebooks in general which illuminate their multimodal agency. There are also findings about the specific textual conventions through which texts act. Finally, the study provided information on the ways that texts act as teachers, supporting young readers in making meaning.

The study found that the written text of picturebooks entered the reading transaction much more frequently than the illustrations. It also found that two types of written information, characters' speech and characters' actions, constituted the majority of information from text that was observed in reader think-aloud statements. Further research might confirm these patterns in a broader context and if so, study the effects of teaching students to focus on these aspects of text. For instance, it may be beneficial to instruct readers to focus their summaries on what readers said and did. It may be

particularly advantageous to teach readers to focus on character speech, which constituted 32% of the information observed in the think-aloud statements. This holds surface validity: the author's decision to include dialogue appears to signal importance. This would, of course, require confirmation by additional research.

The finding that readers are paying most attention to character's action and speech in written text also raises the question of what does not receive reader attention. There may be a downside in paying attention to some parts of texts more than others. In the present study, the readers successfully constructed meaning and their interpretations did not seem to suffer from lack of attention to the illustrations. That may not always be the case, especially as readers are required to read more demanding nonfiction. It is recommended that students read higher ratios of nonfiction as they grow older (Snow, 2002), and the need to attend to charts, graphs, and other visual information when reading has been widely acknowledged (Miller, 2003). There may be harm in readers developing the habit of attending mostly to written text.

Another important finding about multimodality in picturebooks concerns the methodology of studying the actions of illustration. While I do not question the previous finding that written text is dominant, I believe that the actions of the illustration are underrepresented in the data. In 16% of the think-alouds, it was clear that either the written text or the illustration entered the reading event, but the data did not provide evidence of which modality acted. In these cases, the information that entered the reading event was present in both the written text and the illustration, so either modality, or both, may have acted.

The concern that arose during data analysis is that the think-aloud protocol used in this study is biased toward identifying action by written text. The think-aloud protocol uses readers' words to view the behaviors of all agents. Written text and readers share the modality of the English language. On the other hand, illustration communicates visually. When readers discuss information from the illustration, they must convert that information to a new sign system. When a reader discusses information from the written text, the reader's use of specific phrases from the text can serve as evidence that written text was the source. There is no comparable indication when the reader speaks of evidence from the illustration, unless the information that the reader conveys was present only in the illustration. For this reason, I believe that the role of visual information is underrepresented in the study.

Further research could more closely examine the role of illustration. One way to do this would be to perform a study similar to the present one but using exclusively wordless books. There are numerous titles of wordless books that tell rich and complex stories through illustration only. A few examples are *The Boy*, *The Bear*, *The Baron*, *The Bard* (Rogers, 2007), *The Red Book* (Lehman, 2004), and *Tuesday* (Weisner, 1997). More specific knowledge of how illustrations act in reading events might contribute to the development and testing of instructional strategies that support readers in habitually interacting with illustrations in ways that improve their comprehension.

The increased multimodality of texts in our technological society (Pahl & Rowsell, 2005) intensifies our need to understand how different modalities transact in reading events. This is reflected in the Common Core Standards for English Language Arts, which expects readers as young as kindergarten age to begin to acknowledge and

interpret the multimodality of texts. One of the literature standards for kindergarten reads, “With prompting and support, describe the relationship between illustrations and the story in which they appear” (Common Core State Standards Initiative, 2010, p. 11). By third grade, the expectation is that that a reader can “Explain how specific aspects of a text’s illustrations contribute to what is conveyed in by the words in a story (e.g., create mood, emphasize aspects of a character or setting) (Common Core State Standards Initiative, 2010, p. 12).

The second category of findings describes specific textual conventions and patterns among them. Many of these findings are presented in comparison and contrast to the “rules of reading” identified by Rabinowitz (1987), the work that most thoroughly describes the textual conventions of fiction. Other works that examine conventions of written text tend to either focus on considerate text characteristics, which apply mostly to non-fiction (Baumann, 1986; Gordon et al., 1992; Konopak, 1988), or treat conventions as part of genre on a more theoretical level, without describing specific conventions (de Beaugrande, 1982; Halliday, 1975). For this reason, it is most useful to present some findings as either additions to or variations from Rabinowitz’s scholarship.

The broadest finding regarding textual agency in terms of the conventions through which picture books act is the list of the most frequently observed conventions. Rabinowitz had identified textual conventions for adult fiction, but there was no comparable catalog for children’s fictional picturebooks. Previous scholarship has documented the need for such as catalog (Meek, 1988; Snow, 2002) as well as the need for explicit instruction in textual conventions (Delpit, 1995; Lee, 1995). The present study identified the following frequently-acting conventions: words that signal emotion

or excitement, character confusion or questioning, typeface cues, references to routines or constants, pronouncements, punctuation cues, high level of detail, speech balloons, word layout, repeated words, and textual patterns. As detailed in Chapter 6, some of these picturebook conventions align with previously noted conventions of adult fiction.

Others, such as words that signal emotion or excitement, punctuation cues, speech balloons, and word layout, have not been previously noted and are new contributions to the field. There is a need for further research to confirm the importance of these specific conventions. If confirmed, this list of conventions might eventually guide teachers in their observations of how individual readers interact with text and in the instruction of cognitive behaviors that support their interaction with specific conventions. Again, more research is needed.

The textual convention that was most frequently observed in the study, words that signal emotion and excitement, is one of the newly identified conventions. This finding leads to the question of why adult fiction and children's picturebooks differ so much in this regard. It is possible that children's picturebooks use words that signal emotion and excitement to support their less developed readers? Adult literature might be written with the expectation that readers infer excitement and emotion, whereas children's fictional picturebooks expect that their readers require support to make these inferences. A study involving picturebooks manipulated to include varying numbers of this convention might more reliably illuminate its effects.

The second-most frequently observed convention in the study was character confusion and questioning. This convention intersects with two conventions described by Rabinowitz: factual conflicts within a work and character proclamations of known



errors. The current study extends our understanding of how this convention affects readers. Readers responded to character confusion and questioning in three ways: they confirmed their own understanding, they sympathized with the character, or they pondered the question themselves. These reader behaviors are noteworthy because they entail higher-order thinking (Bloom, 1956), and in the cases of the first and third behaviors, involve self-monitoring. Self-monitoring is considered an essential and underperformed component of the comprehension process (Cross & Paris, 1988; Pressley, 2002). Further research might probe whether readers benefit from direct instruction in noting character confusion and questioning and responding by confirming their own understanding, sympathizing with the character, or pondering the question themselves.

The study also found that textual conventions can be categorized as visual, syntactic, or meaning-based cues. Visual cues are those cues which are evident with a visual scan, without reading the words, and include typeface cues and speech balloons. Syntactic cues are on the word level, and include repetition of words. Meaning-based cues require that the reader consider the meaning of the text, and include character confusion or questioning. These three categories are the subject of a great body of scholarship that discusses their use in assessment and instruction of decoding text (Brown, Goodman, & Marek, 1996; Goodman, Watson, & Burke, 2005; Pinnell and Fountas, 1998). These categories may also be useful in the assessment and instruction of comprehending text. Analysis of reader behaviors in terms of response to these categories could assist teachers in diagnosing and addressing reader strengths and weaknesses; further research is needed.

The third category of findings regarding textual agency describes the ways in which texts act as teachers or guides, supporting young readers in constructing desired interpretations. The study found that these texts supported their readers in two ways, the use of multiple cues and the use of varying types of support.

Many texts used multiple conventions in a single phrase or passage to increase the probability that readers would note key information and bring it to the reading transaction. One specific convention, typeface cues, was often used in multiple ways in a single section of text. For example, a phrase was printed in a large font with italics and bold print. A great deal of the textual information that entered reader think-alouds was multiply cued, suggesting that this is an effective textual action. The two easiest texts, *Cinderella's Rat* and *No Such Thing*, used multiple cueing most frequently. The hardest text, *Knots on a Counting Rope*, used multiple cueing extensively during a particularly important and challenging passage. These two observations lead to the tentative conclusion that texts do use multiple cues to support their developing readers in their construction of desired interpretations. It would be interesting to conduct a study in which participants read texts that had been manipulated to contain controlled amounts of multiple cueing in order to more closely analyze the effects of this textual action.

Looking across the texts, the study also found that texts varied their types of support according to their anticipated readers. These types of support followed a hierarchy implicit in the categories of textual conventions. Visual cues, such as typeface cues, require that a reader only look at the words in order to transact with the convention. The reader can see that the word is important before even reading it. Syntactic cues, such as repeated words, require that the child read the phrase in order to transact with the

convention. Meaning-based cues, such as character confusion or questioning, required the most from readers, as they had to read and consider the meaning of the written text in order to transact with the convention. There were patterns in the ways that different texts used these types of support: the easier texts used the less demanding conventions, the visual and syntactic conventions, most. The visual conventions were present almost exclusively in the easier texts. Many of the visual conventions, such as typeface cues, word layout, and speech balloons, are particularly suited for picturebooks. This suggests that more challenging picturebooks rely less on picturebook conventions, possibly as a way to transition their readers to other genres. These findings suggest that picturebooks as a genre use categories of textual conventions in a way that provides and then gradually removes certain supports as text difficulty increases. This tentative finding needs to be confirmed with further research. If it holds true, it may affect teacher's choices regarding instruction of textual conventions at different grade levels.

The findings about textual agency in this section provide insight into the ways in which text acts through written language and illustration, the specific conventions through which text acts, and the ways in which texts act as a teacher or guide, supporting young readers. I repeatedly make the call for further research to corroborate these findings, as they have the potential to affect comprehension instruction and the publishing of children's fictional picturebooks. In the next section, I review findings regarding the role of culture and discuss their implications.

### **Findings and Implications regarding the Agency of Culture**

This study viewed cultural agency as the transaction of cultural knowledge in the reading event. This conceptualization itself can be considered in a finding: that there is

value in viewing culture's effects on reading in terms of cultural knowledge. The agency of culture has not been examined through this lens before; previous scholarship looked at cultural identities, values, and shared experiences and their effects on interpretation (Fish, 1980; Holland, 1975; Smagorinsky, 2001; 2005). In contrast, this study looked at the effects of cultural knowledge in the process of constructing an interpretation, focusing on how cultural knowledge transacts with reader and text. This conceptualization of culture is not meant to challenge any previous conceptualizations, but rather to provide additional information. Throughout this chapter, I advocate for further research that tests the current study's finding in broader contexts. A similar study with different readers and texts, including different cultural groups and texts created within different cultures, may provide valuable connections between this work and other scholarship on culture and reading.

The current study also found that when viewing cultural agency in reading as cultural knowledge that enters reading events, there are different types of cultural knowledge that come into play. These types of cultural knowledge are genre-related knowledge, broad understandings about cultural elements, knowledge of specific cultures, and knowledge of specific objects or events. These tangible categories allow for more detailed analysis of how cultural knowledge affects reading.

Genre-related knowledge was the type of culture knowledge that most frequently entered reading events. Within genre-related knowledge, there were two categories: knowledge of how plots develop and knowledge of how stories generally end. Knowledge of how plots develop included knowing that stories have conflicts and action, that repetition will likely continue, and that close events are connected. Knowledge of

how stories generally end included knowing that mysteries will be solved, truth will be revealed, and problems will be solved. There was a pattern of correlation between both types of genre-related knowledge and easier texts. There was also a tendency for readers to use this knowledge to make predictions and syntheses.

I consider this finding encouraging because genre knowledge is very teachable, especially compared to the other categories of cultural knowledge. It appears to me that the challenge in instruction is not teaching students these characteristics of stories, which appear quite simple, but in helping them habitually draw on this knowledge when they read. The prevalence of action by genre-related cultural knowledge in reading events with the easier texts suggests that this cognitive behavior would be appropriate in the primary grades. Additional research might explore whether students benefit from direct strategic instruction regarding how to use their knowledge of plot development and endings as they read and whether it is beneficial to teach them specifically to use this knowledge to predict and synthesize information. It is worth noting that the genre-related knowledge that readers used in this study was, in many cases, slightly more specific than story grammar as it is often described (Pellegrini & Galda, 1982; Morrow, 1985). For example, while readers in the study sometimes used knowledge that conflicts will be resolved, they also used more specific knowledge that truth will be revealed and that mysteries will be solved. Further research might explore whether students benefit from instruction in these more specific generalizations about stories.

The present study also found that knowledge of broad understandings of culture also entered a sizeable number of transactions. Readers drew on knowledge of reality versus fantasy, basic causality, discourses, insult, and humor and used this knowledge as

they performed a range of behaviors. My opinion is that these categories provide some insight into types of cultural knowledge but fall short in specificity, as they fail to give a complete picture of what the readers in the study know about reality versus fantasy, discourse, or the other broad elements of culture. Further research with readers from different cultural groups might provide information about cultural differences in this knowledge and how these differences affect interpretations.

It seems likely that these broad understandings of culture are related to habitus, doxa, and cultural capital (Bourdieu, 1990; 1994) and therefore, those who do not possess the necessary cultural capital would not be able to arrive at desired interpretations in the same way. The data from the present study showed that knowledge of broad understandings of culture acted 44 times, while genre-related knowledge acted 91 times. This may suggest that knowledge of broad understandings of culture is less important, which would be encouraging, considering the complexity of building cultural capital. I am concerned, however, that the subconscious nature of cultural capital (Bourdieu, 1990) reduces the likelihood of it being articulated in a think-aloud statement. Conducting studies similar to the present study with readers from different cultural backgrounds may shed needed light on this issue.

Knowledge of specific cultures did not demonstrate notable agency in these reading events. This was true even when the texts were about people with different cultures and backgrounds, such as the Native American family in *Knots on a Counting Rope* and the family living in an airport in *Fly Away Home*. Knowledge of specific objects or events, however, was an important agent in these reading events. The study found that there were three conditions under which knowledge of specific objects or

events contributed to an effective interpretation: when the topic was introduced by the text, rather than the reader; when the knowledge entered the transaction later in the text, and when the knowledge transacted simultaneously with the reader making a connection and performing a second behavior. Some readers tend to become distracted when they transact with specific background knowledge (Keene & Zimmerman, 2007; Miller, 2003). These specific guidelines for effective use of specific knowledge could affect comprehension instruction and reduce such distraction.

The present study contributes several important findings to existing knowledge of cultural agency in reading. It provides a new way to conceptualize the role of culture in reading as cultural knowledge that enters specific reading events. It describes categories of cultural knowledge and the extent to which data confirmed their effect on interpretations. It also described specific ways that specific items of cultural knowledge were used by readers. Within the cultural theory of reading, and its conceptualization of reading as a transaction among reader, text, and culture, the least is known about culture. While these findings are tentative, and many questions remain, these findings add to the body of knowledge surrounding the role of culture in reading.

### **Conclusion**

The goal of this study was to address the question, “If the construction of meaning during reading is framed as a transaction among reader, text, and culture, then what are the characteristics of this transaction?” The study was successful in providing a clearer picture of the way readers, text, and culture acted in twenty-four reading events involving five elementary school readers and five fictional picturebooks. In doing so, it contributes to the young cultural theory of reading. In addition to the findings, the study contributes

a new way to conceptualize the role of culture as well as the conflation of the cultural theory of reading with Reading Response Theory (Rosenblatt, 1978, 1994), sociocultural theories of reading (Vygotsky, 1978), metacognitive theories of reading comprehension (Baker & Brown, 1984b; Pressley et al, 1989) and multiple strands of literary theory (Kress & van Leeuwen, 1996; Volosinov, 1973; Rabinowitz, 1987).

There are several areas of potential impact for the information in this study. It certainly adds to our general understanding of the reading process when it involves 8-year-old to 12-year-old readers and fictional picturebooks. Teachers may find this knowledge beneficial on the instructional level. I hope that this study might have an effect similar to that of the “good reader” body of research (Pearson et al., 1992; Pressley, 2000; Snow, 2002) which led educators to focus instruction on the behaviors that good readers perform, with great effect. Perhaps this study might be the seed of “good reading event” research which leads us to teach readers not only perform the behaviors of good readers, but to transact with text and culture in ways that are proven effective. Findings from this study might inform the writers, illustrators, editors and publishers of children’s picturebooks, giving them information about how to tailor writing for different levels of readers and how to make challenging information more accessible.

I am careful to say, however, that these are areas of *potential* impact. It is important to note that this study, because of its small scale, provides limited findings. The findings in this study apply to five specific readers reading five specific fictional picturebooks. Future research might seek to confirm, extend, or refute these findings based on data from reading events that include a higher number, wider range, or different group of readers or picturebooks. Every finding in this study needs to be corroborated to



increase its credibility. That being said, I am not shy about proffering potential implications. The cultural theory of reading is young, and this study describes reading events in a new way. I hope to excite the reader with this direction of research and these findings, however tentative they may be. Further research is necessary in order to credibly recommend that these findings be applied to classroom instruction or publishing. It is in these fields, however, that these findings might extend beyond this study and directly benefit young readers.

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## Appendix A

*Think-Aloud Protocol***Standard Protocol:**

“Thank you so much for agreeing to help me with my project. As I explained, I am looking at how children work to understand what they are reading.

What I want you to do is read this story out loud. If it is too hard for you or you don’t want to do it, you can tell me and we will stop.

Today’s book is \_\_\_\_\_ by \_\_\_\_\_. Have you read this book before? Remember, while you are reading, remember to think aloud so I can hear you. Please say everything that you are thinking.

**Standard Prompts:**

*These prompts were used when the reader paused for more than four seconds, or if the reader reached the bottom of the page without having shared any thoughts.*

“Remember, I want you to tell me everything that you are thinking.”

“Tell me what you’re thinking.”

*This prompt was used when a child could not decode a word. If this prompt was unsuccessful, I would provide the word. If I needed to provide more than five words on any page, or if the child seemed frustrated, I stepped in and read the text. This was not used when children made errors, only when they stopped because they were stuck. Errors were noted in running records.*

“What can you do to figure out that word?”

Appendix B

*Desired Interpretations of Each Picturebook*

Title	Desired Interpretations
<i>No Such Thing</i> (Koller, 1997)	<ol style="list-style-type: none"> <li>1. reasonably accurate literal understanding of the events, including the determination of reality in this particular storyworld</li> <li>2. understanding of the parallel structure</li> <li>3. appreciation of the humor and/or irony of the boy and monster being afraid of each other</li> </ol>
<i>Cinderella's Rat</i> (Meddaugh, 2002)	<ol style="list-style-type: none"> <li>1. reasonably accurate literal understanding of the events, including the determination of reality in this particular storyworld</li> <li>2. understanding of the references to Cinderella</li> </ol>
<i>Fly Away Home</i> (Bunting, 1991)	<ol style="list-style-type: none"> <li>1. reasonably accurate literal understanding of the events</li> <li>2. appreciation of the sadness of the situation</li> <li>3. understanding the bird as a symbol of hope</li> </ol>
<i>Knots on a Counting Rope</i> (Martin & Archambault, 1997)	<ol style="list-style-type: none"> <li>1. reasonably accurate literal understanding of the events, including understanding that the boy is blind</li> <li>2. understanding the symbolism of the counting rope</li> <li>3. understanding the cultural differences between the reader and the characters</li> </ol>
<i>Bad Day at Riverbend</i> (Van Allsburg, 1995)	<ol style="list-style-type: none"> <li>1. reasonably accurate literal understanding of the events, including an understanding that the characters are figures in a coloring book</li> </ol>

Appendix C

*Codes Used to Describe Reader Behaviors*

Code	Definition	Example
Questioning	Asking a question about the events, characters, or other elements in the text.	"Why are they so mean to Cinderella?"
Predicting	Presenting an idea of what might happen next or later in the text.	"I think something will happen to the stepsisters because they are so mean."
Connecting	Noting a relationship between one's own knowledge or experiences and the text.	"I hate it when my sisters make me do all the work."
Summarizing	Retelling, often in a shortened version, the events of the story.	"The fairy godmother appeared, and helped Cinderella get a dress and go to the ball."
Inferring	Making a conclusion not in the text based on information from the text.	"Cinderella must have been surprised to see the fairy godmother."
Synthesizing	Combining separate ideas to make a generalization.	"They treat her like she's a servant."
Self-monitoring	Noting, planning, or evaluating one's comprehension process while reading	"Does it mean that he's shy? I'm still not sure. Oh, it means that he's in love. That makes sense."
Rereading	Reading a segment of text for a second time.	Rereading a sentence within a passage, going back to reread a passage while thinking-aloud
Directly referring to the illustration	Directly referencing the illustration with words, pointing, or both.	"I'm guessing that he's a rat again but his hat is still there because I just see a mouse peeking out of the hat."
Stating a personal reaction	The reader judges or shares an emotional reaction to information from the text.	Connie: I think it's cool that since the girl has a voice of a dog she can scare away the cats and the mice can have a happy life.
Sympathizing with the character	Noting a shared feeling or commiserating with a character.	"If my sisters were mean to me like that, I'd hate having to help them."
Interrupting the standard utterance	Varying from the usual pattern of dialogue in which the text presents written text and illustration, and the reader responds.	Stopping in the middle of written text to think-aloud, reacting to the illustration without first reading the written text.

Appendix D

*Codes Used to Describe Modes of Text in Action*

Code	Definition	Example
Illustration	The think-aloud statement shows that the reader dialogued with the illustration.	<p><i>Written Text:</i> A rat in a trap has usually enjoyed his last bite of cheese. Ruth and I huddled together as the trap door was opened. Then we jumped for our lives. That's when it happened.</p> <p><i>Illustration:</i> The first illustration shows two mice huddling in dark, scared. In the second illustration, the box is being opened by Cinderella, and as the mice jump out, the fairy godmother does a spell with a wand. (<i>Cinderella's Rat</i>, p. 6)</p> <p><i>Connie:</i> I can see in the pictures over here that the fairy godmother zapped her out with her wand.</p>
Written Text	The think-aloud statement shows that the reader dialogued with the written text.	<p><i>Written Text:</i> When we got to the castle the girl ran off to the ball. Kitchen smells drew me like a magnet. "Make yourself useful, boy!" Said the cook. "Bring me some flour from the larder."</p> <p><i>Illustration:</i> The cook has a big spread of food on the table and is talking to the boy. (<i>Cinderella's Rat</i>, p. 12)</p> <p><i>Brad:</i> He's hungry and he wants food but the cook says "go get me some flour"</p>
Both written and illustration	There is evidence that both the written text and the illustration acted in the think-aloud.	<p><i>Written text:</i> The horses were nervous and breathing hard. They looked terrible, their smooth white coats scarred with the strange stuff that hung from them in loopy ropes or stuck out like stiff wire. The sheriff grabbed a piece with both hands. It was slippery. He gave it a pull, and the horse jerked away and whinnied in pain. Whatever the stuff was, it stuck to them as sure as their flesh. "Where's the coachman?" Sheriff Hardy asked. "Gone," someone answered. "The coach came into town without him."</p> <p><i>Illustration:</i> The sheriff is trying to pull the "slime" (red scribbles) from a horse. He is straining.</p>

		<i>Brad:</i> The chief is trying to pull the red stuff off the horses, and the horses are being stubborn.
Unknown: Written and / or illustration	The information is from the text, but it was present in both modes, and no evidence that points to either or both specifically.	<p><i>Written text:</i> My parts started to come and go changing and rearranging... until at last I was ME. But...</p> <p><i>Illustration:</i> This illustration is a whirlwind that starts with the boy, has 2 boy/mouse transition components, and ends with the boy changed back into a rat.</p> <p><i>Connie:</i> I'm thinking that the sister will also turn back in to a rat and then they'll be back to normal again.</p>
Other	The information comes from a source other than the written text and illustration.	There were no examples of this in the current study. Examples from other texts include endpages with meaningful visual designs and transparent pages that allow two pages to be viewed simultaneously.

Appendix E

*Codes Used to Describe Types of Information from Text*

Code	Example
Description of character in written text	<p><i>Written Text:</i> Howard loved the old house he and his family had just moved into. He loved all the neat little nooks and crannies, and the large windows that nearly touched the floor.</p> <p>He couldn't wait to explore all the funny little closets and cupboards.</p> <p><i>Illustration:</i> Boy standing on landing of old house, smiling.</p> <p><i>Brad:</i> He's in love with his new house.</p>
Action of character in written text	<p><i>Written Text:</i> Ned Hardy helped the coach driver down and led him to the hotel.</p> <p><i>Amy:</i> The coach driver is going to stay at the hotel for a little bit</p>
Character's speech in written text	<p><i>Written Text:</i> "Whatever evil thing has done this is out in those hills," he said, pointing in the direction of the light. "I aim to ride out there and put an end to it."</p> <p><i>Chad:</i> I think he's going to ride out there and try to stop what's going on.</p>
Description of object in written text	<p><i>Written Text:</i> But one morning Sheriff Ned Hardy stood in front of the Riverbend Jail and saw something he never seen before. A brilliant light in the western sky. It lasted a few minutes, then faded away.</p> <p><i>Chad:</i> The brilliant light was aliens, or the stagecoach exploded.</p>
Description of setting in written text	<p><i>Written text:</i> The town looked deserted, but when he passed the hotel, someone called out, "Sheriff."</p> <p><i>Chad:</i> I think that everyone left except for that person that yelled "sheriff". Everyone else disappeared.</p>
Representation of character in illustration	<p><i>Amy:</i> Oh, my goodness. This guy, I think he's the coachman, he's covered in the slime.</p>
Action of character in illustration	<p><i>Written text:</i> A rat in a trap has usually enjoyed his last bite of cheese. Ruth and I huddled together as the trap door was opened.</p> <p>Then we jumped for our lives.</p> <p>That's when it happened.</p> <p><i>Illustration:</i> the box is being opened by Cinderella, and as the mice jump out, the fairy godmother does a spell with a wand.</p> <p><i>Brad:</i> They got shocked by the person who made the mouse trap.</p>
Speech balloons in illustration	<p><i>Illustration:</i> Boy is shouting, hands up. <i>In a speech balloon:</i> STOP! That's my sister!</p> <p><i>Brad:</i> He's telling him to stop because he doesn't want his sister to get killed.</p>
Representation of object in illustration	<p><i>Written text:</i> My sister Ruth and I were always hungry. One day hunger drove us to do a foolish thing... and we were caught!</p> <p><i>Illustration:</i> Top picture shows mice smelling cheese and going toward</p>



	<p>trap. Bottom picture shows trap closing on them.</p> <p><i>Brad:</i> I guess he got caught in a mouse trap, because he was hungry and there was cheese in there.</p>
Representation of setting in illustration	<p><i>Written text:</i> We stepped out into the night.</p> <p><i>Illustration:</i> Castle on hill in the night.</p> <p><i>Amy:</i> They are going to the castle that the person lives in.</p>

Appendix F

*Codes Used to Describe the Relationship between Modes of Text*

Code	Definition	Example
Complementary	The written text and the illustration appear to share goals. They convey much of the same information, and there are no areas of contradiction.	<p><i>Written text:</i> Riverbend was a quiet little town -- -- just a couple dozen buildings alongside a dusty road that led nowhere. Though the stagecoach occasionally rolled through town, it never stopped because no one ever came to Riverbend and no one ever left. It was the kind of place where one day was just like all the rest.</p> <p><i>Illustration:</i> A black and white line drawing from a bird's eye view of a small town surrounded by empty land with mountains and mesas in distance. (Bad Day at Riverbend, p. 2)</p>
Contradictory	The written text and the illustration contradict each other, either entirely or to some degree.	<p><i>Written Text:</i> But just as they came over the hill, they were frozen in the bright light that suddenly filled the sky.</p> <p><i>Illustration:</i> There are black and white line drawings of 4 men on horses – all are slimed. Then, on the far right side there is a color, realistic drawing of a young person's hand coloring one of the horses with a red crayon. (Bad Day at Riverbend, p. 27).</p>
Congruous	The illustration and written text depict different subjects or storylines. While separate, they are not contradictory.	<p>Excerpt:</p> <p style="padding-left: 40px;">All night you lay silent with your eyes closed, your breath too shallow, too weak for crying...</p> <p>... and you carried me out to see the morning, Grandfather, but I did not open my eyes. Tell me that part.</p> <p style="padding-left: 40px;">Two great blue horses came galloping by...</p> <p><i>Illustration:</i> Back outside, the old man &amp; boy are sitting close. It is a close up, slightly more focused on grandfather. The fire is shining between their somber faces.</p>

Appendix G

*Codes Used to Describe Textual Conventions*

Typeface cues	Changes in typography such as font, font size, or bold print.	<i>Text:</i> He even liked his big, old-fashioned bed. <b><i>Until it got dark...</i></b> (Note, the typeface for the last sentence is also larger.) (NST, p. 2)
Repeated words	Words that represent significant ideas are repeated within a page.	<i>Text:</i> Howard loved the old house he and his family had just moved into. He loved all the neat little nooks and crannies, and the large windows that nearly touched the floor. He couldn't wait to explore all the funny little closets and cupboards. (NST, p. 1)
Punctuation cues	Notable use of exclamation points, question marks, ellipses, or other punctuation.	<i>Text:</i> He even liked his big, old-fashioned bed. <b><i>Until it got dark...</i></b> (Note, the typeface for the last sentence is also larger.) (NST, p. 2)
Privileged position	Important concepts are represented in titles, headings, or other positions where they are likely to be noted and perceived as important.	<i>No Such Thing</i> (Title)
False claims	When a character or narrator states something that the reader knows is untrue.	<i>Text:</i> Monster heard a sneeze. "Mommy come quick!" he called. "What is it, Monster?" His mommy asked. "There <i>is</i> a boy," said Monster. "I heard him sneezing on top of my bed." Monster's mommy sniggled again. "You've been reading too many comic books, Monster," she said. "I told you, boys are only pretend." (No Such Thing, p. 6)
Pronouncements	A statement	<i>Text:</i> Life is full of surprises, so you may as well

	about life which applies to the situation in the text, but also extends beyond it. Generally intended to impart wisdom.	get used to it. (CR, p. 32)
Words that signal newness/change	A character or narrator mentions a change or something new.	<i>Written Text:</i> Howard loved the old house he and his family had just moved into. He loved all the neat little nooks and crannies, and the large windows that nearly touched the floor. He couldn't wait to explore all the funny little closets and cupboards.
Words that signal emotion/excitement	Specific language indicates strong emotion or excitement.	<i>Written Text:</i> Monster's mommy tucked him in once more. "I've had it, monster," she said. "If I have to come in here again, you are going to be twaddled. Now, go to sleep!" Howard put his face in his pillow and started to cry. He cried and cried. Monster pulled his spider web over his face and started to wimple. He wimpled and wimpled.
Words that signal suspense	Specific words convey suspense and alert the reader to the possibility of looming significant events.	<i>Written Text:</i> He even liked his big, old-fashioned bed. <i>Until it got dark...</i>
Abrupt utterances	A short sentence or phrase stands out to signal an important turn in the story. A sentence or phrase might also be considered	<i>Written Text:</i> "They don't?" asked monster. "Of course not," said Howard. Then he stopped laughing. "But <i>monsters eat boys</i> . Are you going to eat me?" Monsters started to sniggle. He sniggled so hard that he rolled back on the floor and kicked his feet in the air. "Monsters eat boys!" He cried. "That's the funniest thing I ever heard. Where did you get such a crazy idea? Did your mommy tell you that?" "No," said Howard. "My mommy says there are no

	abrupt in its construction: for example, beginning with "but."	such things as monsters." Monster stopped laughing.
Secrets/ mysteries and their revelations	A secret or a mystery serves as a cue of something which, when revealed, will change the course of events.	<i>Text:</i> "Really?" He said. "My mommy says there are no such things as boys. She never believes me when I hear boy noises at night." "I know," said Howard. "Mine never believes me either." Howard and monster sat slowly shaking their heads, when suddenly Howard started to smile. "Come here," he said. He leaned close and whispered in Monster's ear. Monster sniggled and nodded. Monster crawled on top of the bed. Howard crawled under the bed. "Oh, Mommy," they both called together. "Mommy, come quick!"
Character confusion or questioning	A character poses a question or refers to being confused.	<i>Text:</i> Monster's mommy took him back to his room. She lifted him up to see the top of the bed. "There," she said. "Now are you satisfied?"
High level of detail	A high level of detail indicates importance to the reader.	<i>Text:</i> Howard loved the old house he and his family had just moved into. He loved all the neat little nooks and crannies, and the large windows that nearly touched the floor. He couldn't wait to explore all the funny little closets and cupboards.
Patterns	An action occurs repeatedly.	<i>Text:</i> Howard peeked over the edge of his bed. "Mommy, come quick!" he cried. "I can see his tail!" Howard's mommy rushed into his room. She picked Howard's jump rope off the floor. "Howard," she said. "I'm losing patience. Tail indeed!"
Threats/ promises	A character makes a threat or promise.	<i>Text:</i> Howard's mommy tucked him in once more. "Now, this is it, Howard," she said. "If I have to come in here again, you are going to be punished. Good night!"
Routines and constants	The text refers to the routines of a character or characters.	<i>Text:</i> Dad and I try not to get noticed. We stay among the crowds. We change airlines.
Figurative	The written	Being a rat is no picnic.

language	text includes figurative language.	Cats are plentiful and food is scarce.
Time shift	The written text jumps forward or backward in time.	<p>You know the story, Boy. Tell it.</p> <p>Now, Grandfather, no. Start, "It was a dark night..."</p> <p>It was a dark night, a strange night. Your mother and father and I were safe in the hogan...</p> <p>... and the sheep were safe in the pen...</p> <p>... when a wild storm came out of the mountains...</p>
Speech balloon	A character's dialogue is placed in the illustration, using a speech balloon.	<p>I became a COACHMAN. Well, more of a Coach Boy.</p> <p><i>Illustration:</i> The boy is sitting, looking confused. The boy's speech balloon says "My tail. Where's my tail?" A confused mouse (sister) looks on.</p>
Separate components of illustration	The page consists of multiple illustrations.	<p>My sister Ruth and I were always hungry. One day hunger drove us to do a foolish thing... and we were caught!</p> <p><i>Illustration:</i> Top picture shows mice smelling cheese and going toward trap. Bottom picture shows trap closing on them.</p>
Word layout	The text is not laid out in a typical sentence or paragraph fashion. The layout uses white space or an illustration to space the written text.	<p><i>Text:</i> Monster peeked out from under the bed. "Mommy, come quick!" he called. "I can see his fingers!" Monster's mommy came in. She didn't see anything. "I'm sure it was just your pet tarantula," she told Monster. "Now, go to sleep!"</p> <p><i>Illustration:</i> A monster (unclear which) is holding a tarantula</p> <p><i>Text below illustration:</i> Howard decided to take one more look. Monster decided to take one more look.</p>
Dialogue tags positioned for	A dialogue tag spaces a	<p>Suddenly the boy leaped to his feet. "A RAT!" He shouted. "KILL IT!"</p>

emphasis	character's utterance to emphasize the content of the dialogue.	"He knows!" I thought, and covered my head to protect myself. But the boy wasn't looking at me. <i>Illustration:</i> (Bottom) A closeup of the other boy's face, looking startled.
Exceptions	The written text refers to something as an exception from the norm.	Text: "Fly, bird," I whispered. "Fly away home!" Though I couldn't hear it, I knew it was singing. Nothing made me as happy as that bird.
Reference to title	The title is referenced in the written text.	Text: "Fly, bird," I whispered. "Fly away home!"
Evaluative statement by character	The character makes a judgment or evaluative statement.	Text: My dad and I live in an airport. That's because we don't have a home and the airport is better than the streets.
Character expresses desire	The character expresses desire for a specific outcome.	Text: "Will we ever have our own apartment again?" I ask dad. I'd like it to be the way it was, before Mom died.
Characters differ in opinion	The written text states that two characters differ in opinion.	Text: After next summer, dad says, I have to start school. "How?" I asked. "I don't know. But it's important. We'll work it out." Denny's mom says he can wait for a while. But dad says I can't wait.
Character statement of intent	A character directly states an intention to perform or avoid a specific action.	Text: My dad and I live in an airport. That's because we don't have a home and the airport is better than the streets. We are careful not to get caught.
Change in medium of illustration	The artistic medium of the illustration changes.	The sheriff followed Owen outside. The coach had never stopped in Riverbend before, but now it stood motionless at the end of the street. A crowd gathered around it, but they held back, as if they were afraid to get too close. It was easy to see why. The horses were covered with great stripes of some kind of shining greasy

		<p>slime.</p> <p>"What is it, Sheriff?" someone asked as Ned Hardy stepped up to the coach. He didn't know. It was the strangest thing he'd ever seen, the strangest thing anyone had ever seen.</p> <p><i>Illustration:</i> The sheriff and Owen are in the foreground, looking at the stagecoach and horses. The horses have red marks on them. It looks like red crayon scribbles. (The previous illustrations were black and white line drawings.)</p>
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Appendix H

*Codes Used to Describe Knowledge of Broad Cultural Elements*

Code	Example
Knowledge of discourses	The grandfather is telling the boy legends about his name or who he is.
Knowledge of reality/fantasy	Boys are not pretend
Knowledge of social order/ justice/ rules	He's probably going to get himself into trouble because he just said that.
Knowledge of basic causality	The cowboy person's paper was touching the book, so the cowboy got in the story.
Knowledge of social structures	They're in an Indian tribe, or an Indian family. They are related to Indians. They have Indian blood.
Knowledge of what is insulting or offensive	I guess the monsters kind of insulted that his mom says there's no such thing as him
Knowledge of how people dress	I think that would kind of stand out because if they wore all blue, because not everybody wears all blue.
Knowledge of traditions	It's a tradition to race and he was afraid to do it but he won
Knowledge of humor/irony	It's funny, because it looked like crayon at the beginning.

Appendix I

*Codes Used to Describe Genre-Related Knowledge*

Code	Example
Problems will be solved	Because he was sick and frail I'm thinking he grows up big and strong because of that. Because he was sick and frail I'm thinking he grows up big and strong because of that.
Repetition will continue	I think they're going to keep going on and on all night trying to fix her.
Stories have a conflict	If it's a big house I think he will get lost at some point and find a little door.
Mysteries will be solved	They'll figure it out. I definitely think that it has something to do with the light that's making this green slime appear on everything and on all the people.
Close events are connected	Maybe the slime has something to do with the light.
Stories have action	The rat might turn into something.
Overly simple solution won't be the resolution	I guess the mommy is satisfied but the monster's not because maybe the covers are like open and not all the way up to the pillows.
The truth will emerge	I think he's going to reveal the truth now, to the boy and to the wizard.

Appendix J

*Codes Used to Describe Knowledge of Specific Cultures*

Code	Example
Knowledge of Native Americans	These people are definitely Indians and this must be hard for them, having a baby with no real doctor.
Knowledge of people living without homes	It's horrible that some people don't have homes and they have to live in places like that and they have to act like hobos.

Appendix K

*Codes Used to Describe Knowledge of Specific Objects and Events*

Code	Example
Monsters	When it gets dark there will be a monster under the bed and he'll see eyes peeking out.
Blindness	I'm thinking that the boy is blind.
Horses	In my barn there was a horse that someone owned and it had a baby. It was really cute and if you put your hands in the stall it would nip your fingers.
Cats and Rats	Since the cat -- I guess these look like cat ears, and the cat is going to chase the mouse, or the rat
Magic and Witches	the fairy godmother zapped her out with her wand.
Cinderella	This story is kind of like the same thing as Cinderella. Like that rat turned into the person that drives in Cinderella and the other one turns into the horse, and there's her big dress.(Looks again at illustration) and there's the other rat right here (points).
Explosions	Maybe something exploded and got all this muck all over them
Supernatural and Ghosts	I think something is controlling them, maybe a ghost.
Crayons	The great stripes of the greasy slime stuff is like coloring that a kid did.
How Kids Imagine Monsters	I guess it's like, Howard's dream, and he's having a nightmare about monsters.
Tarantulas	I guess he thought his tarantula was a monster because they are big and hairy, sort of like monsters.
Airports	Airports are really noisy and crowded.
Cost of Living	He only sometimes gets juice because it's kind of expensive
School	It's important to get an education.
Getting lost	Whenever I go to the airport with my mom, I'm afraid that I'm going to get lost, so I stay really close.

Appendix L

*Relationships between Textual Actions and Rabinowitz's "Rules of Reading" (1987)*

The most frequently acting textual conventions in the current study (presented in order of frequency)	Corresponding "rules of reading" (Rabinowitz, 1987)
Words that signal emotion or excitement	None
Character confusion or questioning	Partial alignment <ul style="list-style-type: none"> <li>• Factual conflicts within a work</li> <li>• Character proclamations of known errors</li> </ul>
Typeface cues	Typography
Textual references to routines or constants	Partial alignment <ul style="list-style-type: none"> <li>• Rules of undermining</li> </ul>
Punctuation cues	None
Pronouncements	Partial alignment <ul style="list-style-type: none"> <li>• Maxims</li> <li>• Direct statements of importance</li> </ul>
High level of detail	Partial alignment <ul style="list-style-type: none"> <li>• Details at climactic moments</li> </ul>
Speech balloons	None
Word layout	None
Repeated words	Partial alignment: <ul style="list-style-type: none"> <li>• Repetition</li> </ul>
Textual patterns	Partial alignment: <ul style="list-style-type: none"> <li>• Repetition</li> </ul>