

Fall 1998

Character prominence and perspective in narrative comprehension

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**CHARACTER PROMINENCE AND PERSPECTIVE IN
NARRATIVE COMPREHENSION**

BY

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DISSERTATION

**Submitted to the University of New Hampshire
in Partial Fulfillment of
the Requirements for the Degree of**

Doctor of Philosophy

in

Psychology

September, 1998

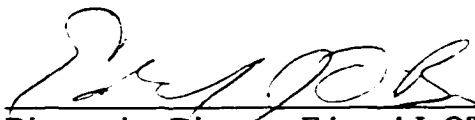
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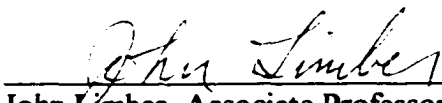
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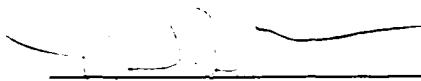
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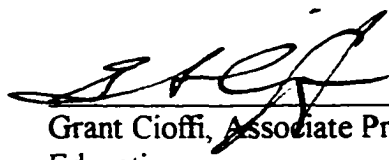
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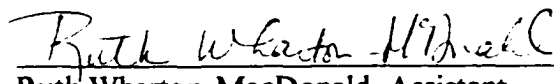
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DEDICATION

This dissertation is dedicated to my family and friends who have provided a great deal of the energy behind my continued efforts. Your contributions to my person, and thus to this project, are significant and greatly appreciated. I could not be who I am today or where I am today without each of you.

ACKNOWLEDGEMENTS

This project could not have been possible without the contributions and support of my committee members: Grant Cioffi, John Limber, Dan Morrow, Ruth Wharton-McDonald, and my advisor and dissertation director, Ed O'Brien. In addition to the guidance they provided during my research, their comments have helped me improve this document and develop my plans for future research. It has been a pleasure to work with each of them.

I owe a special thanks to Emma Norton who stood in for me when I was absent from the lab. Her interest in both this project and my success meant a great deal to me this year. I would also like to thank Anne Cook for her assistance in the lab this year and Michelle Rizzella and Chris Hakala for inviting me into the lab several years ago.

TABLE OF CONTENTS

	PAGE
DEDICATION	iii
ACKNOWLEDGEMENTS	iv
LIST OF TABLES	vii
ABSTRACT	viii
INTRODUCTION	1
 CHAPTER	
I. COMPREHENSION STRATEGIES AND THE FOCUS OF MEMORY	4
Leading Edge	4
The Here-and-Now	6
Scenario-Based Model	7
Memory-Based Text Processing	7
II. SITUATION MODELS	9
Coherence	10
III. DISCOURSE FOCUS AND THEMATIC SUBJECT	18
Implicit and Explicit Focus	18
Thematic Focus	19
The Determination of Thematic Focus	20
Processing Consequences of Designating a Thematic Subject	25
Increased Accessibility of the Thematic Subject	25
Persistence of the Thematic Subject Over Time	26
Higher Likelihood of Inferences Regarding the Thematic Subject	28
Focus on the Spatial Location of the Thematic Subject	30
IV. PERSPECTIVE	31
What is Perspective and How is it Established	31
Effects of Perspective on Comprehension	38
Accessibility of Information as a Function of Perspective	40
Recall of Information as a Function of Perspective	42

Some Limits to the Claim that Readers Adopt the Protagonist's Perspective	47
V. COMMON GROUND IN NARRATIVE COMPREHENSION	50
VI. EXPERIMENTS	58
Experiment 1	61
Method	64
Participants	64
Materials and Design	65
Procedure	68
Results	69
Discussion	72
Experiment 2	74
Method	77
Participants	77
Materials and Design	78
Procedure	80
Results	80
Discussion	83
Experiment 3	83
Method	84
Participants	84
Materials and Design	86
Procedure	87
Results	87
Discussion	90
VII. GENERAL DISCUSSION	92
REFERENCES	99
APPENDIX A	106
APPENDIX B	131

LIST OF TABLES

Table 1. Example Passage from Experiment 1.	62
Table 2. Mean Reading Times (in Milliseconds) for Two Target Sentences as a Function of the Consistency of the Elaboration and Point of View in Experiment 1.	70
Table 3. Example Passage from Experiment 2	76
Table 4. Mean Reading Times (in Milliseconds) for Two Target Sentences as a Function of Elaboration Consistency and the Location of the Second Character in the Target Sentence Scene: Experiment 2.	81
Table 5. Example Passage from Experiment 3.	85
Table 6. Mean Reading Times (in Milliseconds) for Two Target Sentences as a Function of the Consistency of the Elaboration and the Location of the Second Character in the Target Sentence Scene: Experiment 3.	88

ABSTRACT

CHARACTER PROMINENCE AND PERSPECTIVE IN NARRATIVE COMPREHENSION

by

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University of New Hampshire, September, 1998

Current theories of narrative comprehension assume that readers attend to information about the protagonist, including his/her goals, location, and emotions. However, such a limited view of narrative comprehension does not adequately address the complexity of text. Typically, the reader is exposed to an array of important secondary characters and their relations to the protagonist(s) in narratives. Also included in this story dynamic may be the beliefs or opinions of the secondary character(s) regarding the protagonist.

Three experiments were conducted to examine the effects of character prominence and perspective on reading comprehension for narratives. The prominence distinction between two characters, a protagonist and secondary character, was established by controlling the order of mention and the number of references to each character by proper name and pronoun. Character perspective was introduced into the narratives by describing the beliefs of the secondary character regarding the protagonist. The effects of such belief-based descriptions on comprehension were compared to other protagonist descriptions that were asserted as true from an omniscient narrator's perspective.

Reading time results showed that the beliefs of the secondary character regarding the protagonist were used to update the reader's mental representation of the protagonist. When the beliefs of the secondary character were inconsistent with a later action performed by the protagonist, readers experienced comprehension difficulty. However, this difficulty was delayed (i.e., observed on the second target sentence) relative to when that action was inconsistent with a previous description which was stated as true of the protagonist from the narrator's perspective (Experiment 1). Further, the effects of the second character's beliefs on reading comprehension were affected by the second character's location in the target action scene (Experiment 3). The comprehension difficulty observed when the second character was present in the target action scene was not observed when the second character was removed from that scene. These results contribute to the limited research on the role of secondary characters in narrative comprehension.

INTRODUCTION

Two central issues under investigation in the study of discourse comprehension are the processes governing the development of the mental representation of a text and the resultant contents and structure of that representation. The memory representation of a text is generally assumed to be comprised of at least two levels: the text base and the mental or situation model (Albrecht & O'Brien, 1993; Glenberg & Langston, 1992; Glenberg, Meyer, & Lindem, 1987; Johnson-Laird, 1983; Just & Carpenter, 1987; Kintsch, 1988; Kintsch & van Dijk, 1978; van Dijk & Kintsch, 1983). The text base is a representation of the text itself (Kintsch & van Dijk, 1978), whereas the situation model is a representation of what the text is about, including information not explicitly stated in the text such as relevant information from general world knowledge (Garnham, 1981). Recently, researchers have focused more on the development and nature of the situation model than on the text base level (e.g., Garnham, 1981; Johnson-Laird, 1983; Just & Carpenter, 1987; van Dijk & Kintsch, 1983). In general, these investigators have examined how textual elements might interact with general world knowledge in order to construct this fuller mental representation.

Current models of discourse comprehension assume that readers have a limited-capacity system (e.g., Kintsch & van Dijk, 1978; Sanford & Garrod, 1981; van Dijk & Kintsch, 1983). Further, because only a limited amount of information can be processed at one time, it is assumed that text is processed over a series of cycles. During each cycle, a

small portion of the text is processed, and from one cycle to another, a small portion of text is carried forward in a memory buffer in order to connect incoming information with previously processed information (Kintsch & van Dijk, 1978). As information is processed and transferred into long-term memory, new information is brought into working memory. The cumulative interconnection of text elements from the first cycle to the last cycle is assumed to form the coherent representation of the text in memory. This text representation is updated as new information is encoded. Support for this buffer model is found in the observation that the items selected to be held in active memory are recalled more quickly and accurately than items which are not held in this buffer (Fletcher, 1981; Fletcher & Bloom, 1988). The selection of text elements to be carried forward or maintained in active memory is determined by the reader's comprehension strategy (see Fletcher, 1981; 1986; Fletcher & Bloom, 1988; Glenberg et al., 1987). Understanding the strategies used to select information to be maintained in active memory and the mapping of incoming information onto previously processed information is essential for developing a model of discourse comprehension.

Several different comprehension strategies, or models of the comprehension process have been proposed. The majority of research on the comprehension strategies employed during the reading of narratives has focused on the role of the main character (i.e., the protagonist or thematic subject) in this process. That is, the narratives used in this research are typically simple and focus on one primary character. However, natural narratives typically involve multiple characters of differing importance. The purpose of the current set of experiments was to investigate the effects of secondary characters on the

comprehension and representation of text in memory. Specifically, whether or not information relevant to a secondary character was incorporated into the reader's mental representation of a text, assuming that this representation centers around the story protagonist, was explored. This series of experiments tested whether or not belief-based information presented from the perspective of a secondary character was incorporated into the situation model in the same way as information about the protagonist. While the topic of secondary character has received little attention in the literature, there are several related lines of research. Research on the effects of character prominence (i.e., main characters or thematic subjects), perspective, and common ground on text comprehension help to lay a foundation for the series of experiments which follow.

CHAPTER I

COMPREHENSION STRATEGIES AND THE FOCUS OF MEMORY

This section will provide a brief review of several models of discourse comprehension. These include the Leading Edge strategy, the Here-and-Now model, the Scenario-Based view, and the Memory-Based view of text processing.

Leading Edge

Kintsch (1974) proposed that as a text is processed and comprehended it is stored in a hierarchical propositional structure in which position in the structure reflects argument repetition in the text. Comprehension proceeds as incoming propositions are connected to previously processed propositions based on argument overlap.

Kintsch and Vipond (1978, see also Kintsch & van Dijk, 1978) extended this model and hypothesized that only a limited number of propositions from a discourse can be held in active memory, a temporary buffer, at one time. They proposed that these propositions are chosen based on the "leading edge" strategy. That is, the most recent and important propositions, as determined by level in the propositional hierarchy, will tend to be retained in the buffer. These propositions are maintained in the buffer until the next cycle of text processing has occurred.

Kintsch's model (Kintsch & van Dijk, 1978; Kintsch & Vipond, 1979) assumed that coherence was established and maintained through coreference, or argument overlap. Discourse referential coherence has been shown to occur through three processes: direct

matching between new information and previously processed information which is automatically accessible (stored in a working memory buffer), the construction of bridging inferences between new information and related portions of the text when a direct match is not possible, and reinstatement matches (see Lesgold, Roth, & Curtis, 1979; Kintsch & Vipond, 1979).

While the primary mechanism for establishing coherence in this model was argument overlap, argument overlap does not ensure coherence between text elements. For example, Keenan, Baillet, and Brown (1984) gave the following sentences, "Fido is in the house. Fido is in the yard," as a case where two sentences share arguments in common, yet they are incoherent. They noted that in addition to referential coherence, causal coherence affects the comprehension process (Keenan et al., 1984). Specifically, the stronger the relationship between a cause and an event, the faster the statements regarding the event are processed (Keenan et al., 1984).

Some support has been found for the effectiveness of other strategies over the leading-edge strategy. Fletcher (1986) conducted research on various strategies for allocating short-term memory resources during reading comprehension (e.g., the leading edge strategy, recency, frequency, and those based on story grammar structure). He found that a strategy based on focusing on the plans and goals of the main character in a text could account best for data from both verbal protocols (i.e., think aloud) and readability measures. Both the here-and-now model and the scenario-based view of text processing specifically address the special status of main characters in the mental representation of texts. Whereas the leading-edge strategy addressed the development of the text-base level

of representation, the remaining comprehension strategies address the development of the situation model.

The Here-and-Now

The "here-and-now" model of discourse comprehension assumes that readers occupy their limited-capacity working-memory system with a subset of information from their developing situation model of the text. Specifically, this model of text processing assumes that the reader maintains an updated model of the story protagonist at all times during comprehension, and that this model of the protagonist is carried forward and continuously updated during comprehension (Bower & Morrow, 1990; Morrow, Bower, & Greenspan, 1989; Morrow, Greenspan, & Bower, 1987; Morrow, in press). Thus, the mental representation of a text is built around the protagonist's point of view. Accordingly, the reader should maintain in focus information relevant to the here-and-now state of the protagonist. This information may include attributes of the protagonist, their current goals, their physical location, the location of objects and other characters in their surrounding environment, as well as their emotional states. All information relevant to the main character and characteristics of that entity is used to update the representation, and all other information which is not relevant to the current here-and-now of the narrative is not carried forward in the representation (see Morrow et al., 1989). All new information about this character is compared with the current representation. A coherence break occurs when new information conflicts with the current representation of the character.

Scenario-Based Model

The scenario-based model of discourse comprehension proposed by Sanford and Garrod (1981; Garrod & Sanford, 1988; 1990) suggests that the memory representation of a text is broken into explicit and implicit focus. Elements in explicit focus correspond to the contents of working memory, whereas all other relevant information which is not currently in direct focus is held in implicit focus. The model assumes that the protagonist is maintained in explicit focus, while characteristics of the protagonist and other scenario-based information are held in implicit focus. Discourse pointers serve as a mechanism in the model to relate the contents of explicit and implicit memory. In this way, the contents of implicit memory are restricted to only information which is relevant to the current scenario. Glenberg and Langston (1992) further proposed that items in the reader's focus of attention would also act as discourse pointers to relevant information in long-term memory. Thus, when new information is processed through this system, information in explicit focus sends activation to information in implicit focus, and both of these memory sources are involved in the integration process.

Memory-Based Text Processing

According to the memory-based view of text processing, the processing of information in active memory results in a signal travelling through all of memory in parallel, including both the current model of the protagonist and all of long-term memory. All related information resonates in response to that signal, even information from general world knowledge or that which has been noted as no longer true or relevant to the current focus. The degree to which information resonates depends on the strength of their relation

and degree of featural overlap between the two memory traces (O'Brien, Raney, Albrecht, & Rayner, 1997). The contents of long-term memory which reach a sufficient level of activation become active in working memory. This reactivation process has been characterized as a fast-acting resonance process (McKoon, Gerrig, & Greene, 1996; McKoon & Ratcliff, 1992; McKoon & Ratcliff, 1989; Ratcliff, 1978; Myers, O'Brien, Albrecht, & Mason, 1994; O'Brien, 1995; O'Brien, Rizzella, Albrecht, & Halleran, in press). Reactivated memory traces are connected, if possible, to the information currently being processed in an integration stage (Myers & O'Brien, in press, as cited in O'Brien et al., in press; see also Kintsch, 1988). In this second stage, the reader's current representation of the text is updated (see Kintsch, 1988).

Some recent research has focused on distinguishing which model of text processing can account best for how readers develop a coherent, multi-level mental representation during reading. This research will be reviewed in the discussion of local and global coherence in the following section on the situation model level of text representation.

CHAPTER II

SITUATION MODELS

A situation model is a representation of the situation or world described by the text. It is an integration of the semantic content of the text with the reader's general world knowledge. It also includes inferences that the reader draws during comprehension through the interaction of the text with their general world knowledge (Johnson-Laird, 1983; Sanford & Garrod, 1981; van Dijk & Kintsch, 1983). This representation may be composed of propositions, however, the propositions describe the discourse event rather than the sentence structure of the text (i.e., the text base representation). Glenberg et al. (1987) argued that situation models are perceptual-like and their construction requires activity on the part of the reader, that is, the material being processed is constantly compared to and integrated with the reader's knowledge of language and the world.

In the situation model, the reader may attempt to attach meaning to the story. Emotions of both the reader and those described as being experienced by the characters are integrated into the situation model (Gernsbacher, Goldsmith, & Robertson, 1992; Gernsbacher & Robertson, 1992). Kneepkens & Zwaan (1994) argued that emotions are especially important in guiding the construction of the situation model in that the emotions described or experienced are important indicators of what is important to the reader and will therefore direct the attention of the reader to certain story elements.

Research has shown that the mental representation of text also contains such

elements as information about central characters in the discourse, the actions and goals of the main character (Graesser, Singer, & Trabasso, 1994; Suh & Trabasso, 1993), and information about spatial layouts or locations of people and objects (Bower & Morrow, 1990; Glenberg et al., 1987; Mani & Johnson-Laird, 1982; Morrow et al., 1987; Morrow et al., 1989; O'Brien & Albrecht, 1992; Zwaan & Oostendorp, 1993). In the research on narrative comprehension, an abundance of research has investigated the role of story characters on the development of this mental representation. As mentioned in the preceding section, some theories claim that the mental representation is developed around the current state of a story protagonist (e.g., the here-and-now view).

A central question in theories of text-comprehension is how information in long-term memory is accessed when it is relevant to information currently being read. Some theorists have posed this question in terms of "what" information is available in long-term memory or what information is "readily available" (McKoon & Ratcliff, 1992). Some recent research on the maintenance of global coherence during reading has advanced our understanding of these processes, as well as tested the usefulness of some models of discourse comprehension in accounting for experimental findings. A discussion of some of this recent work in the following section will provide the motivation for the current proposal.

Coherence

A central feature of discourse is coherence. Coherence can be established at both a local and a global level, and the development of the situation model requires that coherence be established at both levels (e.g., Bower & Morrow, 1990; Garrod & Sanford,

1988; Glenberg & Langston, 1992; Glenberg et al., 1987; O'Brien & Albrecht, 1992; Singer, Graesser, & Trabasso, 1994). There is a great deal of experimental support that during narrative comprehension both local and global coherence are established (e.g., Albrecht & O'Brien, 1993; Albrecht & Myers, 1995; Garrod & Sanford, 1988; 1990; Glenberg et al., 1987; Glenberg & Langston, 1992; Hakala & O'Brien, 1995; Huitema, Dopkins, Klin, & Myers, 1993; McKoon et al., 1996; Myers et al., 1994; O'Brien & Albrecht, 1992; O'Brien et al., in press; Rizzella & O'Brien, 1996; van Dijk & Kintsch, 1983; Zwaan, Magliano, & Graesser, 1995). Local coherence is established when incoming information is connected with information held in working memory. Global coherence is established when incoming information is also connected with relevant textual information that has already been processed and is held in long term memory.

Albrecht & O'Brien (1993) demonstrated that coherence was established at a global level even when there was no violation of local coherence (see also Hakala & O'Brien, 1995; Myers et al., 1994; O'Brien & Albrecht, 1992; O'Brien et al., in press; Rizzella & O'Brien, 1996; Zwaan et al., 1995). Albrecht and O'Brien (1993) created passages in which an elaborated characteristic of the main character was either consistent or inconsistent with a target action carried out by that character. For example, in a passage about a woman named Mary, Mary was either described as someone who loved junk food and things cooked in grease (consistent elaboration) or as a vegetarian, health-nut (inconsistent elaboration). In a target sentence, Mary orders a cheeseburger and fries. In each passage, the elaboration was backgrounded such that it was not active in memory when participants read the sentence containing the target action. Reading time for the

sentence containing the target action was longer following the inconsistent elaboration than the consistent elaboration, even though the texts were locally coherent in each condition. These reading times were taken to reflect comprehension difficulty as the reader attempted to reconcile the sentence being processed with the reactivated, inconsistent character description. Thus, readers monitored global coherence even when the text was locally coherent, and global coherence breaks caused comprehension difficulty.

The results found by Albrecht and O'Brien (1993) can be accounted for by the scenario-based view, the here-and-now view, as well as the memory-based view of text processing. According to the scenario-based view of text processing, Mary is held in explicit focus, while her character description (e.g., a junk-food junky or vegetarian) is held in implicit focus. When the reader is given the target action (i.e., Mary ordered a cheeseburger and fries) this information is mapped onto the contents of explicit memory, as well as the contents of implicit memory through discourse pointers. When the action and the character description are inconsistent, the reader experiences comprehension difficulty. The relevance of information governs reactivation in the scenario-based model. According to the here-and-now view, the reader maintains a fully updated representation of the protagonist in memory. Incoming information is checked against and integrated into this representation. In the case where the elaboration described Mary as a vegetarian, the reader would experience comprehension difficulty trying to integrate information that she ordered a cheeseburger with that current representation. Finally, the comprehension difficulty observed by Albrecht and O'Brien (1993) can also be explained by the memory-based text processing view. According to this account of discourse processing, reading of

the target action causes a signal to be sent through memory. If the incompatible character description resonates to a sufficient degree, it will be reactivated into working memory and a coherence break will occur, even if this information is not relevant to the current information being processed. Long-term memory reactivation is governed by featural overlap in the memory-based text processing view; the relevance of this information is only considered during a later, integration stage.

Some recent work by O'Brien and colleagues has served to test these different accounts of how readers maintain global coherence. In a series of five experiments, O'Brien et al. (in press) adapted previously used materials (i.e., Albrecht & O'Brien, 1993 and Hakala & O'Brien, 1995) by restricting the conditions under which the character description was operative (e.g., "Nevertheless, Mary never stuck to her diet when she dined out with friends..."), shifting the time frame under which it was operative (e.g., "Mary recalled that she had been a health nut and a strict vegetarian for about ten years but she wasn't anymore."), or indicating that the characteristic was never true (e.g., "Joan played a joke by telling people that Mary had been a strict vegetarian for ten years."). The memory-based view and here-and-now view of text processing make different predictions regarding how these qualifications affect comprehension.

If readers maintain a fully updated representation of the protagonist in memory, as assumed by the here-and-now model of comprehension, then the qualification should have been used to update the model and the target action would no longer be inconsistent; there would be no violation of global coherence. However, the memory-based view predicts that upon processing the target action, all information related to that action, such as the

qualified character description, will resonate in response. The reactivation of this information would produce comprehension difficulty, although this may be reduced by the qualification.

Consistent with previous findings, longer reading times were observed following the inconsistent elaboration than following the consistent elaboration (Albrecht & O'Brien, 1993; Hakala & O'Brien, 1995). When the critical characteristic was qualified, participants still experienced comprehension difficulty. While there was still an inconsistency effect even with the qualification, the qualification seemed to facilitate resolution of that inconsistency. This was evidenced by either faster reading times on the first critical sentence in the qualified condition compared to the inconsistent condition or no reliable differences in reading time of the second target sentence in the consistent versus qualified conditions, although these results varied between experiments. O'Brien et al. (in press) noted that their results demonstrated the fact that the resonance process was not sensitive or limited by changes in time (Experiments 3 and 4) or changes in the situation described (Experiments 1 & 2).

In a subsequent series of experiments, O'Brien and colleagues conducted a series of experiments to try to distinguish if discourse pointers are needed for a model of text processing or if the resonance process is sufficient to explain the process of maintaining coherence during reading (Cook, Halleran, & O'Brien, in press). In two of the experiments in their series, Cook et al. (in press) used narratives about two characters in which an elaboration section described a characteristic of either the first or second character. This elaboration was either consistent or inconsistent with an action performed by the first,

more prominent character in a critical sentence toward the end of the text. The first character elaborations provided replications of previous research (Albrecht & O'Brien, 1993; O'Brien et al., in press). In the second character conditions, the consistent or inconsistent character descriptions were ascribed to the secondary character. For example, in a passage about a man named Ken, his friend Mike was described as either a big man who loved physical contact sports (Second Character Consistent), or as a small, weak man who hated contact sports (Second Character Inconsistent). Because the critical sentence always described an action carried out by the first character (e.g., "Ken decided to enroll in boxing classes"), when the elaboration contained information about the secondary character, this information was irrelevant to the later action carried out by the first character. According to the scenario-based model, discourse pointers should only refer to information relevant to the protagonist, in this case the first character. However, the memory-based model of text processing makes a different prediction. According to this view, all information which shares featural overlap with the critical sentence will resonate in response to the processing of that sentence, regardless of the character to whom the information is attached. In this case, both the first and second character descriptions are inconsistent with the later target action.

Cook et al. (in press) used both reading time for the critical, action sentence and probe verification time to assess comprehension difficulty and reactivation, respectively. They observed no significant difference in reading time when comparing the second character consistent and inconsistent elaborations. Thus, it appeared as if no comprehension difficulty resulted when the second character's description was inconsistent

with the critical action. In the probe verification study, the verification probe was a sentence which appeared either immediately after the elaboration section ,after the filler section , or after the critical sentence. Half of the probes referred to the first character and half referred to the second character. The probes differed within a passage only by the character name presented (e.g., Ken/Mike liked non-contact sports). The results from the probe verification task supported that the character description was reactivated following the critical sentence. For both the first and second character conditions, the time to verify the probe sentence was faster following the critical sentence (1713 and 1708 msec, respectively) compared to following the filler section (1918 and 1937 msec, respectively). Verification times were also faster following the elaboration sections compared to following the background, and again this was true for both character conditions. No significant difference was found for either character condition when comparing verification times after the elaboration with those after the critical sentence. Taken together, these two experiments demonstrate that backgrounded information can be reactivated and not affect comprehension. Further, the processing of a sentence about the main character can result in reactivation of information related to that topic but associated with another character, not the main character.

Cook et al. (in press) explained these results through a "dumb" resonance mechanism which reactivates backgrounded information based on relatedness, or featural overlap, and not on relevance. While Cook et al. did not find evidence of comprehension difficulty due to the reactivation of the second character information, the reactivation of this information alone goes against the claims of the scenario-based and here-and-now

models of text processing. The reactivation of the inconsistent information along with the lack of comprehension difficult lends support to the notion that there are two separate phases during comprehension including the reactivation of related information from long-term memory and the integration of information into the current representation of the text (Kintsch, 1988).

The two experiments conducted by Cook et al. (in press) are particularly relevant to the current set of experiments because they begin to address the issue of how information about secondary characters is integrated into the developing situation model of a text. The results suggest that this information is available in the situation model in much the same way as information directly relevant to the main character. The following review of some research on the role of main characters in narrative comprehension should serve to guide our understanding of the potential role of secondary characters.

CHAPTER III

DISCOURSE FOCUS AND THEMATIC SUBJECT

As noted earlier, very little research has been conducted on how secondary characters influence the development of narratives or their representation in memory. However, the collection of work by Sanford, Garrod and their colleagues provides a nice framework in which to discuss the possible significance of these secondary characters. A discussion of their distinction between implicit and explicit focus and their ideas about the role of primary characters in the developing mental representation of narratives will serve as a context in which to consider the experiments which follow.

Implicit and Explicit Focus

There is much evidence to support that, because of the limits of cognitive resources, only a certain portion of a discourse is maintained in the reader's focus. This active portion typically contains discourse entities that are currently active in the discourse or are important to the discourse (Sanford & Garrod, 1989). Items maintained in focus are more easily available for reference resolution, inference generation, verification, and other cognitive processes.

In their original description of implicit and explicit memory, Sanford and Garrod (1981) explained that explicit focus contains tokens for characters or other entities introduced in the text. It also is assumed to contain structural information from the text. With few exceptions, establishing focus on discourse elements requires that they are

introduced explicitly (Garrod & Sanford, 1990). Implicit focus contains knowledge based information, and in their words, implicit focus is "nothing more than a currently accessible part of semantic memory" (Garrod & Sanford, 1982, p.26). Implicit focus contains relevant aspects of the story scene, including knowledge-based information about the roles and situations being described. It is implicit focus which gives the text significance.

These two levels of focus are interconnected in such a way that entities in explicit focus map onto situation and role information in implicit focus. Even when a character is only mentioned by an explicit name and no role information is given, Sanford and Garrod (1981) noted that it is likely that the reader assigns a role to that character. In this way, the introduction of a character in a text and the subsequent representation of that character in explicit focus determines how the reader focuses on the situation. The introduction of a main character may result in the reader adopting that character's perspective when representing in implicit focus the situation described in the text (Sanford & Garrod, 1981).

One component of the distinction between implicit and explicit focus is the determination of thematic subject. The following section provides a discussion of what constitutes a thematic subject and what some of the processing consequences are of its determination.

Thematic Focus

There is consensus in the literature that narratives tend to be written around a main character or a small number of main characters with one being more prominent at any point in the discourse (Bower & Morrow, 1990; Garrod & Sanford, 1988; Sanford, Moar, & Garrod, 1988). According to most accounts of foregrounding in situation models, this

main character, or the most recently mentioned character, and information about this character are in the foreground or focus of attention (Rinck & Bower, 1995, see also Chafe, 1976; Gordon, Grosz, & Gilliom, 1993). This main character, who takes the central role within a section of a discourse, has been referred to as the Thematic Subject throughout the influential work by Garrod and Sanford (e.g., Garrod & Sanford, 1988; Sanford et al., 1988). They defined thematic subject as, "who the discourse is about" (Garrod & Sanford, 1988, p.520). These authors suggested that main characters, or thematic subjects, are represented differently in memory than other characters who are considered secondary in a narrative. They further claimed that a portion of text can only have one thematic subject. In this section I will discuss how the thematic subject is selected from a text and what some of the implications of character prominence are for discourse comprehension.

The Determination of Thematic Subject

Sanford et al. (1988) have investigated what factors in a discourse affect the phenomenon of character prominence. They noted that character-based narratives or stories usually involve descriptions of more than one character, and that typically, characters in such narratives are not of equal importance. Based on this observation, they investigated what makes one character more prominent compared to other characters in character-based narratives.

Sanford et al. (1988) identified several factors which might contribute to character salience, including primacy of mention, naming, and status in the narrative. Based on observations and intuition, they concluded that main characters tend to be introduced

earlier in a narrative than other less significant characters; main characters also tend to be introduced by proper name (Claire), whereas secondary characters may be introduced by role descriptions (the secretary); and finally, main characters tend to take agentive roles within a discourse scene and the scene is often viewed from their perspective (see also, Bower & Morrow, 1990). For example, in a story about a restaurant, typically the reader learns about the experiences of the customer rather than the dishwasher, and in this way, the story is written from the customer's point of view. Prominent characters tend to be involved in important, foregrounded story events or events that contribute to the story plot (Morrow, 1985).

Sanford et al. (1988) investigated the effects of primacy, naming, and status on the determination of thematic subject. They collected data on both the accessibility and availability of characters in participants' memory for and comprehension of texts. They quantified accessibility and availability by ease of anaphoric resolution, as measured by reading time, and frequency of mentioning in a story continuation, respectively. In their study, participants were presented with pairs of sentences that described two characters interacting in common social settings. Each sentence introduced only one of the characters and that character was introduced by either proper name (e.g., Masie) or a role descriptor (e.g., the customer). One character was chosen as the one from whose perspective the narrative was presented. Participants were asked to read the sentence pairs and then provide a plausible, single sentence continuation of the scenario being described. The following is an example passage and continuation (Sanford et al., 1988):

[Masie/the customer] entered the restaurant and sat down.
[Alphonso/the waiter] wearily limped over to take her order.
Hypothetical continuation:
Masie was waiting for her husband to arrive.

Using passages like this, they were able to introduce the two characters both by name, both by role descriptions, or to distinguish the characters by introducing one by name and one by a role description. The story continuations were examined and the character mentioned most frequently was assumed to be the thematic subject. Sanford et al. (1988) found that when only one character was mentioned by proper name, that character was almost always taken as the thematic subject. Whether mentioned first or second, characters introduced by proper name were mentioned more in the continuation sentences than characters introduced by a role descriptor. No effects for order of mention of characters or for predominant perspective were found. Based on these results, it was concluded that the only factor controlling mentioning in the story continuations was introduction by proper name versus role description. Characters introduced by proper name were more available in the reader's mental representation of the narrative.

In a reading time experiment, Sanford et al. (1988) found that reading times for sentences containing a pronominal anaphoric reference were significantly shorter (289 msec shorter) when the anaphor referred to a character introduced by a proper name compared to those introduced by a role descriptor. These results were consistent with the continuation results and provided additional evidence that characters introduced by proper name were more accessible in the reader's mental representation of the text. (When the anaphoric pronoun was replaced by a repeat of the original proper name or descriptor, no

advantage for proper name was observed.) They concluded that the use of a proper name to introduce a character served to make that character salient in memory.

It has been noted that proper names have a special status as referring expressions. Kripke (1972) noted that proper names serve as "rigid designators." In other words, a character working at a potter's wheel in a studio who is referred to as "Abby" will be the same person as the Abby who later draws a sketch of a boat. However, if this character goes to several galleries and watches "the artist," we would not assume that the same artist has moved between scenes, unless the text explicitly stated this. In this way, proper names are used to refer to the same character within one scene and also moving between multiple scenes. Typically, characters within a narrative who can move between scenes will be more central in the narrative than characters who are limited to only one scene.

Other research has shown that after a character has been named, sentence initial pronouns are used to refer to the protagonist in a story or serve to maintain a character in a central role (Karmiloff-Smith, 1980; Marslen-Wilson, Levy, & Tyler, 1982). From this finding, it has been concluded that the use of pronouns as the subject of a sentence serves to establish that referent as the thematic subject of the discourse; they serve to maintain that character as a referent (Karmiloff-Smith, 1980; Marslen-Wilson et al. 1982). Further, more specific references such as proper names and definite noun phrases are used to refer to less central entities or to reestablish a character or text element as the subject of the discourse (Garrod & Sanford, 1982; Marslen-Wilson et al., 1982).

It is important to note that many of the passages used to study thematic subjecthood were rather short compared to natural narratives (e.g., Sanford et al., 1988).

Sanford et al. (1988) noted that in many narratives, some minor characters are also introduced and/or referred to by a proper name. Based on such cases, they concluded that in natural texts, which tend to be much longer and involve more characters, frequency of mention may be the dominant cue for character prominence; type of introduction would then take a less important role in the determination. They suggested that introduction of a minor character by proper name may signal to the reader that this character may move between scenes in the narrative, just as the main character, and should therefore be represented in the reader's situation model. In contrast, scenario-dependent characters, also referred to as role-defined characters, typically do not move between scenes and are assumed to receive less attention from the reader. In this way, they proposed a hierarchy of character importance: global principal characters, significant other characters who are introduced by proper name, and lastly, scenario-dependent characters (Sanford et al., 1988). In the case where more than the main character is introduced by proper name, frequency of mention allows the reader to distinguish character importance.

The determination of thematic subject is important because if a reader assumes that a character is the thematic subject of the narrative, the reader will pay more attention to that character. Focusing attention on one character will have an impact on processing of the text as well as the structure of the mental representation of the text. The representation of the text should be organized around the protagonist in the narrative (Morrow, 1985). Thus, frequency of mention, type of introduction, designation as the agent in a scene, and other linguistic tools can have significant impact on discourse comprehension. In the following section, I will discuss some research on the processing consequences associated

with determining the thematic subject of a narrative.

Processing Consequences of Designating a Thematic Subject

Several processing consequences resulting from readers focusing on a thematic subject in a narrative have been empirically documented. These include: 1) increased accessibility of the thematic subject in the mental representation compared to secondary characters, 2) persistence of the thematic subject across time shifts in narratives, 3) a higher likelihood that readers will draw inferences regarding the main character in a discourse rather than the secondary characters, and 4) the mental representation of a text includes information about the spatial location and surroundings of the main character.

Increased Accessibility of the Thematic Subject. Thematic subjects have special status among characters and other text elements with respect to reference. Main characters, or thematic subjects, are distinctive in the mental representation of a narrative text because such characters are maintained in the reader's focus throughout the processing of a text. Albrecht and O'Brien (1991) found that the more a concept is mentioned, or held in the reader's focus, the more central or important and thus the more easily the concept is accessed in memory.

Research has shown that the process of anaphoric resolution is affected by whether or not the antecedent is active in memory (either held in a memory buffer or in focus). References to entities in focus are resolved more quickly than references to more distant text elements (Bower & Morrow, 1990; Fletcher, 1984; Garrod & Sanford, 1983; Lesgold et al., 1979; Sanford & Garrod, 1981). Garrod and Sanford (1985) found that referential pronouns to the thematic subjects were resolved immediately, whereas pronouns referring

to other characters were not. Presumably, the thematic subject is more prominent in the reader's representation of the text, or is within the reader's focus more so than other text elements. This may result in the thematic subject, or prominent character, acting as a preferred referent for anaphora (Bower & Morrow, 1990; Morrow, 1985). It has been demonstrated that a sentence containing an anaphoric reference to the main character was read faster than one containing a reference to the scenario-dependent character (Anderson, Garrod, & Sanford, 1983; Garrod & Sanford, 1982). This occurred even when the main character was mentioned earlier in the passage (and therefore further away from the anaphoric reference) than the scenario-dependent character.

Persistence of the Thematic Subject over Time. There is also evidence that the thematic subject of a discourse tends to persist in the developing discourse more so than other characters (Anderson et al., 1983). Anderson et al. (1983) argued, " a representation should be readily accessible if it still forms part of a current model. If a change in episode has occurred, then a new model should be in current use, and entities mapped into a previous model should not be directly accessible by means of pronouns" (p.429). However, main characters typically move between scenes in a narrative. If this results in the representation of the main character being incorporated into the new model, then episode changes should not have an affect on the availability of information pertaining to the main character. Anderson et al. (1983) investigated how shifts in episode and character type affected antecedent accessibility (see also Garrod & Sanford, 1983).

Using a continuation task, Anderson et al. (1983) examined the incidence of mention for main and scenario-dependent characters. They presented participants with

four-line, titled narratives which involved two characters. In each passage, the first sentence introduced the main character by proper name, and the second sentence introduced the scenario-dependent character by a role. The third sentence was a filler sentence which did not refer to either character. Finally, the last sentence introduced a time shift which was either within the normal range of the activity being described or beyond the temporal range of that activity. Participants were instructed to read the passages carefully and to provide a single, continuation sentence for each passage. The following is an example passage:

Title: At the cinema
Jenny found the film rather boring.
The projectionist had to keep changing the reels.
It was supposed to be a silent classic.
[Ten minutes/Seven hours] later the film was forgotten.
[within range/beyond range]

The results showed significant effects for both character type and time shift. Collapsing across time shifts, main characters were mentioned 83.9 percent of the time while scenario-dependent characters were only mentioned 27.3 percent of the time. Further, they observed a significant drop in the incidence of mentioning of scenario-dependent characters after a time shift which was considered "out of range" for the scenario being described and a slight increase in the number of mentioning of the main character after such a time shift occurred. These results were taken to suggest that main characters were more available in the reader's mental representation of the text as compared to other characters.

Anderson et al. (1983) also found that participants were faster to verify a question

about the main character compared to a scenario-dependent character. Whereas the type of time shift (i.e., within range/beyond range) had no effect on the time it took participants to answer a question regarding the main character, participants took longer to answer questions about scenario-dependent characters after beyond-range time shifts compared to within-range time shifts. Apparently information about scenario-dependent characters became less available after a time shift which indicated the end of that scene, and the same time shift did not affect the availability of the main character. These results were consistent with the continuation results in suggesting that the representation of the main character was more available in memory than that of secondary characters.

In conclusion, main characters were treated differently than scenario-dependent characters; main characters were more available in the reader's representation of the text and they were less affected by shifts in time which indicated the beginning of a new episode. Results from the story continuations and the question answering times indicated that the representations of scenario-dependent characters were less available following shifts in time which were beyond the normal limits of the given scene compared to shifts that were within the normal duration of the scene.

Higher Likelihood of Inferences Regarding the Thematic Subject. That readers are more likely to draw attributional inferences about the thematic subject rather than other characters in a narrative also supports the idea that the development of a mental representation of a main character is different than that of secondary characters (Garrod and Sanford, 1988). Sanford and colleagues investigated the role of thematic subject in the assignment of psychological atmosphere statements using narratives that involved two

possible character sources of such statements. The following example taken from Garrod and Sanford (1988) will help to explain their materials:

Example passage: "Lunch at the cafeteria"

1. Alistair hung up his coat and picked a tray
2. The waitress smiled as she poured the coffee.
3. The atmosphere was hot and sticky.
- 4a. He took the cup. (filler)
He mopped his brow. (target sentence)
- 4b. She offered the cup. (filler)
She mopped her brow. (target sentence)

Sentence (3), which refers to the atmosphere, can only be verified by a character because it is a subjective statement about the story environment. The authors referred to such statements as "psychological atmosphere statements." If the inference that the psychological atmosphere statement reflects the subjective experience of the thematic subject is drawn during the processing of that statement, then the final sentence, "He mopped his brow" would be read more quickly than the sentence, "She mopped her brow." If such an inference is not drawn during comprehension, there would be no expected difference between the processing of these target sentences. The results confirmed that readers inferred that the atmosphere statement was made from the thematic subject's perspective. This was demonstrated by an advantage in reading time for the target sentence in 4a when the atmosphere statement was included in the passage compared to when it was omitted. No difference in processing time was observed for the target sentence in 4b with or without the atmosphere statement. These results indicated that the inference was made and that it was made at the time of processing the atmosphere statement.

Focus on the Spatial Location of the Thematic Subject. There is also empirical evidence that a reader's mental representation of a text includes information about the spatial location of the thematic subject as well as information about objects surrounding that character. Glenberg et al. (1987) found that when the main character was foregrounded in the situation model, items spatially associated with that character were also more likely to be foregrounded and thus more accessible than items dissociated from the main character.

Morrow et al. (1989) investigated whether readers divide their attention unevenly between main characters and secondary characters. They had participants read narratives about two characters of different importance. They found that response times were shorter when questions asked about an object near the main character than when they probed objects near the minor character. Rinck and Bower (1995) found that increasing the physical separation between an object and the focus of the reader's attention or location of the protagonist in the narrative served to decrease the accessibility of that object. This line of research will be discussed in more detail with respect to discourse perspective in the following section.

CHAPTER IV

PERSPECTIVE

The topics of Thematic Subject and discourse perspective are closely related. When a story protagonist is in the foreground, readers tend to adopt that character's perspective (Morrow, 1985). It has been proposed that in constructing a situation model of a text, the strategy readers use to determine what information to keep active in memory involves adopting the perspective of the main character or protagonist (e.g., the here-and-now model of text comprehension). In doing so, they are also assumed to maintain information relevant to that point of view (Bower & Morrow, 1990; Morrow, 1985a, 1985b; Morrow et al., 1987; Morrow et al., 1989). Introducing a secondary character's perspective into the narrative can serve to make that character more prominent (Morrow, 1985). While the here-and-now model of comprehension is unable to account for the global inconsistency effect described earlier, its emphasis on and support for the importance of perspective merit discussion.

What is Perspective and How is it Established

Perspective has been defined as a "subjective viewpoint that restricts the validity of the presented information to a particular person in the discourse" (Sanders & Redeker, 1993, p. 69). If a section of text is connected or only available to a certain character, or in a particular scene, that section is said to be perspectivized. For example, if a situation in the discourse continues to be described after the main character has been removed from

the scene, and the scene was being interpreted from the point of view of the protagonist, this segment of the discourse will require a shift in perspective from that of the protagonist to one of the secondary characters or the narrator. Narratives can be written from several different perspectives including the narrator's perspective, the perspective of one character, or the discourse perspective can switch between characters. Banfield (1982) reported that readers tend to interpret sentences in a text from a single perspective.

Subjective viewpoints are often presented by expression of a character's thoughts (i.e., their mental states), deictic expressions (e.g., here/there, this/that), or their direct speech (Millis, 1995; Morrow, in press; Sanders & Redeker, 1993). In fact, Sanders and Redeker (1993) noted that these are the most direct ways of expressing perspective. These authors distinguished between strong and subtle means of introducing a perspective into a discourse. Specifically, they addressed two types of "strong" perspective: quotation and focalization. The following are examples of each respectively (Sanders & Redeker, 1993):

1. The three Englishmen had introduced themselves as tourists. John looked them over. He said: "Well, you sure don't look like tourists to me."
2. The three Englishmen had introduced themselves as tourists. John looked them over. They sure didn't look like tourists to him.

In contrast, the more subtle forms of perspective that they identified involved a viewpoint that was implicit rather than explicit (Sanders & Redeker, 1993). This can be accomplished through shifts in tense and choices in referring expressions, for example. Consistently placing the narrator with one character by making that character the subject of repeated sentences will also create a subjective viewpoint.

Perspective is an important topic to discuss because it has been found to influence comprehension and the development of the situation model. Previous work has supported the idea that readers take on the perspective of a character within a scene being described; their situation model of the text is organized and updated from a specific vantage point within the scene (Anderson, et al., 1983; Abelson, 1979; Black, Turner, & Bower, 1979; Bryant, Tversky, & Franklin, 1992; Franklin & Tversky, 1990; Glenberg et al., 1987; Morrow, 1985a; Morrow et al., 1987). As stated earlier, main characters are often central in the development of a situation model (Morrow, 1985b). Narratives are also often written from that main character's perspective (Morrow et al., 1987). Describing the thoughts or feelings of a character may bias the reader to adopt that character's perspective (Rapaport et al., 1989). When adopting the character's perspective, the situation model of the text is constructed from that character's perspective, whereas adopting the narrator's point of view would result in the model being constructed in a different manner (Millis, 1995; see also Franklin, Tversky, & Coon, 1992).

Bryant et al. (1992) found that readers adopted the perspective of a story character while reading third person narratives. Bryant et al. (1992) had participants read short passages describing a protagonist within an arrangement of objects (e.g., viewing objects within a room at a museum). Immediately after reading the passage, participants were presented with an object which was then followed by a direction probe (e.g., right, left). In response to the direction probe, participants were to name the object situated in that direction. They found that readers responded more quickly to objects in the "in front" of the protagonist condition compared to the "behind" the protagonist condition. This was

taken as evidence that the reader had adopted the character's perspective and was viewing the scene from their vantage point (see also Franklin & Tversky, 1990). In further support of this conclusion, they also found that this directional effect was removed when the narrative described the reader viewing the character within the spatial layout (instead of allowing them to view the layout from the character's perspective). Such a finding is important in that it demonstrated that the perspective taken by the reader could be determined by the way in which the text is written.

Franklin et al. (1992) investigated how readers switched perspective while reading passages about two characters. Franklin et al. (1992) conducted a series of experiments in which participants read passages describing objects located around two characters (or one character at separate times). The participants were then probed as to what objects were described in a specified direction from a specified character. Franklin et al. (1992) found that rather than switching perspective from one character to another as the participants were required to answer questions regarding the characters' changing points of view, the participants appeared to take on a neutral perspective or a perspective-free situation model. This finding was reflected in no significant effect for the spatial framework pattern. According to the spatial framework (Franklin & Tversky, 1990), in adopting the perspective of a character, the reader will have more access to information about what is at the character's head and feet first, and then what is located at their front and back, followed by what is located to their left and right. Franklin et al. (1992) found no differences in reaction time for participants' judgments about objects located in the head/feet and front/back dimensions for either character described. [Note: There was an

effect for right/left judgments with these responses taking significantly longer than either of the other two dimensions. This result was not of interest because of the observation that left/right judgments cause difficulty in many different testing situations (see Franklin et al., 1992).]

Franklin et al. (1992) did find an effect for character prominence or foregrounding. That is, participants were faster to respond to questions about the character referred to as "you" than to the other character described. This result added to similar findings that readers foreground the one character in a text who is indicated as being important or who the text is about (Morrow, 1985b).

In Experiment 4 in their series of experiments, Franklin et al. (1992) separated the two characters being described into two separate locations. Participants' judgments of the location of objects relative to the characters located in separate places showed an effect for spatial framework. Specifically, participants responded more quickly to questions about what object was located in the head/feet dimension compared to the front/back dimension. The front/back dimension was also judged more quickly than the left/right dimension. In addition, no effect for foregrounding was observed. These results were taken as indication that when two characters were separated into two locations, two separate situation models were created.

Franklin et al. (1992) summarized their findings as support for the "one place-one perspective" principle. According to this notion, if one character was described, that character's point of view was adopted, whereas if two characters were described in the same location, a neutral perspective was taken within the situation model. However, if two

characters were described in two separate locations, two separate situation models were created, each from the perspective of the topic character. When these two locations were both visible from a central location in the text, the reader then adopted a neutral perspective rather than either one of the characters'. This finding lent further support to the "one place-one perspective" rule and to the notion that the way a text is written can influence how the reader processes and comprehends its contents.

Using a think aloud protocol, Özyürek and Trabasso (1997) examined the types of evaluations readers may make while processing narrative text, such as what perspective to adopt during reading. These authors took the experimental data from Suh (1988, as described in Özyürek & Trabasso, 1997), and reanalyzed its content. In the Suh study, participants read stories one sentence at a time and were asked to report aloud their understanding of the events being described in each sentence as part of the evolving story. These verbal reports were transcribed and reanalyzed for content and also perspective. Özyürek and Trabasso (1997) found that several different perspectives were taken by the readers during their translation of the story events. These included the perspective of the character being described, the narrator, or a third party presenter perspective. When adopting the perspective of the character, the participants included the character's name and a cognitive or emotion verb. Think aloud statements which included the character and an action or state verb were taken as from the narrator's perspective. Finally, personal comments or evaluations regarding the text without mention of the character were considered as from the presenter's perspective. The statements, "John thought that his family was outgrowing their small house," "John bought a bigger house," and "Having

children is a big responsibility" were examples given of the three perspectives, respectively. The use of all three types of statements supported the idea that readers can assume different perspectives during reading.

In a related line of research, Millis (1995) examined whether discourse perspective was encoded in a reader's mental representation of a literary text. He defined discourse perspective, in the same way as Sanders and Redeker (1993), as the point of view of the story or how the story events are expressed (e.g., the protagonist's point of view or an omniscient narrator). Millis viewed his study as a test of the text base and situation model views of discourse comprehension. He noted that the text base representation would not include information about perspective, whereas this information would be represented within the situation model. In fact, the situation model contains information about the perspective of the story, including spatial and temporal markers of the story (Bruder et al., 1986; Morrow et al., 1989). According to this view, the reader maintains information about who, when and where within the current representation of the story. When a change is made to one of these components, the model is updated. Evidence has been found to support the monitoring of the spatial location of the protagonist (Glenberg et al., 1987; Morrow et al., 1989; Morrow et al., 1987; O'Brien & Albrecht, 1992) and temporal information (Anderson et al., 1983; Millis & Cohen, 1994). However, very little research has investigated the influence or maintenance of perspective within the situation model of narratives.

Millis (1995) assumed that if perspective was incorporated into the reader's mental representation of the text, a shift in perspective would have required this information to be

updated. Such a process was assumed to take time. Therefore, sentences which introduced a change in perspective should have taken longer to read than sentence which did not introduce such a change, but only if this information was included in the mental representation. Further, if information about perspective was included in the mental representation, such shifts in perspective should have posed less of a demand on cognitive resources during a second reading. By presenting a narrative one line at a time and recording reading time in milliseconds for each line, Millis found that sentences which introduced a change in perspective took 700 ms longer on average to read than sentences which did not introduce such a change. However, this significant difference in reading time was not observed during the second reading of the text. This finding was taken as support that the perspective information was encoded in the representation during the first reading and therefore did not need to be recalculated during the second reading. It is not enough simply to show that perspective is incorporated into the situation model of a text; the effects of perspective on comprehension need to be considered.

Effects of Perspective on Comprehension

Previous research has investigated how perspective or narrative point of view affects how readers focus attention during discourse processing. Research has shown that taking the perspective of the main character during comprehension can influence the availability of general world knowledge (e.g., Anderson & Pichert, 1978; Baillet & Keenan, 1986; Black et al., 1979; Bloom, 1988; Bower & Morrow, 1990; O'Brien & Albrecht, 1992; de Vega, 1995). Morrow (in press) listed three ways in which adopting a point of view or perspective will impact comprehension: adopting a perspective will serve

to increase the level of accessibility of information relevant to that point of view and change the level of accessibility of less relevant information; changing point of view during reading requires a change in focus and these processes may slow comprehension (see also Black et al., 1979); adopting a perspective will affect reader responses to the text. For example, identifying closely with a character can result in certain emotional reactions by the reader.

Assuming that a narrative is about one main character and several secondary characters and that the reader will only adopt one perspective during the comprehension of each sentence, the aggregate result should be that the reader will adopt the perspective of that one main character throughout the narrative. Morrow et al. (1987) noted that under the restrictions of our limited-capacity, working-memory system, perspective may serve to guide the reader in determining what information (e.g., characters, attributes, actions, objects, locations) is most important and should be held in focus. Further, information held in focus is more accessible than other information in the reader's mental representation. Thus, information about the main character's attributes, actions, goals, thoughts, emotions, and location should be more accessible than similar information about secondary characters. The current location of the main character with respect to time and space has been referred to as the here-and-now of the situation (Morrow et al., 1987; see also the earlier discussion of the here-and-now model in Chapter I). Some research addressing these claims about the impact of perspective on comprehension will be reviewed.

Accessibility of Information as a Function of Perspective

Morrow et al. (1987) investigated the accessibility of information as a function of distance from the protagonist or the here-and-now of the situation. They predicted that objects near the protagonist would be more available in the situation model than objects with increasing distance from the protagonist. In their experiments, Morrow et al. (1987) had participants memorize maps of buildings. They then read narratives describing a main character moving through a building. Each passage contained four target motion sentences (e.g., Wilbur walked from the conference room into the laboratory) which were followed by a verification probe. The verification probe was two objects which the participants had to judge as from the same room in the building or from different rooms. Verification probes from the same room either came from the source room (e.g., the conference room), the goal room (e.g., the laboratory), or a room within the same building which had not been recently mentioned. Participants were fastest to judge items from within the goal room, or where the protagonist was currently located, than any other room tested (see also, Morrow et al., 1989). This was taken as evidence that the situation model is updated as the protagonist moves through the building, and information relevant to the current location of the protagonist is more accessible than more distant information. This result was not affected by the order of mention of the rooms.

Morrow et al. (1987) also examined whether or not readers hold both a path room and goal room active in memory when the protagonist is moving along the path. For example, in the sentence, "While Wilbur was walking through the conference room toward the library, he looked under the table," the conference room is the current location of the

protagonist, whereas the library is the protagonist's target location. They found that response times were longer after path sentences than after goal sentences (see also Morrow et al., 1989). The location of the protagonist in the path room is assumed to result in both the path and goal rooms being active in memory. In contrast, the location of the protagonist in the goal room marks a completed goal and readers only attend to information relevant to that room. This focus of attention results in an increased accessibility of objects from within that room. Morrow et al. (1989) also found that responses to objects from the unmentioned path room were faster than responses to objects from the source room or other rooms. The important point in this work is that the accessibility of information changes as the here-and-now point in the situation model is updated and information relevant to the story protagonist is more accessible in the situation model than other less relevant information (Morrow et al., 1987).

Morrow et al., (1989) demonstrated that the here-and-now point in the situation model is not limited to just the physical location of the protagonist in the narrative; it can also include information about the mental location of the protagonist (i.e., the character's thoughts). Using the same testing procedures, Morrow et al. (1989) presented passages containing thought sentences, such as, "He thought the library should be rearranged to make room for a display of current research." They found that response times to probes from the thought room were faster than to probes from the room in which the character was located (e.g., Wilbur was in the reception room when he was thinking about the library) or other rooms. Based on their results, Morrow et al. (1989) conclude that the accessibility of information depends on its relevance to the here-and-now of the

developing situation model, or the perspective of the main character.

Morrow et al. (1989) assert that the model is updated from the protagonist's perspective. However, they also note that some narratives require readers to monitor more than one perspectives at a time, and they refer to this as "dual focus." In many stories, readers are provided with more information than simply that known from the perspective of the main character. While the information relevant to the here-and-now of the main character may be in focus, related information known from the narrator or other characters' point of views would also contribute to the readers' mental and emotional reaction to the narrative (Morrow, in press). The influence of such information will be explored in the experiments being proposed.

Recall of Information as a Function of Perspective

In addition to perspective influencing the accessibility of information, it has also been found to affect the comprehension, memory, and production of information (Black et al., 1979). Black et al. (1979) conducted a series of experiments which tested the relationship between these factors. They established the point of view of short texts by indicating the physical state or location of the narrator using deictic motion verbs (e.g., come/go, bring/take) and by mentioning one character as the subject (i.e., character identification). They note that the narrator of a story is assumed to identify with the subject of a sentence. The motion verbs they presented were either consistent or inconsistent with the location of the subject character. The following is an example of one of their passages.

Introduction: Bill was sitting in the living room reading the paper

Consistent continuation: when John came into the living room.

Change continuation: when John went into the living room.

They found that these manipulations served to establish the location of the narrator with that main character. This was evidenced by faster reading times, higher ratings of comprehensibility, and higher recall for sentences written from a consistent point of view compared to those containing a change in point of view. In addition, sentences containing a shift in perspective were often misrecalled as having containing a consistent perspective. Stated differently, the point of view from which a narrative is written affects comprehension and memory of the text. Based on these findings, they argued that text coherence is fostered by a consistent point of view.

Several other researchers have demonstrated that perspective affects recall (Anderson & Pichert, 1978; Baillet & Keenan, 1986; Pichert & Anderson, 1977). Pichert and Anderson (1977) asserted that imposing a schema on a text being read is considered the same as taking a perspective during reading. The schema, or perspective, helps to determine what information is important and therefore what should be in the reader's focus of attention. Information designated as important and maintained in focus will be more likely to be recalled than less important story information. Pichert and Anderson (1977) had participants read a story about two boys who were skipping school one day. The story explained that the boys spent the day at one of their houses and details of the house were provided throughout the narrative. The following is an excerpt from the story:

The two boys ran until they came to the driveway. "see, I told you today was good for skipping school," said Mark. "Mom is never home on Thursday," he added. Tall hedges hid the house from the road so the pair

strolled across the finely landscaped yard. "I never knew your place was so big," said Pete. "Yeah, but it's nicer now than it used to be since Dad has the new stone siding put on and added the fireplace."

There were front and back doors and a side door which led to the garage which was empty except for three parked 10-speed bikes. They went in the side door, Mark explaining that it was always open in case his younger sisters got home earlier than their mother.

The story continued to describe the boys walking through different parts of the house.

Each of two stories contained an equal amount of items of interest to two different perspectives. For example, for the example passage above, participants were instructed to take on the perspective of either a homebuyer, a burglar, or no perspective instructions were provided (control condition). The finely landscaped yard and new stone siding should have been of interest to a homebuyer, whereas the unlocked door and three 10-speed bikes would have been of interest to a burglar. In their first experiment, Pichert and Anderson (1977) investigated whether the assigned perspective would affect how participants rated the importance of different story elements. Overall, the ratings of story idea importance varied as a function of perspective. Further, in a free recall test for memory of the story ideas, the number of idea units recalled varied as a function of importance ratings. That is, participants recalled more idea units that were rated as highly important than those that were rated as less important after both a 12 minute delay and a one week delay between reading and recall. Thus, the perspective adopted by the reader affected perceived importance of story ideas as well as the likelihood of recalling story ideas. From these data, Pichert and Anderson (1977) suggested that perspective may guide the structuring of a reader's situation model of a text.

In a follow-up study, Anderson and Pichert (1978) investigated the effects of a

change in perspective on recall. They had participants take the perspective of either a homebuyer or a burglar as they read the passage. Again, after reading the passage, each participant was asked to recall the story (the first recall test occurred 12 minutes after the text was read). Twenty minutes after the text was read, a second recall test was also performed at which time half of the participants were instructed to take on the perspective they had not been exposed to before reading the passage (e.g., those who read the passage from the perspective of a burglar were now asked to recall the story from the perspective of a prospective buyer). Based on data obtained during the first recall test, Anderson and Pichert (1978) found that participants recalled more information relevant to the perspective they were asked to adopt (see also, Pichert & Anderson, 1977). On the second recall test, participants who were instructed to change their perspective now recalled more information that was relevant to this new perspective than they had on the first recall test. In addition, on the second test participants recalled less information that had been relevant to the perspective taken during the original reading and first recall test, although this effect was not significant due to variability.

In a second experiment, participants were also interviewed regarding their reading and recall strategies. Readers reported selectively attending to information which was important from the perspective they were told to adopt during their initial reading. Again, Anderson and Pichert discussed their results in terms of schema theory. They argued that the operating perspective served as a schema which would guide the comprehension, memory and recall of the story. This idea was supported by the results on the first recall test where participants recalled more information relevant to their assigned perspective.

However, the data also showed that information which was considered irrelevant to the original perspective was in fact encoded. This "irrelevant" information became more available when participants were provided with a new perspective from which to recall the story.

Baillet and Keenan (1986) replicated some of Anderson and Pichert's findings and refined their conclusions. Baillet and Keenan (1986) chose to compare immediate recall with recall at twenty minutes versus after a one week delay. Rather than explicitly asking the participants to take on a particular perspective, each story was titled in such a way that a perspective was implied (e.g., "Enterprising Burglars Check Out Future Jobs"), and participants were also given goals for reading the story (e.g., Which house would be the easiest to rob?). Similar to Anderson and Pichert's (1978) finding, after a 20 minute delay, they also found a change in recall following the perspective shift. However, Baillet and Keenan (1986) did not observe an increase in the newly relevant information, rather they saw a decrease in the amount of information recalled which was relevant to the original perspective (this was noted as an increase in the number of omissions). When a shift in perspective was introduced at the second recall test, recall after one week still showed an advantage for information consistent with the original perspective. So, the perspective taken at the time of retrieval was found to have an effect after a short delay but not after a longer delay between encoding and recall. However, the perspective taken at the time of encoding was shown to have an impact on recall at both a short and long delay interval. For the purpose of this discussion, this result is significant in that it demonstrates that perspective can influence the processing and therefore the retention of information.

Some Limits to the Claim that Readers Adopt the Protagonist's Perspective

Morrow (1990) and his colleagues acknowledged that the nature of their task, having participants study maps, might bias readers to focus on spatial information while reading the text. However, he also demonstrated that readers will monitor the spatial location of the main character, including this information in their situation model of the text, even without the use of a pre-memorized map exercise. More recently support has been found for the proposition that readers monitor the location of objects with respect to the main character only when the experimental materials or procedures allow or bias the reader to attend to such information (Hakala, 1995; de Vega, 1995; Morrow, 1994; Zwaan & van Oostendorp, 1993; 1994; O'Brien & Albrecht, 1992). Otherwise the extent to which readers incorporate this specific spatial information in their mental representation is limited. Thus, it appears as if readers attend to the location of the main character but only have limited or task specific knowledge of the objects or surroundings in that location (Morrow, 1990; de Vega, 1995).

O'Brien and Albrecht (1992) conducted an experiment in which participants read narratives beginning with a description of the physical location of the main character (e.g., "Kim stood inside/outside the health club"). A second location sentence was also presented either immediately after the first location sentence (close condition) or after three filler sentences (distant condition). This second location sentence described the main character moving in a direction which was either consistent or inconsistent with that original location (e.g., "She decided to go outside the health club"). O'Brien and Albrecht (1992) found that participants took longer to read a target sentence describing an

inconsistent movement with respect to the location of the main character than one describing a movement consistent with the character's location in both the close and distant conditions. This result further supports the notion that readers integrate information about the spatial location of the protagonist in their situation model of the narrative.

In a second experiment however, O'Brien and Albrecht (1992) found that while readers monitor the location of the protagonist they may not monitor the location of objects or other characters with respect to the main character unless encouraged to do so. In this experiment, a second character was introduced and this second character moved in a direction which was consistent or inconsistent with a constant location of the protagonist. For example, in a passage about Kim at a health club, Kim was described as either standing inside or outside the health club. Later in the passage, she saw "the instructor come in the door." This movement by the second character would have been a consistent movement from Kim's perspective if she was inside the club and inconsistent if Kim was outside the club. If readers adopted the main character's perspective, then movement which was inconsistent with that perspective should caused comprehension difficulty. No significant difference was found in the reading times for the critical lines in the consistent versus inconsistent conditions. Thus, it appeared that readers did not adopt the perspective of the main character. However, when the participants were instructed to take the perspective of the main character, as in the third experiment conducted by O'Brien and Albrecht (1992), participants did notice the inconsistent movement by the second character as shown by significantly longer reading times in the inconsistent

condition. Overall, the results of these experiments were taken as support that information relevant to the protagonist is selected to be placed in the foregrounding of the situation model. However, the reader may not adopt the perspective of the main character unless the nature of the text or task promote such a comprehension strategy.

Clearly, spatial information is used in the development of the situation model of the text. However, the extent to which such information is used and its role in the development of the model continues to be investigated.

The current research project investigates whether perspective with respect to a character's knowledge, as well as their physical location, influences the development of a situation model. With respect to characters' knowledge, whether or not readers distinguish between information that is only known by one story character in the development of their situation model is of interest. The recent research on common ground addresses some determinants of accessibility of shared knowledge among characters.

CHAPTER V

COMMON GROUND IN NARRATIVE COMPREHENSION

Some recent work has been conducted on the topic of common ground or "who-knows-what-about-whom" (e.g., Gerrig, 1993; Greene, Gerrig, McKoon, & Ratcliff, 1994; Lea, Mason, Albrecht, Birch, & Myers, 1998). The term common ground refers to multiple characters sharing knowledge about a topic. In the case of reading a narrative, Greene et al. (1994) note that readers of a text gain this shared knowledge by witnessing what occurs between characters in the discourse (i.e., they function as side-participants) (see also Gerrig, 1993). Maintaining this shared knowledge in the mental representation of the text can facilitate understanding of interactions between the characters who share such knowledge. For example, this shared knowledge among characters or between a speaker and addressee allows for a known entity to be referred to implicitly (Gerrig, 1993; Greene et al., 1994; Lea et al., 1998).

Greene et al. (1994) examined the affects of common ground on the use and resolution of unheralded pronouns. Pronouns are considered unheralded when there is no appropriate referent locally available within the text (Gerrig, 1986; Greene et al., 1994). The stories used by Greene et al. (1994) all involved three characters, two of whom shared knowledge about the third character. At the beginning of the story, two of the characters were together and their shared knowledge was explained to the reader. These two characters then separated and the narrative followed either the character who then

interacted with the third character (Concept Present version) or the character who was then alone (Concept Absent version). The following is an example of their narratives:

Introduction:

Jane was dreading her dinner with her cousin, Marilyn.
 She complained loudly to her roommate Gloria.
 "Every time I go to dinner at my cousin's house I get sick."
 Gloria asked, "Why did you agree to go?"
 Jane said, "Because I'm too wimpy to say no."

Concept Present version:

Jane went off to dinner.
 When she arrived, Marilyn was just finishing the cooking.
 "You're in luck," she said, "we're having fried squid."
 Jane knew she was in for a wonderful evening.
 The two of them sat down to dinner.
 After dinner, they talked for a while and then Jane left.

Concept Absent version:

Jane went off to have dinner.
 Gloria decided to cook something nice for herself for dinner.
 "As long as I'm home alone," she thought, "I'll eat well."
 Gloria searched her refrigerator for ingredients.
 She found enough eggs to make a quiche.
 After dinner, she put the dishes in the dishwasher.

Conclusion:

Gloria was still up when Jane arrived home about midnight.
 Gloria asked Jane, "Did she poison you again?"
 Jane chuckled and said, "We'll see in the morning."

Before the conclusion of this passage, one would have predicted that the concept cousin was more accessible following the Concept Present version compared to the Concept Absent version. However, if the reunion of the two characters in the Conclusion served to foreground their shared knowledge, then the concept cousin should have been equally available in both conditions. If this was the case, then the unheralded pronoun, she, would have been easily resolved in both conditions. Greene et al. (1994) tested this prediction using a concept verification task. In the above example, the passage would have been

interrupted either just before the reunion sentence (e.g., Gloria was still up when Jane arrived home about midnight) or immediately after the sentence containing the unheralded pronoun (e.g., she). Upon interruption of each passage, participants were asked to verify whether the target concept (e.g., cousin) had been mentioned in the passage. Before the reunion sentence, response times were faster in the Concept Present condition (896 msec) than in the Concept Absent condition (995 msec). Of particular interest was the finding that participants showed a much larger change in response time when comparing the two test positions in the Concept Absent condition than in the Concept Present condition. That is, response times became much faster after the pronoun sentence (892 msec) compared to before the reunion sentence (995 msec) in the Concept Absent condition. Greene et al. (1994) interpreted this finding as an indication that when the pronoun was read, the target concept was returned to the reader's focus of attention. The advantage that the Concept Present condition gave the readers in accessing the target concept before the reunion sentence was no longer present following the sentence containing the pronominal reference to the target concept.

In a follow-up experiment (Experiment 3), Greene et al. (1994) tested verification time both before the reunion sentence and immediately after the reunion sentence. They found that the reunion sentence alone served to increase the accessibility of the target concept in the Concept Absent condition. These experiments demonstrate that the accessibility of shared knowledge of two characters changes as the situation described by the text changes. Greene et al. (1994) argued that when these characters separate and then reunite, their reunion results in the reactivation of their common ground or shared

knowledge about another character, that is, their shared knowledge was more accessible after the reunion than it had been just prior to the reunion. From this, it can be concluded that such shared information affected the structure of the reader's mental representation of the text (Greene et al., 1994).

Some of these results have been replicated by Lea et al. (1998). In one experiment, they confirmed the result found by Greene et al. (1994) that an antecedent was more accessible following the reunion of two characters who shared common knowledge of that antecedent compared to before the reunion when the characters were separated and the antecedent was not in focus. However, Lea et al. (1998) investigated whether this effect was due to common ground or simply to the rementioning of the character associated with the antecedent. These later experiments will be discussed in detail.

Lea et al. (1998) created passages in which two protagonists either shared the same knowledge (i.e., common ground) or did not share the same knowledge. For example, in one passage two characters were described at a recital. In the Common Ground condition one character, Alfred, decided to get the solo tenor's autograph and his friend Eva agreed to wait for him. In the No Common Ground condition Alfred told Eva he would meet her in the lobby and then only the reader is privy to his thoughts about getting the tenor's autograph. In both conditions a Reunion Sentence stated that, "Alfred returned to Eva looking very unhappy." The Reunion Sentence was then followed by a Pronoun Sentence. One of the following two Pronoun Sentences was presented: Alfred said, "He was surrounded by a huge crowd"; or Eva asked, "Was he surrounded by a huge crowd?" In the No Common Ground condition, neither Pronoun Sentence was appropriate

because Eva did not share Alfred's knowledge about who "He" was in the story. Lea et al. (1998) predicted that if readers kept track of what each character knew in the story, then both Pronoun sentences would have been read more slowly in the No Common Ground condition than in the Common Ground condition. This prediction was confirmed. Whereas the presence or absence of common ground was not a determinant of accessibility of the outsider, the lack of common ground did cause difficulty processing a sentence referring to the target concept. This result supported that readers were able to distinguish what information was known and by which characters: readers were aware of common ground. Lea et al. (1998) suggested two ways in which this information could be maintained by the reader: the readers might keep track of protagonists' knowledge, or the rementioning of a character results in the automatic reactivation of information associated with that character (this is also true of context, e.g., Albrecht & Myers, 1995; McKoon et al., 1996; Myers et al., 1994). If the later, more likely case is correct, Lea et al. (1998) noted that there would be no need to discuss the previous findings in term of common ground, rather context reinstatement through a resonance process would provide a sufficient explanation. Further, the fact that readers were aware of the disparity between the protagonists' knowledge yet the reunion effect was observed indicates that the manipulation of common ground did not affect the resonance process.

While the previous two studies cited used experimenter generated narratives, Graesser, Bowers, Bayen, and Hu (in press) studied whether readers can keep track of which characters are aware of information in a literary text. These authors emphasize the importance of distinguishing characters' knowledge for many stories to be effective.

Intuitively, readers are able to keep track of the knowledge of different agents in a story. Consider the following possible contents of a mystery. There is a killer hiding behind a door in an unsuspecting widow's house. After weeks on the case and extensive investigation of the five murders already committed, the detective has just pieced the case together, and he knows he has to get to the widow's house immediately because she is the next to die. In order for the reader to feel fear just as the widow climbs the stairs to where the killer waits, they must be able to distinguish that the widow is unaware of the killer's presence, while the detective is aware of her impending doom. If the reader does not distinguish between the knowledge of the agents, the widow's actions would seem unbelievable, and the story would not achieve the intended fear and suspense in the reader.

Previous research has shown that readers sometimes project their own knowledge onto characters in the text (Keysar, 1994). This is referred to as "reader knowledge projection" and reduces the reader's ability to maintain correct information about who knows what in the discourse. While this may occur at times, from the example stated above, it seems reasonable to assume that readers are also able to keep track of character knowledge with impressive accuracy. Graessar et al. (in press) investigated readers' ability to track knowledge of character agents when the information was presented in a speech act either by the character, spoken to the character, overheard by the character, or spoken in the absence of the character (note: in some cases the absent character was a close friend of the speaker and would be assumed to have knowledge of the information presented at times due the intimacy of the relationship).

If readers are able to distinguish characters' knowledge then the degree to which the character has knowledge of the information expressed will vary in the following ways (Graesser et al., in press). The character who states the information should have knowledge of it, whereas the character who was not present to hear the speech act should not. Characters who hear the information should also have knowledge of it, although this may be to a lesser extent than the speaker. Finally, characters who are friends with the speaker yet do not overhear the speech act may have knowledge of the information through other means. In these ways, the reader will distinguish to what extent different characters have knowledge of specific story information. Graesser et al. (in press) refer to this as a "multiagent reader." Alternatively, if the "reader knowledge projection principle" operates, then all characters should have equal knowledge of the speech act based on the reader's knowledge.

In their experiment, Graesser et al. (in press) had participants read a literary story and then rate the extent to which characters had knowledge about certain speech acts. The source of the speech act was varied as were the characters who served as addressee, onhearer, friend, and nonfriend. The results supported the notion that readers were "multiagent readers." The mean knowledge ratings were highest for speakers of information (5.90 on a six point scale), then addressees (5.42), onhearers (3.36), and then friends (3.22) and nonfriends (1.65) who did not overhear the speech act. There was no significant difference between onhearers and friends; all other planned comparisons were significant. If the reader had projected their knowledge onto that of the characters, none of these comparisons should have reached a level of significance. Thus, this experiment

supported the notion that readers could keep track of who knew what in a story and the pattern of results suggested that readers were sensitive to the systematic way in which information spreads from one character to another in a story.

CHAPTER VI

EXPERIMENTS

Research on the role of secondary characters in the development of the situation model of a text is quite limited. The research on thematic subjects, perspective, and common ground serve to provide a framework in which to consider the questions being addressed in this thesis. Three experiments were conducted to examine to what extent the integration of information in the situation model is affected by character prominence and/or the perspective of the discourse. Previous research has demonstrated that readers tend to focus their attention on a thematic subject, or main character, and build their representation of the text around information pertaining to that character. However, the question of what happens to information attached to a secondary character has not been adequately addressed. The experiments presented here address what happens to information which pertains to the main character but which is known or believed only from the perspective of a secondary character. In all three experiments, reading time was taken as a measure of the integration of information which is currently being processed with that which preceded it in the discourse.

Experiment 1 was designed to test whether or not information associated with a secondary character is used to update the situation model of the protagonist. Specifically, the integration of a protagonist's target action with the beliefs of a secondary character regarding the protagonist which are either consistent or inconsistent with that action is

examined. Previous studies have shown that readers experience difficulty integrating an action with inconsistent information at both a local and a global level (e.g., Albrecht & O'Brien, 1993; Cook et al., in press; Hakala & O'Brien, 1995; Myers et al., 1994; O'Brien et al., in press). Experiment 1 compared the integration of an action by the protagonist with earlier stated consistent or inconsistent elaborations of the protagonist (see Albrecht & O'Brien, 1993) versus earlier stated elaborations of the secondary character's consistent or inconsistent beliefs about the protagonist. In this way, Experiment 1 examined whether readers reactivate the beliefs of the secondary character when updating their representation of the protagonist in the same manner that they reactivate information about the protagonist when updating their mental representation. If the information presented from the secondary character's perspective is not reactivated in this same way, then the inconsistency effect which has been demonstrated in previous research should not be observed for the new, second character conditions.

Experiment 2 tested whether the accessibility of the second character's beliefs is affected by their location in the discourse. This experiment was designed to test the effect of the second character's consistent or inconsistent beliefs about the protagonist on processing of the target action (i.e., reading time) when the secondary character was present during the target action scene compared with when the secondary character was removed from that scene. Previous research has shown that the accessibility of information attached to secondary character changes with shifts in episodes, whereas this is not true for information attached to main characters (Anderson et al., 1983). Because the elaborations presented in Experiment 2 are connected to the secondary character, yet

concern supposed characteristics of the protagonist, it is not clear whether the accessibility of this information will decrease when the secondary character leaves the focus of the narrative or whether the accessibility will remain unchanged because of the continued presence of the protagonist in the narrative focus.

Experiment 3 was designed to test whether a strengthening of character prominence would impact the integration of an action by the protagonist with an earlier description of that character presented from the perspective of the secondary character. Experiment 3 is an extension of Experiment 2 after adding a reemphasis on character prominence. This experiment was a response to the interesting results that came out of Experiments 1 and 2.

Researchers have acknowledged a need to investigate how information which is known from one narrative perspective and not another is processed during reading (e.g., Morrow, in press). Changing the point of view in a narrative should subsequently change the accessibility of information in the situation model. Information that is presented following a shift in perspective can be mapped onto the preceding text in that it is locally coherent with that text. However, the perspective shift necessarily requires an addition to the situation model and a change in the information which is maintained in focus.

The question of what happens to information which is connected to the point of view of a secondary character, but which is about the protagonist, has not been addressed in the literature. Intuitively, we know that readers distinguish the beliefs of a secondary character from what they know to be true about the protagonist. Thus, it does not make

sense for this information to be integrated into the mental representation in the same manner as information known by the protagonist. However, because the protagonist is the topic of the information, clearly it is relevant to one's representation of the character (or the way other characters view the protagonist). How other characters view the protagonist should be relevant during interactions with those secondary characters. The current thesis investigates whether character prominence and perspective with respect to a character's knowledge, rather than with respect to their physical location, influence the development of a situation model.

Experiment 1

The goals of Experiment 1 were to replicate previous studies and to determine if readers attend to information known from the perspective of the secondary character. Specifically, the information presented was the beliefs of a secondary character about some quality of the protagonist and whether or not this information was integrated with incoming information (i.e., a later action by the protagonist) was tested. Slower reading times following an action which was inconsistent with previously presented information, compared to when it followed a consistent elaboration, were taken to reflect readers' difficulty integrating the current action with previously presented information about the protagonist.

Participants read passages containing several sections: an introduction, an elaboration section describing the protagonist, a filler section providing backgrounding of the elaboration, two target sentences describing an action performed by the protagonist, and a conclusion. A sample passage is presented in Table 1.

Table 1. Example Passage from Experiment 1.

Introduction

Jessica had always been fascinated by different cultures. Her family had decided to take a trip to France last summer. Jessica and her younger brother Kent were glad their parents had chosen France as a vacation spot.

Protagonist Consistent Elaboration

Jessica was able to use the language she had been studying in school for seven years. She had always gotten good grades in her French classes and had also received the outstanding student of French award in high school. This award included a scholarship for each year that Jessica studied French in college.

Protagonist Inconsistent Elaboration

It was the first time Jessica had traveled overseas. She had no idea what France would be like. None of the schools in her town offered foreign culture or language classes. Jessica's only exposure to French culture was a television documentary. She had been worried about how she would communicate with people there.

Second Character Consistent Beliefs Elaboration

Kent was excited to hear Jessica speak French on their trip. He had wanted to hear her use some of the expressions she had learned in her classes at school. Kent thought that Jessica sounded sophisticated when she spoke with her French accent. He hoped people would be able to understand her.

Second Character Inconsistent Beliefs Elaboration

However, Kent was very worried about Jessica being an embarrassment on the trip. He was afraid that Jessica would make a fool out of herself trying to speak French. Kent thought that she sounded ridiculous when she said things using her fake French accent. He didn't think anyone could possibly understand her.

Filler

On their trip, her family spent four days in Paris and Jessica didn't think that was enough time to see everything. After their stay in the city, Jessica and her family traveled around the rural countryside. The family ended their trip with several days on the Riviera. On the last day of the trip, the entire family decided to get lunch at a quaint cafe near the beach. It was an expensive restaurant and Jessica was especially excited about such a nice treat before she returned home. When the waiter came to take their orders, Jessica ordered first because her brother Kent was still deciding.

Target Sentences

Jessica ordered in flawless French.
The waiter understood her perfectly.

Conclusion

Jessica was excited that she could read and understand the menu. She hoped she would enjoy the meal she had ordered.

Comprehension Question

Did Jessica's family visit Paris?

Of interest in this experiment are the four elaboration conditions presented. In all four elaboration conditions, the target sentences of the passage described the same action by the main character. Consider the example passage in Table 1. In the example, the target action was the protagonist, Jessica, ordering her lunch in French. In the protagonist consistent condition, the elaboration contained information about the protagonist that was appropriate with respect to that target action. For example, Jessica was described as being an outstanding student in French. As a comparison, the protagonist inconsistent elaboration contained information about the protagonist that was inappropriate with respect to that target action. In this case, Jessica was described as having never studied a foreign language. These conditions were replications of prior research (e.g., Albrecht & O'Brien, 1993; Hakala & O'Brien, 1995; Myers et al., 1994; O'Brien et al., in press). Based on these prior studies, readers should have experienced difficulty integrating the target action with prior context which was inconsistent with that action; no integration difficulty should have been observed following the consistent elaboration.

The new elaboration sections described beliefs of the secondary character regarding some quality of the protagonist. The elaboration was considered true from the perspective of the secondary character; the information was true from their perspective and was never discredited within the passage. These elaborations either described beliefs of the secondary character which were consistent with the protagonist's later action or inconsistent with that action. The passage in Table 1 includes a second character's consistent beliefs elaboration which describes Jessica's brother Kent as excited to hear Jessica speak French because he thinks she sounds sophisticated. However, the second

character's inconsistent beliefs elaboration describes Kent as worried that Jessica will embarrass him on their trip, because he thinks she sounds ridiculous when she uses her fake French accent. If the beliefs of the secondary character are treated in a similar manner to the statements regarding the protagonist provided in the other elaborations, a similar pattern in the results should have been observed. Specifically, readers were expected to take longer to read the target sentences after having learned that another character had beliefs about the protagonist which were inconsistent with that action compared to when those beliefs were consistent. Referring back to the example, it should have been difficult to integrate Jessica's action with the information that Kent thinks she sounds ridiculous when she uses her fake French accent, and no difficulty should have occurred when Kent was described as excited to hear Jessica speak French on their trip.

It is possible, however, that because the beliefs of the secondary character are not explicitly noted as true about the protagonist, the extent of the integration difficulty may be reduced compared to when the elaboration contains explicitly true information about the protagonist. An alternative possibility is that the integration difficulty will be delayed (i.e., observed on the second target sentence) rather than reduced compared to the integration difficulty observed in the protagonist elaboration conditions. These outcomes may also be observed together.

Method

Participants. Sixty undergraduate students at the University of New Hampshire received course credit or extra credit for their participation in this experiment. Participants were randomly assigned to one of the four sets of narrative materials, and each participant

was tested individually. An equal number of participants were exposed to each material set.

Materials and Design. Twenty-four experimental passages were created for this experiment. Each passage contained the following sections: an introduction, an elaboration section, a filler section providing backgrounding of the elaboration, two target sentences describing some action(s) made by the protagonist, and a conclusion. The experimental passages are included in Appendix A.

For each passage, the introduction was three sentences in length with an average of 45 words (the range was from 35 to 57 words). The introduction of the passage served to establish a distinction between the protagonist and the secondary character. This distinction between characters was accomplished by controlling both the order of mentioning of characters as well as the number and type of mentionings. Specifically, the protagonist was always mentioned first in the introduction. The protagonist was always referred to by their proper name twice and by a pronoun either two or three times. In contrast, the secondary character was referred to by proper name only once in 22 passages, by a pronoun once in four of the passages, and by a description of their role (e.g., husband, mother) either one or two times in all 24 passages.

The characters in each passage were always of opposite sex in order to facilitate the distinction between them. Half of the passages had a female protagonist and a male secondary character, while the other half contained a male protagonist and a female secondary character.

The introduction of each passage was followed by an elaboration section. The

elaboration section provided information about the protagonist or the second character's beliefs about the protagonist, and the appropriateness of this information with a later target action by the protagonist was manipulated. Thus, four elaboration sections were presented: protagonist consistent, protagonist inconsistent, second character's consistent beliefs, and second character's inconsistent beliefs elaborations. Each elaboration section was from three to six sentences in length with an average of 55 words for the protagonist elaborations and 56 words for the second character's beliefs elaborations.

The elaboration sections also served to continue the distinction in character prominence. In addition to the topic of the elaborations being some characteristic of the protagonist, the protagonist was also mentioned more often compared to the second character in each elaboration section. In the protagonist consistent elaboration, the protagonist was mentioned by proper name an average of 1.83 times and by pronoun an average of 6.04 times, whereas the second character was mentioned by proper name once in only one passage and was never referred to by pronoun. In the protagonist inconsistent elaboration, the protagonist was referred to by proper name and pronoun an average of 1.95 and 6.29 times respectively, whereas the second character was mentioned by proper name only once in two passage and again was never referred to by a pronoun. In the second character's consistent beliefs elaboration, the protagonist was mentioned an average of 2.29 times and 3.37 times by proper name and pronoun respectively, and the second character was mentioned an average of 1.70 times by proper name and 2.83 times by pronoun. Finally, in the second character's inconsistent beliefs elaboration, the protagonist was mentioned by proper name 2.29 times and by pronoun 3.79 times, on

average, whereas the second character was mentioned an average of 1.62 times by proper name and 3.20 times by pronoun.

In each passage, the elaboration section was followed by a filler section which ranged in length from five to nine sentences with an average of 98 words. The filler material served to background the elaboration so that it was no longer in short term memory when the target sentences were processed. Again, the filler section served to continue the prominence distinction between characters. This section included, on average, 4.16 and 4.37 references to the protagonist by proper name and pronoun, and 2.20 and 0.95 references to the second character by proper name and pronoun, respectively. Each filler section ended with a sentence containing a proper name reference to the protagonist and second character, except in one passage where the second character was referred to by the role she played (i.e., mother).

Two target sentences were presented following the filler section. The first target sentence described an action by the protagonist, and the second sentence was a continuation of that action or event. The second sentence was included in order to observe any delay in processing difficulty which might have occurred for the first target sentence. Each target sentence was 38 characters long on average. They ranged in length from 35 to 40 characters. Within nine of the passages, the two target sentences were of the exact same length. For 12 passages, the target sentences differed in length by one character, and in the remaining three passages the target sentences differed in length by two characters.

The target sentences were followed by a two to three sentence conclusion to the story. These conclusions were 28 words long on average, with a range from 21 to 38

words. A comprehension question at the end of each passage was used to assess whether or not participants had attended to and understood the content of the story. One half of the comprehension questions required a correct answer of "no," whereas the other half required a correct answer of "yes."

Elaboration type (consistent or inconsistent and whether or not the information is true of the protagonist or is the belief of the second character) was a within subject variable. Four material sets were created, each containing six passages of each type of elaboration. Across material sets, each passage occurred once in each condition.

Procedure. Participants were randomly assigned to one of the four sets of stimulus materials, and each participant was tested individually in a session that lasted approximately 45 minutes. Passages were presented one line at a time on a monochromatic monitor using a microcomputer (either a Zenith Z100, a Zenith 286, or a DELL 325SX). The rate of line presentation was controlled by the participant. Each participant was instructed to read the passages for comprehension.

Each session began with the word "Ready" at the center of the display. Participants sat in front of a computer screen and controlled the rate of presentation and responded to the comprehension questions using three finger-keys . The participants were instructed to press a line-advance key when they were ready to initiate the experiment. The first press of the line-advance key resulted in the word "Ready" being replaced by the first line of a passage. Participants were able to continue reading a passage by pressing the line-advance key in order to have the current line replaced by the next line of the text. In this way, participants advanced through the passage line-by-line. At the end of the passage, the

word "Questions" appeared automatically on the display as an indicator that there was an upcoming question. This first prompt remained on the screen for 2000 ms and was followed automatically by a second cue ("??????") which remained on the screen for 750 msec. The second cue was replaced by a comprehension question regarding the passage just read. Participants responded to the "yes/no" question by using two response keys labeled accordingly. The participants were given feedback regarding their responses; the word error was presented on the screen for 750 msec when a mistake was made. If a response was not made within ten seconds, the error message appeared automatically.

Three practice passages were presented at the beginning of each session in order to allow the participant to become familiar with the equipment. The end of each experimental session was indicated by a message on the display. Participants were given information about the purpose of the experiment at the conclusion of each session.

Results

Time to read each target sentence was recorded. Reading times that were more than three standard deviations from the mean or greater than 4,000 milliseconds were removed which eliminated approximately 7.5% of the data. For all the results reported in this thesis, F_1 and t_1 refer to tests against an error term based on participant variability, whereas F_2 and t_2 refer to tests against an error term based on item variability. All analyses were considered significant at a 0.05 alpha level. All planned comparisons used a Bonferroni procedure with a familywise error rate of 0.05.

The mean reading times for both target sentences in Experiment 1 are presented in Table 2. Separate analyses of variance were performed for each target sentence because

Table 2. Mean Reading Times (in Milliseconds) for Two Target Sentences as a Function of the Consistency of the Elaboration and Point of View in Experiment 1.

Elaboration		
	Consistent	Inconsistent
	Sentence 1	
Protagonist Elaboration	1,685	1,886
Second Character's Belief	1,673	1,724
	Sentence 2	
Protagonist Elaboration	1,590	1,697
Second Character's Belief	1,617	1,698

the patterns of results varied between sentences.

Participants read the first target sentences more slowly following the protagonist elaborations than when the elaboration contained the beliefs of the second character: $F_1(1, 56) = 10.374$, $MSE = 43,669.043$; $F_2(1, 20) = 11.264$, $MSE = 13,396.312$. Planned comparisons revealed that reading times on the first target sentence were significantly longer following the protagonist elaboration than following the second character's beliefs elaboration in the inconsistent condition (1,886 versus 1,724 msec): $t_1(56) = 12.526$, $t_2(20) = 14.990$. No significant effect for character (i.e., source of elaboration) was observed on the second target sentence: $F_1(1, 56) = 0.326$, $MSE = 37,850.609$; $F_2(1, 20) = 0.039$, $MSE = 11,664.263$.

Participants read the first target sentence more slowly in the inconsistent conditions than in the consistent conditions: $F_1(1, 56) = 27.568$, $MSE = 34,612.438$; $F_2(1, 20) = 15.839$, $MSE = 30,949.788$. Planned comparisons revealed that reading times were significantly longer following the protagonist inconsistent elaboration than following the protagonist consistent elaboration (1,886 versus 1,685 msec): $t_1(56) = 20.445$, $t_2(20) = 21.974$. There was a similar trend for the second character elaborations, although this comparison did not reach significance: $t_1(56) = 3.174$, $p > 0.08$; $t_2(20) = 2.258$, $p > 0.14$.

There was also a main effect for consistency on the second target sentence. Similar to the first target sentence, participants read the second target sentences more slowly in the inconsistent conditions than in the consistent conditions: $F_1(1, 56) = 13.745$, $MSE = 38,149.308$; $F_2(1, 20) = 21.114$, $MSE = 8,927.862$. Planned comparisons confirmed that this was true in the protagonist conditions (1,697 versus 1,590 msec): $t_1(56) = 10.301$, t_2

(20) = 11.859, as well as the second character's beliefs conditions (1,698 versus 1,617 msec): $t_1(56) = 7.108$, $t_2(20) = 10.264$.

Finally, there was also a significant interaction between character and consistency in the reading time results for the first target sentence: $F_1(1, 56) = 6.897$, $MSE = 49,314.812$; $F_2(1, 20) = 11.604$, $MSE = 15,089.638$. This result reflected that the slowdown in reading time when comparing the consistent and inconsistent elaborations was greater when those elaborations described some characteristic of the protagonist rather than the beliefs of the second character regarding characteristics of the protagonist. No significant interaction between character and consistency was observed on the second target sentence reading times: $F_1(1, 56) = 0.454$, $MSE = 22,216.142$; $F_2(1, 20) = 1.118$, $MSE = 8,512.563$.

When considering the results on the comprehension questions, there were no significant differences in error rates for the four different elaboration conditions; $p > 0.05$ for all contrasts. The error rates for the protagonist consistent, protagonist inconsistent, second character consistent, and second character inconsistent elaborations were 0.042, 0.036, 0.043, and 0.042 respectively.

Discussion

Overall, target sentences were read more slowly when they were preceded by an elaboration containing information which was inconsistent with the action than when that information was consistent with the action (a main effect for elaboration appropriateness). However, this experiment revealed that the onset for the effect of elaboration consistency varied depending on the source of the elaboration. When considering the protagonist

consistent and inconsistent elaborations, the results obtained in this experiment are consistent with previous research (e.g., Albrecht & O'Brien, 1993; Cook et al., in press; Hakala & O'Brien, 1995; Myers et al., 1994; O'Brien et al., in press); participants experienced difficulty integrating information which was inconsistent with that which preceded it, and this difficulty was observed on both the first and second target sentence.

Of particular interest here are the results for the second character's beliefs elaborations. Readers experienced difficulty integrating an action by the protagonist with earlier stated beliefs that the second character had about the protagonist which were inconsistent with that action. However, this integration difficulty did not occur as quickly as when the information was stated as true about the protagonist; significantly slower reading times following the inconsistent beliefs elaboration than following the consistent beliefs elaborations were only observed on the second target sentence (although there was a trend in the expected direction on the first target sentence).

This finding indicates that the second character's beliefs regarding the protagonist (i.e., a description of the protagonist from the second character's perspective) were incorporated into the reader's situation model of the protagonist. This information was reactivated and integrated with incoming information, although the rate at which these processes occurred differed from when the description of the protagonist was provided from the narrator's perspective. This observation will be discussed in more detail following Experiment 3.

Again, the significant interaction which was observed on the first target sentence reflected the fact that the source of the information (protagonist versus second character)

changes the size of the inconsistency effect. As expected, the interaction was due to a reduction in the size of the inconsistency effect when the elaborations contain information about the beliefs of the second character regarding some quality of the protagonist than when the information was stated as true about the protagonist. Whereas there was no significant difference in reading times due to the source of the elaboration in the consistent conditions, reading times were slower in the inconsistent protagonist elaboration condition (1,886) than in the second character beliefs inconsistent condition (1,724 msec).

No significant interaction between source and consistency was observed on the second target sentence, as the inconsistency effect in the second character condition reached significance. The delay of onset of the inconsistency effect for the second character's beliefs elaborations compared to the protagonist elaborations indicates that the second character's beliefs are not used to update the reader's current representation of the protagonist in the same way that the explicit information is used; the second character's beliefs about the protagonist are reactivated and integrated with new information, however this occurs at a slower rate than the integration of incoming information with information stated as true about the protagonist from the narrator's perspective.

Experiment 2

This experiment was designed to test whether the accessibility of the second character's beliefs was affected by their presence in the scene. As in Experiment 1, an elaboration section described the beliefs that a secondary character had regarding some quality of the story protagonist. Again, the second character's beliefs were either consistent or inconsistent with a later action performed by the protagonist. As a new

manipulation, the presence of the second character in the scene where that action was performed was varied. For example, the passage in Table 3 describes the second character Kent either at lunch with Jessica or off swimming while Jessica goes to lunch. The target action, Jessica ordering in flawless French, occurs while Jessica is having lunch at an expensive restaurant. As a result of these changes, each passage included an introduction, elaboration of the second character's beliefs, a filler section indicating the location of the second character with respect to the protagonist, two target sentences, and a conclusion followed by a comprehension question.

This experiment was an extension of Experiment 1 in that it was intended to provide information about how a second character's beliefs are integrated into the mental representation of the main character. Experiment 1 demonstrated that information about what a secondary character believes to be true about the protagonist was reactivated by and integrated with incoming information. In fact, when the protagonist behaved in a way which was inconsistent with the beliefs of the secondary character, the readers experienced comprehension difficulty. These results clearly demonstrate that the beliefs of the secondary character were used to update the model of the story protagonist. However, it is possible that this source of information, the beliefs of the secondary character, is distinguished from other information because it is actually attached to the secondary character and not the protagonist, and that the accessibility of this information will vary as a function of the presence of the second character in the target action scene. Specifically, this information may be less accessible when the second character is excluded from the scene: the information is taken out of the current focus when the character to whom it is

Table 3. Example Passage from Experiment 2.

Introduction

Jessica had always been fascinated by different cultures. Her family had decided to take a trip to France last summer. Jessica and her younger brother Kent were glad their parents had chosen France as a vacation spot.

Second Character Consistent Beliefs Elaboration

Kent was excited to hear Jessica speak French on their trip. He had wanted to hear her use some of the expressions she had learned in her classes at school. Kent thought that Jessica sounded sophisticated when she spoke with her French accent. He hoped people would be able to understand her.

Second Character Inconsistent Beliefs Elaboration

However, Kent was very worried about Jessica being an embarrassment on the trip. He was afraid that Jessica would make a fool out of herself trying to speak French. Kent thought that she sounded ridiculous when she said things using her fake French accent. He didn't think anyone could possibly understand her.

Filler - Second Character Present

On their trip, her family spent four days in Paris and Jessica didn't think that was enough time to see everything. After their stay in the city, Jessica and her family traveled around the rural countryside. The family ended their trip with several days on the Riviera. On the last day of the trip, the entire family decided to get lunch at a quaint cafe near the beach. It was an expensive restaurant and Jessica was especially excited about such a nice treat before she returned home. When the waiter came to take their orders, Jessica ordered first because her brother Kent was still deciding.

Filler - Second Character Removed

On their trip, her family spent four days in Paris and Jessica didn't think that was enough time to see everything. After their stay in the city, Jessica and her family ended their trip with several days on the Riviera.

On the last day of the trip, Jessica and her mother decided to get lunch at a quaint cafe near the beach while her father and brother went swimming.

Jessica was excited about the chance to eat at an expensive restaurant before she returned home. She wanted to try everything on the menu. When the waiter came to take their orders, Jessica ordered first because her mother was still deciding.

Target Sentences

Jessica ordered in flawless French.
The waiter understood her perfectly.

Conclusion

Jessica was excited that she could read and understand the menu. She hoped she would enjoy the meal she had ordered.

Comprehension Question

Did Jessica's family visit Paris?

attached is also removed from focus (Anderson et al., 1983). Accordingly, slower reading times should be observed in the inconsistent condition when the second character is present. In other words, if the second character is removed, their inconsistent beliefs should be less available and will therefore result in less difficulty integrating the action into the current discourse representation. It is important to note that this information is not stated as true about the protagonist, rather this information is only stated as true from the perspective of the secondary character.

In this experiment, two elaborations were presented, the second character consistent and inconsistent beliefs elaborations, and the location of the second character in the target action scene was manipulated. The two conditions in which the second character was present in the target action scene were replication of conditions in Experiment 1. Thus integration difficulty was expected on the second target sentence when the second character's beliefs were inconsistent with the protagonist's actions and not when those beliefs and actions were consistent. The second character absent conditions were included to test whether or not the reactivation and integration processes were affected by character location.

Method

Participants. Forty-eight undergraduates at the University of New Hampshire received course credit or extra credit for their participation in this experiment. Participants were tested individually and were informed of the purpose of this experiment at its conclusion. Assignment of participants to one of the four material sets was done randomly, and an equal number of participants were exposed to each set of materials.

Materials and Design. The materials were the 24 passages used in Experiment 1 with several changes. First, only two elaboration types were presented: the consistent and inconsistent second character beliefs elaborations. Secondly, two filler sections were presented, one which noted the second character as present in the target action scene and one which noted the second character as removed from the scene in which the protagonist performed the target action. Again, each story contained an introduction, an elaboration of the second character's beliefs, a filler section, two target sentences, and a conclusion. The full set of experimental passages are included in Appendix B.

For each passage, the introduction, second character beliefs elaborations, target sentences, and comprehension question were unchanged from Experiment 1. The filler section in which the second character was present in the target action scene was changed minorly from Experiment 1 in order to make it more consistent with the new filler section. The filler sections in which the second character was present ranged in length from five to nine sentences with an average of 98 words. This filler section served to background the elaboration section as well as to continue the distinction between characters. On average, the story protagonist was referred to by proper name 4.25 times, whereas the second character was referred to by proper name only 2.20 times. The protagonist was referred to by pronoun 4.29 times on average, and the second character was referred to by pronoun 0.95 times on average. As in Experiment 1, each of these filler sections ended with a sentence containing a proper name reference to the protagonist and second character, except in one story in which the second character was referred to by a role (i.e., mother).

Several important changes were made to the filler section from Experiment 1 in

order to create the new filler section in which the second character was removed from the target action scene. As indicated in Table 3 by line separations (see also Appendix B), this filler section was broken into three parts: a shift away from the elaboration section, a sentence describing the removal of the second character from the scene, and a continuation of the story after the second character had been removed. The first part of the filler was nearly identical to the first few sentences in the other filler section. In the following section, in which the second character was removed from the scene, the second character was always explicitly mentioned. This section was one sentence long except in one passage in which two sentences were used to explain the second character's removal from the scene. The final continuation of the story after the removal of the second character was always three sentences long, and it ranged in length from 29 to 48 words with an average of 38 words. The second character was never mentioned in this section.

Overall, this new filler was an average of 3.50 words longer than the filler in which the second character was present in the target action scene. The filler in which the second character was removed ranged in length from 85 to 117 words, with an average of 101 words, and was six to nine sentences long. Again, this filler section served to maintain a difference in prominence between the two characters. In this filler section, the protagonist was mentioned by proper name 4.87 times and by pronoun 5.83 times on average, whereas the second character was mentioned by proper name 1.95 times and by pronoun 0.91 times on average.

The conclusion of each story had to be modified in order to remove any mention of the second character which would cause a break in coherence under the conditions that

the second character had been removed from the developing discourse. As in Experiment 1, each story conclusion was two to three sentences long, contained an average of 28 words, and ranged in length from 21 to 38 words.

Appropriateness of the elaboration (i.e., consistent or inconsistent beliefs of the second character) and location of the second character (i.e., present or removed from the target action scene) were within subject variables. Four passage types resulted from the manipulation of these two variables. Four material sets were created, each containing six passages from each passage type. Each passage appeared once in each condition.

Procedure. The procedures were the same as in Experiment 1. Reading time for each line of text was recorded, as well as the accuracy of responses to the comprehension questions.

Results

Reading times for each target sentence were recorded. The same cutoff procedures were used (see Experiment 1) resulting in the loss of approximately 7.6% of the data. The mean reading times for both target sentences in Experiment 2 are presented in Table 4. Separate analyses of variance were performed on the reading times for each target sentence in order to determine if there were main effects for the appropriateness of the elaboration (i.e., consistent or inconsistent) and the location of the second character (i.e., present in or removed from the target action scene), as well as significant interactions.

For both sentences, no effects approached significance. There was no significant effect for location of the second character in the target action scene: $F_1(1, 44) = 1.567$, $MSE = 44,235.572$ and $F_2(1, 20) = 2.635$, $MSE = 15,003.579$ (first target sentence);

Table 4. Mean Reading Times (in Milliseconds) for Two Target Sentences as a Function of Elaboration Consistency and the Location of the Second Character in the Target Sentence Scene: Experiment 2.

	Elaboration	
	Consistent	Inconsistent
	Sentence 1	
Second Character Removed	1,754	1,799
Second Character Present	1,819	1,810
	Sentence 2	
Second Character Removed	1,625	1,643
Second Character Present	1,638	1,654

$E_1(1, 44) = 0.282$, $MSE = 24,293.396$ and $E_2(1, 20) = 0.026$, $MSE = 13,515.844$
 (second target sentence). There was no significant effect for consistency of the second
 character's beliefs with the target action: $E_1(1, 44) = 0.564$, $MSE = 27,615.396$ and $E_2(1,$
 $20) = 0.000$, $MSE = 24,037.571$ (first target sentence); $E_1(1, 44) = 0.507$, $MSE =$
 $32,372.855$ and $E_2(1, 20) = 0.000$, $MSE = 16,445.644$ (second target sentence). Finally,
 there was also no significant interaction between location and consistency: $E_1(1, 44) =$
 0.792 , $MSE = 41,818.941$ and $E_2(1, 20) = 0.535$, $MSE = 31,516.471$ (first target
 sentence); $E_1(1, 44) = 0.002$, $MSE = 27,579.489$ and $E_2(1, 20) = 0.082$, $MSE =$
 $14,080.152$ (second target sentence).

An overall analysis of variance was performed to check for effects that may have
 reached significance when both sentences were considered together. There was a main
 effect for target sentence where the first target sentence was read more slowly than the
 second: $E_1(1, 44) = 80.382$, $MSE = 28,764.544$; $E_2(1, 20) = 16.226$, $MSE = 66,142.603$.
 No other effects were significant. Again, there was no main effect for location: $E_1(1, 44)$
 $= 1.345$, $MSE = 44,516.274$; $E_2(1, 20) = 0.774$, $MSE = 20,925.391$, or consistency: E_1
 $(1, 44) = 1.372$, $MSE = 21,932.734$; $E_2(1, 20) = 0.000$, $MSE = 22,539.128$. There were
 also no reliable effects found for the following interactions: sentence x location, $E_1(1, 44)$
 $= 0.678$, $MSE = 24,012.694$ and $E_2(1, 20) = 3.120$, $MSE = 7,594.032$; sentence x
 consistency, $E_1(1, 44) = 0.000$, $MSE = 38,055.516$; $E_2(1, 20) = 0.000$, $MSE =$
 $17,944.086$; location x consistency, $E_1(1, 44) = 0.529$, $MSE = 33,594.519$; $E_2(1, 20) =$
 0.602 , $MSE = 22,286.332$; and sentence x location x consistency, $E_1(1, 44) = 0.430$,
 $MSE = 35,803.911$; $E_2(1, 20) = 0.197$, $MSE = 23,310.291$.

Finally, there were no significant differences in comprehension question error rates for the four different story conditions; $p > 0.05$ for all contrasts. The error rates for the four conditions were 0.046 for the second character absent, consistent beliefs condition; 0.042 for the second character absent, inconsistent beliefs condition; 0.049 for the second character present, consistent beliefs condition, and 0.053 for the second character present, inconsistent beliefs condition.

Discussion

The contrast of the consistent and inconsistent elaborations when the second character was present during the target action scene was expected to replicate the results obtained in Experiment 1; this contrast was expected to reach significance on the second target sentence. It is possible that the lack of replication was due to the changes made in the elaborations presented. Whereas in Experiment 1 participants read twelve passages which included an elaboration section about the beliefs of the second character regarding the protagonist and twelve elaboration sections regarding some characteristic of the protagonist, in Experiment 2 the participants read 24 passages including the beliefs of the second character regarding the protagonist. Because this difference in the materials could have affected the character prominence distinction and subsequently the integration of information during reading, Experiment 3 was designed to test this possibility.

Experiment 3

Experiment 3 was designed to test whether or not the change in materials in Experiment 2 resulted in the absence of significant findings and more importantly in the failure to replicate the results from Experiment 1. In Experiment 1, a significant effect of

the consistency of the second character's beliefs on the integration of an action made by the protagonist was observed on the second target sentence. This same manipulation failed to replicate in Experiment 2. However, the materials were not identical between these two experiments. In Experiment 1, twelve passages within each material set contained a protagonist elaboration. However, these elaborations were dropped in Experiment 2, and based on the results obtained in that experiment, it was proposed that the presentation of 24 passages with the second character beliefs elaborations had an effect on how these stories were processed by the readers. The current experiment was designed to test whether the failure to replicate this effect for consistency was due the changes made to the materials from Experiment 1 to Experiment 2.

In order to test whether or not this change in materials had an overall effect on character prominence, the introduction to each story was changed and a stronger emphasis on character prominence was added. An example passage appears in Table 5. This new emphasis on prominence in the introduction made the story contents used in Experiment 2 more similar to those used in Experiment 1. However, because this new section was presented in all 24 passages rather than only twelve, the references to the protagonist were fewer in the new introduction than they were in the original protagonist elaborations (see Materials section for details).

Method

Participants. Forty-eight undergraduates at the University of New Hampshire either received course or extra credit for their participation in this experiment. Participants were randomly assigned to one of the sets of narrative materials, and an equal number of

Table 5. Example Passage from Experiment 3.

Introduction from Experiment 3 - Added Emphasis on Character Prominence

Jessica had always been fascinated by different cultures. Her family had decided to take a trip to France last summer. Jessica had often dreamed of visiting Paris, and she knew that this trip was the opportunity of a lifetime. Before the trip, she wondered if Paris would be what she had expected. Jessica had imagined that it would be a glamorous city filled with artists and beautiful people. She couldn't wait to see what it was like. Jessica and her younger brother Kent were glad their parents had chosen France as a vacation spot.

Second Character Consistent Beliefs Elaboration

Kent was excited to hear Jessica speak French on their trip. He had wanted to hear her use some of the expressions she had learned in her classes at school. Kent thought that Jessica sounded sophisticated when she spoke with her French accent. He hoped people would be able to understand her.

Second Character Inconsistent Beliefs Elaboration

However, Kent was very worried about Jessica being an embarrassment on the trip. He was afraid that Jessica would make a fool out of herself trying to speak French. Kent thought that she sounded ridiculous when she said things using her fake French accent. He didn't think anyone could possibly understand her.

Filler - Second Character Present

On their trip, her family spent four days in Paris and Jessica didn't think that was enough time to see everything. After their stay in the city, Jessica and her family traveled around the rural countryside. The family ended their trip with several days on the Riviera. On the last day of the trip, the entire family decided to get lunch at a quaint cafe near the beach. It was an expensive restaurant and Jessica was especially excited about such a nice treat before she returned home. When the waiter came to take their orders, Jessica ordered first because her brother Kent was still deciding.

Filler - Second Character Removed

On their trip, her family spent four days in Paris and Jessica didn't think that was enough time to see everything. After their stay in the city, Jessica and her family ended their trip with several days on the Riviera.

On the last day of the trip, Jessica and her mother decided to get lunch at a quaint cafe near the beach while her father and brother went swimming.

Jessica was excited about the chance to eat at an expensive restaurant before she returned home. She wanted to try everything on the menu. When the waiter came to take their orders, Jessica ordered first because her mother was still deciding.

Target Sentences

Jessica ordered in flawless French.

The waiter understood her perfectly.

Conclusion

Jessica was excited that she could read and understand the menu. She hoped she would enjoy the meal she had ordered.

Comprehension Question

Did Jessica's family visit Paris?

participants read each set of materials. As before, each participant was tested individually in a session that lasted approximately 45 minutes.

Materials and Design. The same 24 passages from Experiments 1 and 2 were adapted for Experiment 3. As in Experiment 2, both the location of the second character in the target action scene as well as the consistency of the second characters' beliefs regarding the protagonist with that target action were manipulated. The only adaptation of the materials from Experiment 2 occurred in the introduction section of these passages. The experimental passages are included in Appendix B.

The introduction was changed to include added emphasis on character prominence. In each passage, this added emphasis involved two additional proper name references and four additional pronominal references to the protagonist. These changes were based on the contents of the protagonist elaborations from Experiment 1. In Experiment 1, there were approximately two proper name and 6 pronominal references made to the protagonist in the protagonist consistent and inconsistent elaborations. The introduction section in Experiment 2 was adapted for the current experiment by adding two proper name and three to four pronominal references to the protagonist. The introduction section in Experiment 2, which contained two proper name and two to three pronominal references to the protagonist, now contained four proper name and five to seven pronominal references to the protagonist in Experiment 3.

In a limited number of passages, additional references to the second character were included in order to maintain coherence. In three passages, one additional proper name reference was made to the second character, and in three passages either one or two

addition pronominal references were made to the second character. No other changes were made to the materials.

Procedure. The procedures were the same as in Experiments 1 and 2. Reading times for each line of text were recorded, as well as the accuracy of responses to the comprehension questions.

Results

Reading times for each target sentence were recorded and analyzed. The same cutoff procedures were used as in the previous experiments resulting in the loss of approximately 7.5% of the data. The mean reading times for the first and second target sentences are presented in Table 6.

An analysis of variance on both target sentences revealed that participants read the first target sentence more slowly than the second target sentence: $F_1(1, 44) = 24.861$, $MSE = 44,029.719$; $F_2(1, 20) = 7.841$, $MSE = 74,596.078$. When collapsing across sentences, the overall interaction between consistency and location approached significance on the analysis based on subject variability, $F_1(1, 44) = 2.959$, $MSE = 33,857.384$, $p > 0.09$, and was significant for the analysis based on item variability, $F_2(1, 20) = 4.630$, $MSE = 9,915.274$, $p < 0.05$.

Each target sentence was also analyzed separately in order to determine whether there were main effects for consistency of elaboration and location of the second character. A main effect for consistency was observed on the first target sentence: $F_1(1, 44) = 5.483$, $MSE = 40,019.254$; $F_2(1, 20) = 4.855$, $MSE = 19,958.196$. Planned comparisons confirmed that participants read the first target sentence significantly more

Table 6. Mean Reading Times (in Milliseconds) for Two Target Sentences as a Function of the Consistency of the Elaboration and the Location of the Second Character in the Target Sentence Scene: Experiment 3.

Elaboration		
	Consistent	Inconsistent
Sentence 1		
Second Character Removed	1,808	1,831
Second Character Present	1,739	1,852
Sentence 2		
Second Character Removed	1,695	1,680
Second Character Present	1,703	1,726

slowly in the inconsistent condition than in the consistent condition when the second character was present in the target action scene (1,852 versus 1,739): $t_1(44) = 8.267$, $t_2(20) = 9.678$. There was no significant difference in reading times between the consistent and inconsistent conditions when the second character was removed from the target action scene.

The analysis of the first target sentence showed no main effect for location of the second character: $F_1(1, 44) = 0.603$, $MSE = 45,334.866$; $F_2(1, 20) = 1.159$, $MSE = 13,155.613$. Finally, the interaction of location and consistency was insignificant when the analysis was based on subject variability, $F_1(1, 44) = 2.321$, $MSE = 42,638.108$, and it was significant when the analysis was based on item variability, $F_2(1, 20) = 4.624$, $MSE = 10,067.521$.

None of the analyses on the second target sentence reached significance. There was no reliable effect found for: location, $F_1(1, 44) = 1.001$, $MSE = 34,436.125$, $F_2(1, 20) = 0.006$, $MSE = 23,028.240$; consistency, $F_1(1, 44) = 0.012$, $MSE = 52,377.920$, $F_2(1, 20) = 0.046$, $MSE = 10,449.440$; and no interaction between location and consistency, $F_1(1, 44) = 0.583$, $MSE = 30,364.948$, $F_2(1, 20) = 0.819$, $MSE = 9,302.865$.

Finally, there were no significant differences in comprehension question error rates for the four passage conditions; $p > 0.05$ for all planned comparisons. The error rates for the second character absent consistent and inconsistent were 0.028 and 0.014 respectively. The error rates for the second character present consistent and inconsistent were 0.028 and 0.014 respectively.

Discussion

The changes to the materials in Experiment 3 served to reproduce the effect of the consistency of the second character's beliefs observed in Experiment 1. As in Experiment 1, participants experienced comprehension difficulty when the protagonist's action was inconsistent with the second character's beliefs regarding the protagonist and did not experience this difficulty when those beliefs were consistent with the action. However, this integration difficulty only occurred when the second character was present in the target action scene. Further, whereas the integration difficulty was observed on the second target sentence in Experiment 1, it was observed on the first target sentence in this experiment. The sentence on which this effect was observed is presumed to be due to the differences in the materials used. However, it is interesting to note that the integration difficulty did not spillover onto the following target sentence when the second character was present in the target action scene (something not tested in the first experiment). This indicates that while the inconsistent beliefs of the second character did cause comprehension difficulty, this conflict was resolved quickly. The fact that this information was resolved quickly indicates that it may be distinguished in some way from other information presented as true about the protagonist from the narrator's perspective.

That the inconsistent beliefs of the second character regarding the protagonist did not cause comprehension difficulty when the second character was removed from the target action scene indicates that the availability of this information is affected by the character's location in the narrative. However, this result needs to be investigated further due to a confound in the materials. In changing the materials to remove the secondary

character from the target action scene, the recency of mention of the second character was also affected. In the second character present conditions, the second character was mentioned in the sentence immediately preceding the target sentences. In contrast, three sentences separated the target sentences and the preceding reference to the second character in the second character removed conditions. That a significant effect was found in the second character present condition and not in the second character absent condition could be due to this difference in the materials.

The significant interaction between the consistency of the beliefs of the second character and their location in the target action scene was due to the change in the magnitude of the comprehension difficulty observed as the location of the second character changed. As expected, the interaction was due to a reduction in the size of the inconsistency effect when the second character was removed from the current discourse. Such a result may signify that the beliefs of the second character are not integrated into the reader's discourse model of the protagonist in the same way as is other information. Instead, the beliefs of another character may be held in some subset of the discourse model which is associated with that character, and the accessibility of such information may be affected by whether or not that character is in the discourse focus.

CHAPTER VII

GENERAL DISCUSSION

Adding to the research demonstrating that readers monitor the spatial location of the protagonist (Glenberg et al., 1987; Morrow et al., 1989; Morrow et al., 1987; O'Brien & Albrecht, 1992) and temporal information (Anderson et al., 1983; Millis & Cohen, 1994), this thesis further supports the finding that perspective information is stored in the situation model and affects comprehension (Albrecht & O'Brien, 1995; Anderson & Pichert, 1978; Baillet & Keenan, 1986; Black et al., 1979; Bloom, 1988; Bower & Morrow, 1990; Millis, 1995; Morrow, in press; O'Brien & Albrecht, 1992; Pichert & Anderson, 1977; de Vega, 1995). In addition, the current set of experiments contribute to the research on the effects of character prominence and perspective in discourse comprehension by further specifying how these factors affect the integration of information and thus the maintenance of global coherence. The finding that readers monitor global coherence during reading, as evidenced by comprehension difficulty when incoming information is inconsistent with previously processed information, was replicated (Albrecht & O'Brien, 1993; Hakala & O'Brien, 1995; Myers et al., 1994; O'Brien & Albrecht, 1992; O'Brien et al., in press; Rizzella & O'Brien, 1996; Zwaan et al., 1995).

The relative impact of information attached to the protagonist compared to information presented from the perspective of a secondary character was demonstrated. Information presented from a secondary character's perspective was incorporated into the

situation model of the text and was used to update that model during comprehension. The finding that character perspective and, in particular, their beliefs are integrated into the situation model is consistent with the research demonstrating that character emotions are represented in the situation model (Gernsbacher et al., 1992; Gernsbacher & Robertson, 1992; Kneepkans & Zwaan, 1994). The current set of experiments demonstrated that when this information was the beliefs of the secondary character regarding the protagonist, a related action by the protagonist resulted in the integration of incoming information with that information. This result is consistent with the work by Cook et al. (in press). In a series of experiments, they demonstrated that information about secondary characters is available in the situation model in much the same way as information relevant to the protagonist. However, the results from the current set of experiments demonstrated that while this information was available in the situation model, its reactivation was affected by character prominence and perspective (see also Franklin et al., 1992; Morrow, 1985b). It was distinguished from other information which was presented as true about the protagonist from the omniscient narrator's perspective; the beliefs of the second character were shown to have a smaller impact on the integration of new information compared to a description of the protagonist from the narrator's perspective (Experiment 1).

Further, it was demonstrated that the extent to which information about the beliefs of the secondary character regarding the protagonist impact the integration of new information depended on both character prominence and the location of the second character in the narrative (Experiments 2 and 3). Experiment 3 showed that the information regarding the protagonist presented from the secondary character's

perspective had a greater impact on the integration of new information into the developing mental model when the second character was present rather than removed from the current narrative focus. This result is consistent with previous research demonstrating that the availability of information is impacted by its centrality (Albrecht & O'Brien, 1991; Morrow et al., 1987) and that the availability of information attached to a secondary character is influenced by changes in the narrative scenario (Anderson et al., 1983). Sanford et al. (1988) proposed that an important secondary character who is introduced into the narrative by a proper name would be represented in the reader's situation model and compared to a scenario-dependent character would be more likely to move between scenes. In the current research, the second character was denoted as both important and able to move between scenes with the main character. However, when the secondary character left the scene in which the protagonist continued to act, information attached to the second character had less of an impact on the integration of new information related to the protagonist. This result showed that shifts in scenes may not only affect antecedent accessibility (Anderson et al., 1983; Garrod & Sanford, 1983); they also appear to affect the accessibility of information attached to those characters. Further investigation of this effect using materials which control for both character location and recency of mention in the text would contribute to a stronger understanding of the impact of these variables on narrative comprehension.

Because the protagonist was still active in the discourse model, characteristics of the protagonist should have been active (Garrod & Sanford, 1988; Rinck & Bower, 1995; Sanford & Garrod, 1989; Sanford et al., 1988). While the information about the secondary

character's beliefs included possible characteristics of the protagonist, the availability of this information was affected by the second character's location. This information was distinguished as being the beliefs of the second character and was more directly attached to this character rather than the protagonist.

The lack of any significant effects for elaboration consistency or location of the second character in Experiment 2 could have been due to either a general confusion between characters as the prominence distinction was weakened or the shared thematic subject status of both characters. The high level of accuracy on the comprehension questions argues against the former hypothesis. In the later case, the emphasis on the second character may have resulted in the elaborated characteristics being more strongly associated with the second character compared to the protagonist. Thus, when the protagonist performed the target action, the information about the second character's beliefs did not resonate in response at a sufficient level to be reactivated, and subsequently there was no sign that it impacted comprehension. This possibility could be tested by changing the actor in the target sentence from the protagonist to the second character. If in fact the elaborated characteristics were more strongly associated with the secondary character, then comprehension difficulty should be observed when these characteristics are inconsistent with the target action performed by the secondary character and not when they are consistent, even though the characteristics are beliefs about the protagonist.

According to the memory-based view of discourse comprehension, the beliefs of the second character regarding the protagonist would be reactivated if they share features in common with the target action being processed. However, because this information is

not true of the protagonist, it may not be reactivated at as strong a level, or as fast a rate, as other related or relevant information. In Experiment 1 the finding that the inconsistency effect for the protagonist elaboration occurred on both target sentences, whereas the inconsistency effect of the second character's beliefs was not observed until the second target sentence are both consistent with this view. In addition, because this information is related but not relevant to the information currently being processed (i.e., it was not stated as true about the character, rather it was the beliefs of a secondary character regarding the protagonist), the comprehension difficulty experienced could be resolved quickly.

Consistent with this, in Experiment 3, the comprehension difficulty observed when the second character was present in the target action scene and the elaboration described their inconsistent beliefs occurred on the first target action sentence and was resolved by the second sentence. That the inconsistency was based on the beliefs of the secondary character may have served to qualify this information and as a result facilitated resolution of the comprehension difficulty (see also O'Brien et al., in press).

According to the research on the effects of common ground on narrative comprehension (Greene et al.,), the presence of two characters with shared knowledge, or their reunion in a scene, affects the availability of that shared information. In other words, when both characters are in focus, information attached to them or shared by them is more accessible than when one of those characters is no longer in focus. Thus, as the situation described in the text changes, so does the accessibility of information or specifically the knowledge of characters. If this is true of shared knowledge, it should also be true of knowledge or beliefs held by a single character; when the character who possesses a belief

leaves the discourse focus, information attached to them should become less available than when the character was in focus. That this shared information is more accessible after the characters reunite supports the idea that how information is presented in a text (e.g., perspective) influences how it is stored in the situation model (Greene et al., 1994). That no integration difficulty was observed in Experiment 3 when the second character was removed from the target action scene supports the proposition that the accessibility of information in the mental representation is affected by discourse focus and shifts in episodes.

The current results provide further support that readers distinguish what information is known by what characters (Lea et al., 1998). These results also provide support for the proposal that the rementioning of a character results in the automatic reactivation of information associated with that character (Lea et al.,). In this way, the action performed by the protagonist in the target sentence would result in a signal travelling through memory. Information stored in memory would resonate in response as a function of the strength of its relation to the information being processed and featural overlap. In the case where the second character was present in the scene, the information attached to that character would resonate to a greater extent than when the second character had been removed from the current discourse focus.

The differential effects on comprehension of the protagonist elaboration and the secondary character's beliefs elaborations provides evidence against Keysar's (1994) finding that readers sometimes have trouble distinguishing who knows what in a story; these results support the notion of a multiagent reader (Graesser et al., in press). If readers

had confused who knew what information, then the secondary character's inconsistent beliefs elaboration should have had a similar effect on comprehension of the target sentence as did the protagonist inconsistent elaboration. In fact, these experiments served to show that readers can track the knowledge and beliefs of multiple characters and that these distinctions have implications for comprehension. Because natural narratives tend to revolve around multiple characters of varying importance, further investigation of the role that secondary characters play in such narratives will contribute to our understanding of discourse comprehension.

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APPENDIX A

PASSAGES FROM EXPERIMENT 1.

Introduction

Jessica had always been fascinated by different cultures. Her family had decided to take a trip to France last summer. Jessica and her younger brother Kent were glad their parents had chosen France as a vacation spot.

Protagonist Consistent Elaboration

Jessica was able to use the language she had been studying in school for seven years. She had always gotten good grades in her French classes and had also received the outstanding student of French award in high school. This award included a scholarship for each year that Jessica studied French in college.

Protagonist Inconsistent Elaboration

It was the first time Jessica had traveled overseas. She had no idea what France would be like. None of the schools in her town offered foreign culture or language classes. Jessica's only exposure to French culture was a television documentary. She had been worried about how she would communicate with people there.

Second Character's Consistent Beliefs Elaboration

Kent was excited to hear Jessica speak French on their trip. He had wanted to hear her use some of the expressions she had learned in her classes at school. Kent thought that Jessica sounded sophisticated when she spoke with her French accent. He hoped people would be able to understand her.

Second Character's Inconsistent Beliefs Elaboration

However, Kent was very worried about Jessica being an embarrassment on the trip. He was afraid that Jessica would make a fool out of herself trying to speak French. Kent thought that she sounded ridiculous when she said things using her fake French accent. He didn't think anyone could possibly understand her.

Filler

On their trip, her family spent four days in Paris and Jessica didn't think that was enough time to see everything. After their stay in the city, Jessica and her family traveled around the rural countryside. The family ended their trip with several days on the Riviera. On the last day of the trip, the entire family decided to get lunch at a quaint cafe near the beach. It was an expensive restaurant and Jessica was especially excited about such a nice treat before she returned home. When the waiter came to take their orders, Jessica ordered first because her brother Kent was still deciding.

Target Sentences

Jessica ordered in flawless French.
The waiter understood her perfectly.

Conclusion

Jessica was excited that she could read and understand the menu. She hoped she would enjoy the meal she had ordered.

Comprehension Question

Did Jessica's family visit Paris?

Introduction

Mary's old college boyfriend John was in town on a business trip. She had made plans for them to have dinner together tonight. Mary left a message at his hotel with the name and address of the restaurant where she had made reservations.

Protagonist Consistent Elaboration

Mary was excited to go to her favorite restaurant. Mary was a junk food junky who enjoyed eating anything that was quick and easy to fix. In fact, she ate at McDonald's at least three times a week. Mary never worried about her diet and saw no reason to eat nutritious foods.

Protagonist Inconsistent Elaboration

Mary was excited to go to her favorite restaurant. Mary liked this restaurant because it had fantastic health food. Mary, a health nut, had been a strict vegetarian for ten years. Her favorite food was cauliflower. Mary was so serious about her diet that she refused to eat anything which was cooked in grease.

Second Character's Consistent Beliefs Elaboration

John wondered what kind of food the restaurant served. John had always thought that Mary was a junk food junky who enjoyed eating anything that was easy to fix. He pictured her eating at McDonald's several times a week. John didn't think Mary ever worried about her diet or bothered to eat nutritious foods.

Second Character's Inconsistent Beliefs Elaboration

John wondered what kind of food the restaurant served. He figured they would eat somewhere healthy because he thought his friend Mary was a vegetarian. John had considered Mary to be one of the most health-conscious people he knew. He thought she probably hated eating unhealthy things that were cooked in grease.

Filler

Mary and John were both looking forward to seeing each other tonight. Mary was nervous about the evening so she arrived at the restaurant a little early. After about ten minutes, John arrived at the restaurant. Mary was surprised by how little he had changed in the past few years. Because she was starving, she suggested that they look over their menus before catching up on all their news. Finally, Mary and John signaled the waiter to come take their orders.

Target Sentences

Mary ordered a cheeseburger and fries.
She handed the menu back to the waiter.

Conclusion

After they ordered, the waiter said he would be back shortly with their appetizers. Mary thought the service here was excellent and she was glad she had chosen this restaurant.

Comprehension Question

Was Mary meeting her husband for lunch?

Introduction

Ken was a math teacher at a high school, and he was excited for his summer break. One thing Ken intended to do this summer was to help his new colleague Michelle get to know the area better. They both planned to join some type of club this summer.

Protagonist Consistent Elaboration

Ken really enjoyed physical activities and tried to keep in shape by jogging and lifting weights every day. He was very muscular and loved tough, physical contact sports which allowed him to match his strength against another person. He hoped to do something physically challenging during his free time this summer.

Protagonist Inconsistent Elaboration

Ken was a small man who didn't worry about staying in shape. His small 120 pound body was all skin and bones. Ken hated contact sports because he feared getting hurt. He preferred non-contact sports, such as golf and bowling which he could practice alone. Ken hoped to do something relaxing this summer.

Second Character's Consistent Beliefs Elaboration

Michelle was curious about what type of activity Ken would enjoy. She thought he probably enjoyed physical activities that helped him stay in shape like jogging and lifting weights. Michelle thought Ken seemed like a very muscular person who probably loved tough, physical contact sports which allowed him to match his strength against another person.

Second Character's Inconsistent Beliefs Elaboration

Michelle was curious about what type of activity Ken would enjoy. She had hoped to get into shape, but she thought Ken was a small guy who wouldn't be interested in that. She thought he probably hated contact sports. Michelle thought Ken would be embarrassed to exercise with her because he probably wasn't very strong.

Filler

Today, Ken was taking Michelle on a tour of the downtown area. Ken had been raised here, so he had watched the city develop in the past thirty years. While they were walking around, Ken took them past a new community center and gymnasium he had noticed. There he spotted an advertisement for the center's summer programs on display in the window. They decided to go in and check out the facility. Once inside, Ken and Michelle went up to the front desk where there was more information about the summer programs.

Target Sentences

Ken decided to enroll in boxing classes.
He felt this would be the perfect hobby.

Conclusion

Ken signed up for the class and paid the registration fees. He couldn't wait for the class to begin. When he was finished, they left the gym and continued their walk downtown.

Comprehension Question

Did Ken recently move to the area?

Introduction

Jennifer and an elderly neighbor Howard enjoyed walking everyday in the park near their houses. She was glad to have someone to talk to tonight because today had been a hectic day. As they walked, Jennifer told a story about the fight she had this morning with her boyfriend.

Protagonist Consistent Elaboration

Jennifer was considering ending the relationship because she didn't like how she was being treated. Jennifer thought she was strong enough to be on her own. She thought she could handle being alone and would have no problem finding things to fill her free time. She wanted to be a more independent person.

Protagonist Inconsistent Elaboration

Jennifer was scared of the relationship ending. She was very dependent on people and hated the idea of being alone. She was willing to tolerate the poor relationship with her boyfriend simply to avoid being alone. She definitely didn't have the courage to tell her boyfriend she was unhappy or to end the relationship.

Second Character's Consistent Beliefs Elaboration

Howard listened to the story and had a hard time holding back his opinions. He knew Jennifer would do the right thing and end the relationship. He thought she was a strong person and would be happier on her own. Howard thought Jennifer would prefer being independent and not having to answer to anyone.

Second Character's Inconsistent Beliefs Elaboration

Howard listened to the story and had a hard time holding back his opinions. Howard thought that Jennifer was too dependent on people. He didn't support her tolerating a poor relationship simply to avoid being alone. He didn't think Jennifer had the courage to end her relationship with her boyfriend and be on her own.

Filler

Jennifer and Howard were nearing the end of their walking path when she decided to ask Howard if they could have dinner together tonight. Jennifer knew he wouldn't pass up an offer to have a homemade dinner. When they arrived at her house, they went directly inside and had drinks while Jennifer finished preparing their dinner. When Jennifer's phone began to ring, she ran over and picked it up. Jennifer expressed her surprise to Howard upon hearing her boyfriend's voice.

Target Sentences

Jennifer told him to never call again.
She didn't intend of see him anymore.

Conclusion

Jennifer got off of the phone as quickly as she could and started working on dinner. She was hungry and didn't want to keep Howard waiting.

Comprehension Question

Did Jennifer order pizza for dinner?

Introduction

Kim Parks had been driving for fourteen hours straight. She was tired and asked her father to drive for a little while. Kim was moving to Los Angeles where she had gotten a job after college.

Protagonist Consistent Elaboration

Kim was excited about the job and her salary. Kim was positive that her salary would cover all of her living expenses and leave her money for some extra things. She had even budgeted money for buying some furnishings for her new apartment. She wanted her apartment to be nice and look like home.

Protagonist Inconsistent Elaboration

Kim was nervous about having a job and being on her own in a new place. She didn't think her salary was high enough to live comfortably. She knew she wouldn't be able to afford to buy furnishings for her new apartment. She planned to save money and look for inexpensive decorations at yard sales.

Second Character's Consistent Beliefs Elaboration

Kim's father was excited about Kim's new job. Mr. Parks was impressed with her salary and was sure she would be able to live comfortably on her own. In addition to covering her expenses, he thought Kim would have enough money to buy some furnishings for her new apartment. Mr. Parks was very proud of his daughter.

Second Character's Inconsistent Beliefs Elaboration

Kim's father was worried about Kim making this move. Mr. Parks didn't think Kim's salary was enough to afford an apartment in California. He didn't think she would be able to live comfortably or afford to buy furnishings for her new apartment. He was concerned that Kim's apartment would be empty and that she would be unhappy.

Filler

Kim and Mr. Parks took a week to make the long drive across the country. When they arrived at her apartment, they started unpacking right away. After unloading all the things from the truck, Kim and her father decided to tour the city a little. Kim was excited to be in California and could tell that her father was having fun too. After the long day of walking around the city, they decided to head back to the apartment. On their way, they passed a large department store and decided to go inside. Kim and Mr. Parks looked around for a while and found some things they liked.

Target Sentences

Kim ordered a large living room set.
She also needed to buy several lamps.

Conclusion

When she was finished looking at the furniture, Kim decided to look in the clothing department. She didn't really like anything she saw and decided to leave.

Comprehension Question

Was Kim moving into a new apartment?

Introduction

Dan was in his senior year in high school and had recently become part of a team tutoring program. Today, he had to attend a meeting to meet his tutoring partner, Alice. While walking down the hallway toward the meeting room, Dan was surprised to find her already there waiting.

Protagonist Consistent Elaboration

Dan wondered what subjects he would be assigned. He had always thought that his academic strengths were math and science. He had taken every science class the school had offered, and he had always gotten good grades. He had been thinking about taking a college level science course during the Spring of his senior year.

Protagonist Inconsistent Elaboration

Dan wondered what subjects he would be assigned. He thought he could handle any subjects except math and science. He had always struggled through science courses because he did not understand the concepts. He always had a tutor help him with his science labs. Dan only took the minimum number of science courses required to graduate.

Second Character's Consistent Beliefs Elaboration

Alice was excited to work with Dan. She thought he was good at both math and science. She figured he had taken every science course the school had offered. She imagined he probably even enjoyed the science labs they had to do. She thought Dan would be better at helping their student with those subjects.

Second Character's Inconsistent Beliefs Elaboration

Alice was worried about working with Dan. She didn't think he was good at either math or science. Alice thought that Dan would prefer to work on other subjects. She noticed that he never spoke in their science class. Alice assumed that he didn't raise his hand to answer questions because he probably didn't know the answers.

Filler

As Dan and Alice stood in the hallway waiting, they watched the other students walk by. Because it was the end of the day, most of the students were packing their bags and heading for the buses that were parked in front of the school. Dan felt awkward standing there with his tutoring partner because he didn't know what to talk to her about. After waiting a few minutes, the director arrived and unlocked the door for them. Once they were all seated around the conference table, the director began explaining their duties. Dan and Alice listened as the director asked them what topics they were interested in tutoring.

Target Sentences

Dan really wanted to tutor chemistry.

He was anxious to get started today.

Conclusion

After the meeting was over, Dan caught the late bus home. He was excited to review some of the materials he had been given at the meeting.

Comprehension Question

Was Dan a college professor?

Introduction

This semester Lance had convinced a good friend of his to sign up to take a psychology class with him. On the first day of the class, the teacher had the students form small discussion groups. Unfortunately, Lance and his friend Sarah didn't end up in the same group.

Protagonist Consistent Elaboration

But Lance didn't mind because he loved being in small discussion groups. He felt that he learned a lot by sharing his thoughts with other students. Lance felt comfortable speaking in class and even enjoyed giving oral presentations. He was leading his group discussion as the professor came by to observe his group.

Protagonist Inconsistent Elaboration

Lance wished that he was in the same group as Sarah. He felt uncomfortable around new people and disliked participating in discussion groups. Lance was shy and awkward around people, especially when he didn't know them. Lance was especially intimidated by the professor standing near his group and listening to what they were saying.

Second Character's Consistent Beliefs Elaboration

As the professor walked around the room, Sarah noticed her stop at Lance's group. Sarah thought that Lance probably enjoyed the attention. Sarah had the impression that Lance was outgoing and liked to talk a lot, especially when he was trying to get to know new people. She assumed that Lance was probably leading his group discussion.

Second Character's Inconsistent Beliefs Elaboration

As the professor walked around the room, Sarah noticed her stop at Lance's group. Sarah felt badly for Lance because of how uncomfortable he must have felt being observed. She didn't think Lance liked participating in this type of exercise. Sarah thought Lance was shy and awkward around people, especially when he didn't know them very well.

Filler

After the professor finished observing all of the groups, the class took a ten minute break. Lance and Sarah both decided to go to the vending machines and get a snack. They had been in classes all day and were starving. After they both bought something to eat from the machine, they headed back to the class. Lance had gotten himself a candy bar, and he hurried to finish it before returning to the classroom. As Lance and Sarah took their seats, the professor asked for one person from each group to share their group's thoughts.

Target Sentences

Lance became the speaker for his group.
He had really enjoyed their discussion.

Conclusion

Lance gave a nice summary of his group's discussion. The professor asked him several questions and then commented on what a good job his group had done.

Comprehension Question

Was Lance taking a psychology class?

Introduction

Lynn needed to buy some sunscreen before heading to the beach. She went to a sporting goods store near her house where the store manager Bob could recommend a good brand of sunscreen. While she was in the store, Lynn looked around a little.

Protagonist Consistent Elaboration

Lynn decided to look at the bikes because she had recently taken up endurance training and had been cycling every day. Her bike couldn't handle that much use. She wanted to get a lighter weight model so that she could increase her speed. There was no way she could compete with other riders on her old bike.

Protagonist Inconsistent Elaboration

As Lynn found herself looking at the bikes, she thought about how much she hated exercising. She especially didn't like cycling and thought it was boring. She never felt safe going fast on a bike. She thought she had a poor sense of balance and that it was dangerous to cycle on the congested roads in her town.

Second Character's Consistent Beliefs Elaboration

The store manager noticed Lynn looking at some of the bikes. He thought she looked like a serious rider and he was excited at the possibility of a sale. He figured Lynn would only be interested in the high priced items so he gathered some information for her. He thought she would probably want a light weight bike.

Second Character's Inconsistent Beliefs Elaboration

The store manager noticed Lynn looking at some of the bikes and watched her for a few minutes. He didn't think Lynn looked like a rider. The manager didn't think she looked very athletic, and he figured she was probably just browsing. He didn't anticipate making a big sale with her on any of the bikes.

Filler

Lynn was glad when she saw the store manager Bob walking toward her. She wanted to ask about the sunscreen she had chosen to see whether or not it was strong enough. He said that it was a good choice. Lynn also asked for some gift ideas for a friend who loved to play golf. The store manager led Lynn to the golfing department in the store and suggested a few gift ideas. After she had made some selections, he helped carry them to the cash register. When the manager Bob asked if those would be her only purchases, Lynn thought she might get something great for herself.

Target Sentences

She decided to buy an expensive bike.
She picked the nicest model on display.

Conclusion

After loading the bike on her car, Lynn decided to go home and try out her new bike. Instead of going to lay out on the beach, she thought it would be nice to ride along the ocean.

Comprehension Question

Did Lynn collect bikes?

Introduction

Ralph had recently made a lot of money for his company and was celebrating by going on a two week vacation to Hawaii. His business partner Joanne was constantly hearing about the trip. When she asked if he was ready to leave the next day, Ralph said everything was set except for the ride to the airport.

Protagonist Consistent Elaboration

Ralph had considered taking his own car because he enjoyed driving in Boston. He had visited many cities and had a lot of practice driving in heavy traffic. Ralph was proud of his city driving skills and often made trips into the city with friends. He never understood why some people were afraid of city driving.

Protagonist Inconsistent Elaboration

Ralph considered driving himself, but he was petrified of driving in Boston. Ever since he was in a terrible accident two years ago, he refused to drive in the city. If he needed to go anywhere near the city, Ralph took public transportation. He would rather take the bus than drive himself to the airport.

Second Character's Consistent Beliefs Elaboration

Joanne thought that Ralph should drive himself to the airport. She thought Ralph would probably complain about anyone else's city driving. She figured that Ralph was probably an aggressive driver who was used to city traffic. She thought he would be nervous about getting to the airport on time if someone else drove him there.

Second Character's Inconsistent Beliefs Elaboration

Joanne hoped that Ralph didn't try to drive himself to the airport. Joanne thought he seemed really uptight recently and would have a hard time handling the heavy traffic. She didn't think Ralph had any experience driving in the city and that he would probably get really nervous because of all the traffic.

Filler

Ralph told Joanne that before worrying about his trip any more, a lot of work needed to be completed. He wanted to make sure the new account would be handled appropriately while he was on vacation. Ralph had put a lot of time into that account and was proud of the success. Because the account was so important to the company, he wanted Joanne to oversee it instead of one of the employees. Ralph reviewed the account with her while having lunch together today. After they finished with their business, Joanne asked Ralph for the latest update on the travel plans.

Target Sentences

Ralph decided to drive to the airport.

He thought the bus would take too long.

Conclusion

After lunch, Ralph went back to his office and resumed his work. He felt good about how his account would be handled in his absence.

Comprehension Question

Was Ralph going to Hawaii?

Introduction

Drew was getting a ride across town from one of his good friends. They were on their way to a friend's birthday party when a great song came on the radio. Drew turned up the radio and listened to his friend Tricia sing along.

Protagonist Consistent Elaboration

As he listened, Drew noticed that Tricia had a nice voice. Drew enjoyed singing to the radio. He also enjoyed singing in the school chorus and had recently taken first place at a local talent show. He was also the lead singer in a band with some of his friends and he enjoyed performing for people.

Protagonist Inconsistent Elaboration

Drew thought he had a horrible voice and never sang when there was anyone else around. When Drew was young, his music teacher had asked him to mouth the words to songs instead of singing them. Drew was convinced that his voice had always sounded horrible and he didn't want anyone to hear him sing.

Second Character's Consistent Beliefs Elaboration

Tricia wondered why Drew wasn't singing. She thought Drew had a great voice. She had overheard him singing loudly once and was amazed at how nice he sounded. She didn't think Drew was aware of how nice his voice sounded. She thought he should be the lead singer in the band he had started with some friends.

Second Character's Inconsistent Beliefs Elaboration

Tricia was glad that Drew was not singing along with her. She thought Drew had a horrible singing voice and shouldn't sing in public. Tricia thought he should stick with playing the guitar in the band he started with some friends. She thought he would embarrass himself if he ever tried to sing in front of an audience.

Filler

Just as the song on the radio ended, Drew and Tricia arrived at the birthday party. They went inside and helped decorate before the guest of honor arrived. Suddenly, Drew heard someone coming up the driveway, so he told everyone to hide. When the front door opened, the room erupted with shouts of "Happy Birthday." Drew quickly went into the kitchen to get the birthday cake. When all the candles were lit, he made his way to the living room where everyone had gathered. Tricia and the other guests began to sing "Happy Birthday" when Drew entered the room.

Target Sentences

Drew sang along as loudly as he could.
He kept the cake balanced as he walked.

Conclusion

He set the cake down on the table and waited for everyone to get a piece. There was plenty of cake for everyone and Drew helped himself to a second serving.

Comprehension Question

Did Drew carry the birthday cake?

Introduction

Jimmy had been coming to this summer camp since he was little. He thought this would be his last year at camp and hoped to see an old friend Cheryl. Jimmy didn't know it, but she was hoping for the same thing.

Protagonist Consistent Elaboration

Jimmy was excited that the camp was offering a special program on theater and comedy this summer. Jimmy had always dreamed of becoming a comedian. He considered himself very funny and he enjoyed trying to make people laugh. He watched other comedians and tried to learn some of their material. Jimmy hoped to someday be a famous comedian.

Protagonist Inconsistent Elaboration

Jimmy wasn't even excited about the special program on comedy that the camp was offering this summer. Jimmy didn't think he was very funny and had a hard time telling jokes. When people laughed at something he said, Jimmy often thought they were making fun of him. Because he was insecure, he never felt comfortable telling jokes to people.

Second Character's Consistent Beliefs Elaboration

Cheryl was excited to see Jimmy because she thought he was hysterically funny. She had met Jimmy at camp last year and thought he was the funniest boy she had ever met. Cheryl thought all of his jokes were great and the way he told them made them even funnier. She was looking forward to hearing his new jokes.

Second Character's Inconsistent Beliefs Elaboration

Cheryl was excited to see Jimmy, but she hoped he wouldn't embarrass her this year. She couldn't stand that Jimmy was always trying to tell jokes. She thought that all of his jokes were corny and he just didn't have any sense of how to tell a joke. Cheryl always felt uncomfortable watching Jimmy embarrass himself.

Filler

Jimmy and Cheryl ran into each other at lunch on the first day of camp. Jimmy spotted Cheryl in the cafeteria and she introduced him to all of her friends. He was surprised that some of her friends had never been to camp before. Jimmy told them a little about how things would be. He told them about all of the chores they would have to do. While Jimmy was talking, he noticed that some of them seemed nervous about being away from home for the first time. Jimmy wished he could make Cheryl's friends feel better.

Target Sentences

He told everyone one of his new jokes.

He had heard it on the radio that day.

Conclusion

After lunch, everyone was called outside for some orientation activities. Jimmy was glad that he had decided to come back to camp this year.

Comprehension Question

Did Jimmy eat lunch by himself?

Introduction

Maggie lived in a quiet suburban neighborhood with her husband Adam and their three children. This Saturday, Maggie was helping do some work around the house. She had to help catch up on all the things they neglected during the week.

Protagonist Consistent Elaboration

Maggie preferred to split up the household chores. She liked to cook and enjoyed preparing large meals for the family each weekend. She considered herself talented in the kitchen. She could make a variety of ethnic foods that she thought seemed authentic. She recently learned how to make stir fry and Maggie thought it tasted wonderful.

Protagonist Inconsistent Elaboration

Maggie preferred to split up the household chores. She really disliked cooking and insisted that her husband cook all the meals for the family. Maggie had never been able to cook very well. She felt nothing she made ever came out the way it was supposed to. She never made dinner for friends because she just couldn't cook.

Second Character's Consistent Beliefs Elaboration

Adam was excited because Maggie always found time on the weekends to cook something special for dinner. He loved her cooking and enjoyed the variety of foods she was able to prepare. He had always been impressed by how natural she seemed in the kitchen. Adam thought Maggie made gourmet cooking look easy.

Second Character's Inconsistent Beliefs Elaboration

Adam was glad that Maggie wasn't in the kitchen making another one of her mystery dinners. He was really getting tired of humoring her by always telling her that her cooking was good. Truthfully, he couldn't stand her cooking. He never told her how awful her cooking was because he didn't want to hurt her feelings.

Filler

This afternoon, Maggie and Adam were working in the yard. Maggie had been bugging her husband all week about the lawn. Their new neighbors were moving in today and Maggie wanted their house to look nice for the new people. During the late afternoon, the new neighbors pulled into their driveway. Maggie and her husband went over to introduce themselves and offered to help unload the truck. Maggie pointed out to Adam that the new neighbors wouldn't be able to settle into their house today, and she thought of what else she could do to help.

Target Sentences

Maggie decided to make dinner for them.
She would make them homemade lasagna.

Conclusion

The neighbors accepted the offer for dinner. Maggie got the impression that she was really going to like her new neighbors.

Comprehension Question

Did Maggie live in a house?

Introduction

Owen and his classmate Ginny would be finishing graduate school soon and had already begun looking for jobs. Most job advertisements they found were academic positions which required both teaching and research. Both Owen and his classmate were concerned about what types of jobs they would get.

Protagonist Consistent Elaboration

The part of graduate school that Owen liked most was teaching. He hoped his new job would only consist of teaching responsibilities. He enjoyed getting to know his students and thought they had favorable things to say about him. He thought he was a good teacher and found teaching more rewarding than doing research.

Protagonist Inconsistent Elaboration

The part of graduate school that Owen liked most was *doing* research. To *him*, there was nothing more enjoyable than discovering something that had not been known before. He was a successful researcher and wanted to find a job that only consisted of research responsibilities. Owen was not interested in finding a teaching position.

Second Character's Consistent Beliefs Elaboration

In addition to worrying about herself, Ginny was also concerned about Owen finding a good job. Ginny thought that Owen was a gifted instructor, and she really wanted him to get a good teaching job. She thought Owen related well to students. Ginny thought he would find a teaching job much more satisfying than a research position.

Second Character's Inconsistent Beliefs Elaboration

In addition to worrying about herself, Ginny was also concerned about Owen finding a good job. Ginny thought that Owen was a gifted researcher, and she hoped he would get a good research position. She thought he was a poor instructor and that his students probably didn't like him very much. She thought he would be happier doing research.

Filler

A constraint that both Owen and Ginny faced in finding jobs was geographic location. Owen really wanted to stay in New England because he loved to ski. Recently, there hadn't been enough time to ski because he had gotten involved in the department undergraduate organization. Today he was going to have lunch with Ginny and try to convince her to get involved. At lunch, Owen asked her about the club meeting and she agreed to help. He was happy to have that issue settled and suggested that they spend the rest of their lunch break working on their job applications. Owen was excited to tell Ginny about a new job he had found.

Target Sentences

Owen applied for a teaching position.

This university discouraged research.

Conclusion

After lunch, Owen had to attend a class. This was the last graduate class he had to take and then he would be totally done with school.

Comprehension Question

Was Owen looking for a job in New England?

Introduction

As Emma finished unpacking the last of the boxes, she suggested to her husband Steve that they should take their daughter out to eat tonight. Emma thought it would be nice to take a break from unpacking. She had a long week ahead because it would be the first week of medical school.

Protagonist Consistent Elaboration

Emma enjoyed being a busy person and was happier when she was busy. In fact, Emma had planned out her schedule so that she could attend classes at night and stay home with her daughter during the day. She had also looked into getting a part-time job. She was sure she could handle such a busy schedule.

Protagonist Inconsistent Elaboration

Emma was concerned about how she would handle the demands of school and her family. She already felt overwhelmed by everything she had to do. She was worried about the financial strain she was putting on her husband, but she knew she couldn't handle having a part-time job. She didn't think she would have enough time.

Second Character's Consistent Beliefs Elaboration

Emma's husband Steve was amazed by how much energy Emma had. He thought Emma would do well in school and still find time to be with the family. He also expected that she would want to work a little to help with the family finances. Steve was confident that Emma could handle taking on that many responsibilities.

Second Character's Inconsistent Beliefs Elaboration

Emma's husband Steve noticed that she was tired from all the moving. He was concerned about how Emma would handle the demands of school and her family. He didn't think she could handle trying to accomplish so much. He also didn't think she would have time to work in order to help with the family finances.

Filler

Emma and Steve agreed that they should go out to eat. They decided to get some sandwiches and take them to the nearby beach. Their daughter loved playing at the beach and Emma thought the fresh air would feel good. On their way to the beach, they stop at the local convenience store to buy some snacks. When she was in the store, Emma decided she wanted to buy the local newspaper. Emma and Steve were interested in learning about the area.

Target Sentences

Emma looked for a new job in the paper.
She wanted to see what was available.

Conclusion

Emma's family enjoyed their time at the beach. Emma was happy that they had moved to such a beautiful part of the country.

Comprehension Question

Was Emma studying to be a lawyer?

Introduction

It seemed hotter than normal in the gym today. Sophia was working on the uneven bars and the humidity in the gym was making it difficult for her to grip the bars. Her coach Roger kept reminding Sophia to put extra chalk on her hands.

Protagonist Consistent Elaboration

Sophia was getting frustrated because she really needed the practice. Sophia thought she was ready to compete this year. She was confident that her floor routine was the best one she had ever done. She was also proud of the improvements she had made on the uneven bars. She was sure that this would be her year to win.

Protagonist Inconsistent Elaboration

Sophia was getting frustrated because she needed the practice. She didn't think her training was going very well this year, and she didn't feel confident about entering any competitions. She thought her floor routine was the worst one she had ever done. In general, Sophia didn't think this would be a good year for her to enter any competitions.

Second Character's Consistent Beliefs Elaboration

Coach Roger was getting frustrated because he thought Sophia needed the practice. He wanted her to compete seriously this year. He was confident that her floor routine was the best one she had ever done. He was also proud of the improvements she had made on the uneven bars. He was sure that this would be Sophia's year to win.

Second Character's Inconsistent Beliefs Elaboration

Coach Roger was getting frustrated because he thought Sophia needed the practice. He didn't think her training was going well and he didn't feel confident about entering her in any competitions. He thought her floor routine was the worst one she had ever done. In general, the coach didn't think this would be a good year for Sophia to compete.

Filler

The gym where Sophia trained was in the process of being renovated. Everyone was excited for the improvements. Sophia was most excited about the air conditioning that was being installed today as she practiced. By the end of the week, she wouldn't have to deal with all this uncomfortable heat. At the end of her practice, she had to go meet with the office manager at the gym in order to set up a training schedule for the next week. The manager asked Sophia how she and Coach Roger felt about her training and what plans they were making for some of the upcoming events.

Target Sentences

Sophia said she felt ready to compete.
She would work out her schedule today.

Conclusion

Her workout schedule had to be flexible because she relied on her parents for transportation to the gym. She would talk to her mom tonight and work out a schedule for the next few weeks.

Comprehension Question

Was the gym being renovated?

Introduction

Vince had been working as a nurse for five months. He worked in the emergency room and found his job very challenging. Vince recently had switched to working nights and had to get used to working with the new chief of staff, Dr. Diane Kennon.

Protagonist Consistent Elaboration

Vince always felt comfortable taking care of patients on his own. He thought he was a talented nurse who really cared about his patients. He put a lot of effort into his work and quickly became very good at his job. He was often complemented on his work and asked to take on a lot of responsibility.

Protagonist Inconsistent Elaboration

Vince never felt comfortable taking care of patients on his own. He preferred to have someone else also check on his patients to make sure he had done a good job. Vince didn't think he could handle the job much longer. He felt incompetent and was afraid he would someday make a horrible mistake.

Second Character's Consistent Beliefs Elaboration

Dr. Kennon always felt comfortable with Vince's work. She felt that he was a talented nurse who really cared about the patients. She trusted that he would take good care of her patients. Dr. Kennon thought that Vince was the most competent nurse on the staff and she tended to give him more responsibility.

Second Character's Inconsistent Beliefs Elaboration

Dr. Kennon never felt comfortable with Vince's work. She always felt that she needed to check up on her patients to make sure Vince had done his job. She didn't understand why he was a nurse or how he had been on the job this long. Dr. Kennon thought he was the most incompetent nurse on the staff.

Filler

At the hospital tonight, Vince was helping organize a blood drive. He expected to spend the entire night in the supply closet making sure everything was ready. While counting some boxes, he heard someone in a nearby waiting room scream for help. Vince ran as quickly as he could and was the first person to respond. He found a woman kneeling near a man on the floor. He determined that the man had a heart attack and quickly began chest compressions. Vince continued doing what he could as Dr. Kennon ran over to help.

Target Sentences

Vince had saved the young man's life.
He was proud of what he had just done.

Conclusion

Vince sat down against the wall and tried to calm down. He was upset by what had just happened. Vince thought he needed some time to relax before he returned to complete his inventory.

Comprehension Question

Was Vince organizing a blood drive?

Introduction

Today Katie's third grade class was going to an assembly. Her school had invited a man to bring in his pet snakes to show the children. Katie's teacher Mr. Smith kept asking the students in her class to quiet down.

Protagonist Consistent Elaboration

Katie was excited to go to the assembly in the auditorium today to see the man with all the snakes. Katie loved animals and was curious about animals she had never seen before. She wondered how big the snakes would be and what they would feel like. She wanted to try and pet them if she could.

Protagonist Inconsistent Elaboration

Katie was dreading going to the assembly in the auditorium today. She didn't want to see the man with all the snakes. Katie was afraid of creatures she had never seen before. She thought snakes were gross, and she was afraid to look at them. She hoped she would not have to stand close to their cages.

Second Character's Consistent Beliefs Elaboration

Mr. Smith thought the children were excited to see the snakes, especially Katie. Mr. Smith thought that Katie was his brightest student and that she would enjoy learning about the snakes. He had noticed that Katie always seemed very curious about new things. He hoped she could get a seat up close and maybe touch one of the snakes.

Second Character's Inconsistent Beliefs Elaboration

Mr. Smith was worried about taking his class to the assembly today. He was worried that some of the younger children like Katie would be afraid of the snakes. He thought Katie was a very timid child who would get scared easily. He expected that she would not be willing to sit up close or touch the snakes.

Filler

Before the assembly, Mr. Smith had the children clean out their desks. Katie finished before anyone else, so she got to lead the line of students down the hall toward the auditorium. As they entered the auditorium, Katie saw a friend of hers from another class. Katie took a seat near her friend and they began talking. As the lights began to dim and the guest speaker came onto the stage, Mr. Smith leaned over and told Katie and her friend to pay attention. When the speaker asked if anyone wanted to come up on stage, Katie noticed Mr. Smith look around at all of his students.

Target Sentences

Katie was the first girl to volunteer.
She quickly made her way to the stage.

Conclusion

Katie was the first person to hold the snake. She was surprised at how long the snake was and how heavy he felt around her shoulders. She didn't think she would ever forget this experience.

Comprehension Question

Was Katie in high school?

Introduction

Laura had just started her freshman year in college. She had decided to attend a small college in Vermont. The school was three hours away from home, and Laura missed seeing her older brother Taylor.

Protagonist Consistent Elaboration

Since she had arrived at school, Laura had not made any friends. She was stuck in a small triple with two girls who already knew each other, and Laura felt left out. Laura really wished she had never come to college in the first place. She missed home and wanted to get out of this place.

Protagonist Inconsistent Elaboration

Since she had arrived at school, Laura had made a lot of new friends. She loved her new freedom and living far away from her parents. Laura thought it was important for her to be away from home so that she could become more independent. She was happy being away from home and loved being in college.

Second Character's Consistent Beliefs Elaboration

Taylor didn't think that Laura was ready to be away from home. He thought Laura had a hard time meeting people and would probably be more comfortable at a school closer to home. Taylor worried that Laura might be unhappy so far away from her family. He hoped she would consider transferring to a school closer to home.

Second Character's Inconsistent Beliefs Elaboration

Taylor had been excited when Laura decided to go away to school. He thought she was incredibly bright and friendly which would help her adjust in a new environment. He also thought it was important for Laura to be away from their parents and gain some independence. He thought Laura would love the college she had chosen.

Filler

Laura talked to Taylor often while away at school. She liked to hear about her brother's interesting job as a movie critic. In fact, he was doing some business close to Laura's school this weekend and was taking Laura to a movie screening. Laura was happy to see her brother when he came to get her in the dorm. She felt special being dressed up and riding with him in an expensive car to the movie screening. While they were in the car on the way to the city, Laura announced that she had some news to tell Taylor.

Target Sentences

Laura told him she was quitting school.
She wanted to go to a school near home.

Conclusion

There was a college within commuting distance from her house, and Laura thought she would like to apply for the Spring term. She would still give college a chance.

Comprehension Question

Was Laura at college in Vermont?

Introduction

Chris and Martha were celebrating their twentieth wedding anniversary. Chris had wanted to take his wife to a special dinner, but he had been asked to attend a school board meeting tonight. It was a good thing that his wife didn't mind waiting until tomorrow to celebrate.

Protagonist Consistent Elaboration

Chris was generous with his time and was always volunteering to work on committees and community projects. Community service was important to him because he enjoyed helping people who were less fortunate. His community involvement had earned Chris recognition by local volunteer groups, and Chris was proud of his accomplishments. He always seemed to have time to help others.

Protagonist Inconsistent Elaboration

Chris was upset that he had to go to a meeting tonight. He hated meetings and didn't like getting involved in committees or community projects. He was happiest being at home and having time with his family. Chris hoped that the meeting would be short and that he wouldn't have to get involved in any projects.

Second Character's Consistent Beliefs Elaboration

Martha was proud of her husband's community service. She was amazed at how well he balanced all his volunteer activities and committee work with spending quality time with their kids. She admired her husband's desire to help less fortunate people. Martha was glad Chris had recently been recognized for all his hard work by a local volunteer group.

Second Character's Inconsistent Beliefs Elaboration

Martha thought that Chris was upset about having to attend the meeting tonight. She couldn't picture her husband enjoying sitting through the meeting, and she didn't think he was interested in getting involved in a community volunteer program. Martha hoped his meeting was short and that he wouldn't have to go back again. She assumed Chris wasn't interested.

Filler

In order to make up for not celebrating their anniversary tonight, Chris made special plans to take Martha to a concert tomorrow night. Chris enjoyed hearing new music and his wife said this group was really good. They typically liked the same music. Chris had also bought her a beautiful necklace which he planned to give her when he returned home tonight. As he sat through the meeting, Chris thought about how Martha would react when she saw the necklace. As he thought about Martha, Chris heard the gentleman conducting the meeting ask for volunteers for an upcoming charity ball.

Target Sentences

Chris raised his hand to offer to help.
He thought it would be a nice gesture.

Conclusion

Chris hurried home after his meeting because he couldn't wait any longer to give Martha her present. He was pleased when he saw how much she loved the necklace.

Comprehension Question

Did Chris buy his wife a new car?

Introduction

Gary and his co-worker Janet both worked for a large car manufacturing company. They had become good friends because they worked next to each other on the final assembly of the vehicles. Recently, Gary had been offered a promotion to be supervisor of his own production team.

Protagonist Consistent Elaboration

Gary felt he was perfect for the promotion because he was very good at acting as an authority figure. He was a competitive man and would rather oversee people than be part of the actual team. He thought he would enjoy being able to fire people who were not qualified to be working for the company.

Protagonist Inconsistent Elaboration

Gary wasn't sure it was a good idea to accept the promotion. He didn't like being in charge of other people's work and was happy in his current job. He hated competing with his coworkers and thought he would have trouble firing someone. Gary wasn't excited about the opportunity to move up in the company.

Second Character's Consistent Beliefs Elaboration

Janet felt Gary was perfect for the promotion because she thought he was very good at acting as an authority figure. She thought Gary was very competitive and that he would be good at overseeing projects. She thought he would probably enjoy being able to fire people who were not qualified to work for the company.

Second Character's Inconsistent Beliefs Elaboration

Janet thought it was a bad idea for Gary to accept the promotion. She thought he worked well in his current position and would be a bad supervisor. She didn't think he enjoyed being competitive and she was sure he would have trouble firing people. Janet thought it would be a bad idea for him to take the job.

Filler

Today at lunch, Gary joined Janet and some of his other friends at their table. Gary had brought some cookies in to share with people. He often stopped by a local deli that had the best desserts and had been telling people about the place. Gary brought in the cookies to give his friends a sample of some of their desserts. Everyone loved the cookies and several people asked for directions to the deli. Gary planned to bring in a cake tomorrow to celebrate some good news with Janet and his friends.

Target Sentences

Gary told his friends he took the job.
He was excited to get this promotion.

Conclusion

Everyone at the table was shocked by the news. Gary was pleased that people were happy for him and willing to support him in any way they could.

Comprehension Question

Did Gary work for a car manufacturer?

Introduction

Jane was a single mother who had one son in preschool. She recently went on a few dates with a man who was new at work. Jane had told a close neighbor Jack all about this new boyfriend and asked whether or not she should reveal that she had a son.

Protagonist Consistent Elaboration

Jane wanted to tell her boyfriend about her son. She felt that it was important to be honest with people and that it wasn't fair to hide her son from him. She thought he had the right to know about something this important before they became serious. Jane was excited to tell him about her wonderful son.

Protagonist Inconsistent Elaboration

Jane didn't want to tell her new boyfriend about her son. She felt that if she told him he wouldn't want to see her anymore. Jane thought she should let him get to know her better first. She didn't want to risk losing him. She knew she wasn't ready to tell him she was a mother.

Second Character's Consistent Beliefs Elaboration

Jack thought that Jane should tell this new guy about her son. He felt that it was important for her to be honest with people and that it wasn't fair for her to hide her son from her dates. Jack thought that the guy had a right to know about something this important before the relationship got serious.

Second Character's Inconsistent Beliefs Elaboration

Jack didn't think that Jane should tell this new guy that she had a son. He felt that if Jane told the guy, he wouldn't want to see her anymore. Jack thought that she should let the guy get to know her better first. He thought Jane needed to feel secure with this guy before she mentioned her child.

Filler

While Jane was talking to Jack, she thought it would be a good time to ask him for his help tomorrow evening. Jane had offered to watch someone's dog all week and wouldn't be able to walk the dog tomorrow after work. Jane had to go to her mother's house for dinner tomorrow. It would be more convenient to leave after picking her son up from preschool. Jane was grateful when Jack agreed to help. As they continued talking, Jane told Jack that she had decided to take her son out for an important evening tonight.

Target Sentences

Jane wanted him to meet her boyfriend.
She thought she had waited long enough.

Conclusion

Jane was a little nervous as she got ready to leave. She called her new boyfriend and asked if she could come over. Jane was glad when he said he would be home.

Comprehension Question

Was Jane married?

Introduction

Joe worked in an art studio that he rented with several old classmates from design school. He was working in the studio tonight with a friend who was a sculptor. Joe wanted to become a famous painter, and the sculptor Susie asked to see some of his new paintings.

Protagonist Consistent Elaboration

Joe thought his paintings were very good. He was extremely proud of his latest work and didn't mind showing them to people. He wanted to try to sell his work by displaying them at a nearby gallery. He thought these paintings might help him build up his reputation in the art community as well as help him financially.

Protagonist Inconsistent Elaboration

Joe didn't think his paintings were very good. He was really disappointed with the way his latest work had come out. He was embarrassed to show them to Susie. He didn't think these paintings were good enough to show in a gallery, and he was convinced that no one would want to buy any of them.

Second Character's Consistent Beliefs Elaboration

Susie thought that Joe was a very talented artist, and she was impressed by his latest work. She thought he should try to sell his work by displaying them at a nearby gallery. She thought his latest paintings would help him build his reputation in the art community and that people would be interested in buying them.

Second Character's Inconsistent Beliefs Elaboration

Susie didn't think that Joe was very talented, and she didn't like his recent work. She felt badly for him as she looked at the paintings because she thought they were very poor. Susie hoped Joe didn't plan on showing his recent work publicly because she thought it might ruin his reputation in the art community.

Filler

As Joe was showing Susie the paintings, the phone rang. He ran through the messy studio to grab the phone. It was one of the other artists who shared the studio calling to invite them to a party nearby. Joe convinced Susie that it would be fun to get out for a while. Joe was excited to see a lot of his friends at the party who he hadn't seen in a while. He was especially happy to see one friend who recently got a job at a museum. As they were talking, his friend asked Joe and Susie if they were interested in having a showing together.

Target Sentences

Joe agreed to show his favorite pieces.
He hoped to earn money by selling them.

Conclusion

Joe said he would need a few weeks to pull things together for a show. He had a lot of work in progress that he would like to finish.

Comprehension Question

Did Joe share studio space with friends?

Introduction

Amy and her husband Brian decided to make a New Year's resolution together this year. She had thought about it a lot and came up with a great idea. Amy suggested that they resolve to try something new every month.

Protagonist Consistent Elaboration

This month, Amy wanted to try something dangerous such as rock climbing. She considered herself to be pretty daring when it came to trying new things. She was sure that something a little dangerous would be exciting to try. She didn't think she would be scared to try something like that because she was pretty brave.

Protagonist Inconsistent Elaboration

This month, Amy jokingly suggested trying something new like rock climbing. But as soon as she suggested it, she regretted it. She didn't think she could handle something like that because she wasn't a very brave person. In fact, she was sure she would refuse to try something like that if her husband pushed the idea.

Second Character's Consistent Beliefs Elaboration

This month, Brian wanted to try something dangerous such as rock climbing. He thought Amy would be excited about the idea. He thought she was pretty daring when it came to trying new things. He was sure that she would find the danger exciting. Brian always felt that Amy was a brave person who would take risks.

Second Character's Inconsistent Beliefs Elaboration

This month, Brian wanted to try something dangerous such as rock climbing. However, he didn't think Amy would like that idea. He didn't think Amy was a very brave person. He was sure she would refuse to try something dangerous like that. He suspected that Amy was somewhat afraid of taking risks like that.

Filler

Last month, Amy and her husband Brian treated themselves to a weekend at a resort just a few hours away from where they lived. While they were there, Amy spent most of her time at the spa. She got a massage each day and enjoyed being pampered. While Amy was inside all day, Brian spent a lot of time relaxing in the sun and reading novels. They wished they could get away like that more often. They talked about doing something similar this month, but Amy told Brian she had a better idea.

Target Sentences

Amy suggested that they go parachuting.
She looked into how much it would cost.

Conclusion

Amy didn't have a hard time convincing Brian that she had a good idea. He loved the suggestion and Amy made reservations right away.

Comprehension Question

Did Amy dislike her time at the spa?

Introduction

While walking down the city street to their new apartment, Tucker felt angry that his mother made them move to this place. He was upset and thought about all the friends he had left behind. When they moved into this new neighborhood, some boys from the local Boy's Club came and introduced themselves to Tucker.

Protagonist Consistent Elaboration

Tucker thought the club would be a great way to meet people. He was nervous about meeting people at school and thought these boys could show him around. He had already met several Boy's Club members and knew they would be fun to hang out with. Tucker was sure this would help him adjust to his move.

Protagonist Inconsistent Elaboration

Tucker had no interest in hanging out with the boys in the club. He thought it was a waste of time and that they were all nerds. He didn't want to join because he thought it was a lame way to meet people. He didn't want the kids at his new school to make fun of him.

Second Character's Consistent Beliefs Elaboration

Tucker's mother thought it would be a great way for him to meet people. She thought Tucker would really enjoy spending time with these boys. She knew that having friends in his new neighborhood would help him adjust to the move. Plus, she thought the nice young boys could help him out in his new school.

Second Character's Inconsistent Beliefs Elaboration

Tucker's mother thought it would be better for him to make new friends at school. She was worried that being in a social group like the Boy's Club would distract him from his school work. She thought that Tucker should get serious about school and she wasn't going to allow him to spend all his time at some club.

Filler

Tucker would be starting school next week. This new school was much bigger than his old school, and he wanted to make a good impression on the first day. Today Tucker's mother took him shopping for some new school clothes. There was a nice mall close to their new apartment. As Tucker and his mother walked to her car, Tucker stopped to talk to some guys he had recently met. When one of the boys asked him to come over and play later that night, Tucker asked his mother if it would be alright and she approved.

Target Sentences

Tucker really intended to join the club.
He was sure to make good friends there.

Conclusion

Tucker said goodbye to the boys and continued walking with his mother. He was feeling a little better about living in this new neighborhood.

Comprehension Question

Did Tucker join a gang?

APPENDIX B

PASSAGES FROM EXPERIMENTS 2 AND 3.

Introduction from Experiment 2

Jessica had always been fascinated by different cultures. Her family had decided to take a trip to France last summer. Jessica and her younger brother Kent were glad their parents had chosen France as a vacation spot.

Introduction from Experiment 3 - Added Emphasis on Character Prominence

Jessica had always been fascinated by different cultures. Her family had decided to take a trip to France last summer. Jessica had often dreamed of visiting Paris, and she knew that this trip was the opportunity of a lifetime. Before the trip, she wondered if Paris would be what she had expected. Jessica had imagined that it would be a glamorous city filled with artists and beautiful people. She couldn't wait to see what it was like. Jessica and her younger brother Kent were glad their parents had chosen France as a vacation spot.

Second Character's Consistent Beliefs Elaboration

Kent was excited to hear Jessica speak French on their trip. He had wanted to hear her use some of the expressions she had learned in her classes at school. Kent thought that Jessica sounded sophisticated when she spoke with her French accent. He hoped people would be able to understand her.

Second Character's Inconsistent Beliefs Elaboration

However, Kent was very worried about Jessica being an embarrassment on the trip. He was afraid that Jessica would make a fool out of herself trying to speak French. Kent thought that she sounded ridiculous when she said things using her fake French accent. He didn't think anyone could possibly understand her.

Filler - Second Character Present

On their trip, her family spent four days in Paris and Jessica didn't think that was enough time to see everything. After their stay in the city, Jessica and her family traveled around the rural countryside. The family ended their trip with several days on the Riviera. On the last day of the trip, the entire family decided to get lunch at a quaint cafe near the beach. It was an expensive restaurant and Jessica was especially excited about such a nice treat before she returned home. When the waiter came to take their orders, Jessica ordered first because her brother Kent was still deciding.

Filler - Second Character Removed

On their trip, her family spent four days in Paris and Jessica didn't think that was enough time to see everything. After their stay in the city, Jessica and her family ended their trip with several days on the Riviera.

On the last day of the trip, Jessica and her mother decided to get lunch at a quaint cafe near the beach while her father and brother went swimming.

Jessica was excited about the chance to eat at an expensive restaurant before she returned home. She wanted to try everything on the menu. When the waiter came to take their orders, Jessica ordered first because her mother was still deciding.

Target Sentences

Jessica ordered in flawless French.
The waiter understood her perfectly.

Conclusion

Jessica was excited that she could read and understand the menu. She hoped she would enjoy the meal she had ordered.

Comprehension Question

Did Jessica's family visit Paris?

Introduction from Experiment 2

Mary's old college boyfriend John was in town on a business trip. She had made plans for them to have dinner together tonight. Mary left a message at his hotel with the name and address of the restaurant where she had made reservations.

Introduction from Experiment 3 - Added Emphasis on Character Prominence

Mary's old college boyfriend John was in town on a business trip. She had made plans for them to have dinner together tonight. Mary couldn't believe how nervous she was just to see an old friend. She cleaned her entire house and brought some old photo albums out of storage. She enjoyed remembering what fun they used to have together. After cleaning the house, Mary made reservations for dinner and then called John's hotel. Mary left a message at the hotel with the name and address of the restaurant where she had made reservations.

Second Character's Consistent Beliefs Elaboration

When he got the message, John wondered what kind of food the restaurant served. John had always thought that Mary was a junk food junky who enjoyed eating anything that was easy to fix. He pictured her eating at McDonald's several times a week. John didn't think Mary ever worried about her diet or bothered to eat nutritious foods.

Second Character's Inconsistent Beliefs Elaboration

When he got the message, John wondered what kind of food the restaurant served. He figured they would eat somewhere healthy because he thought his friend Mary was a vegetarian. John had considered Mary to be one of the most health-conscious people he knew. He thought she probably hated eating unhealthy things that were cooked in grease.

Filler - Second Character Present

Mary and John were both looking forward to seeing each other tonight. Mary was nervous about the evening so she arrived at the restaurant a little early. After about ten minutes, John arrived at the restaurant. Mary was surprised by how little he had changed in the past few years. Because she was starving, she suggested that they look over their menus before catching up on all their news. Finally, Mary and John signaled the waiter to come take their orders.

Filler - Second Character Removed

Mary and John were both looking forward to seeing each other tonight. Mary was nervous about the evening so she arrived at the restaurant a little early. After about ten minutes, John arrived at the restaurant.

They visited for a few minutes, and then John excused himself to go make a phone call.

As she sat there waiting, Mary decided to order herself a drink. Mary signaled to the waiter to come over to her table. Because she knew what she wanted, she also ordered her meal.

Target Sentences

Mary ordered a cheeseburger and fries.
She handed the menu back to the waiter.

Conclusion

The waiter said he would be back shortly with Mary's drink. Mary thought the service here was excellent and she was glad she had chosen this restaurant.

Comprehension Question

Was Mary meeting her husband for lunch?

Introduction from Experiment 2

Ken was a math teacher at a high school, and he was excited for his summer break. One thing Ken intended to do this summer was to help his new colleague Michelle get to know the area better. They both planned to join some type of club this summer.

Introduction from Experiment 3 - Added Emphasis on Character Prominence

Ken was a math teacher at a high school, and he was excited for his summer break. One thing Ken intended to do this summer was to help his new colleague Michelle get to know the area better. Ken knew the area well and thought it was a nice place to live. He had no intentions of ever moving away. Ken always enjoyed showing people around, and he was looking forward to spending time with someone new. He was happy to help Michelle learn her way around because he thought they had a lot of common interests. In fact, they both planned to join some type of club this summer.

Second Character's Consistent Beliefs Elaboration

Michelle was curious about what type of activity Ken would enjoy. She thought he probably enjoyed physical activities that helped him stay in shape like jogging and lifting weights. Michelle thought Ken seemed like a very muscular person who probably loved tough, physical contact sports which allowed him to match his strength against another person.

Second Character's Inconsistent Beliefs Elaboration

Michelle was curious about what type of activity Ken would enjoy. She had hoped to get into shape, but she thought Ken was a small guy who wouldn't be interested in that. She thought he probably hated contact sports. Michelle thought Ken would be embarrassed to exercise with her because he probably wasn't very strong.

Filler - Second Character Present

Today, Ken was taking Michelle on a tour of the downtown area. Ken had been raised here, so he had watched the city develop in the past thirty years. While they were walking around, Ken took them past a new community center and gymnasium he had noticed. There he spotted an advertisement for the center's summer programs on display in the window. They decided to go in and check out the facility. Once inside, Ken and Michelle went up to the front desk where there was more information about the summer programs.

Filler - Second Character Removed

Today, Ken was taking Michelle on a tour of the downtown area. While they were walking around, Ken took them past a new community center and gymnasium he had noticed.

Ken decided to go in and check out the facility while Michelle went into a gift shop across the street.

Ken spotted an advertisement for the center's summer programs on display in the window. Once inside the community center, Ken went up to the front desk where there was more information. He asked the clerk for information about the prices of their programs.

Target Sentences

Ken decided to enroll in boxing classes.

He felt this would be the perfect hobby.

Conclusion

Ken signed up for the class and paid the registration fees. He couldn't wait for the class to begin. When he was finished, he wanted to continue his tour of downtown.

Comprehension Question

Did Ken recently move to the area?

Introduction from Experiment 2

Jennifer and an elderly neighbor Howard enjoyed walking everyday in the park near their houses. She was glad to have someone to talk to tonight because today had been a hectic day. As they walked, Jennifer told a story about the fight she had this morning with her boyfriend.

Introduction from Experiment 3 - Added Emphasis on Character Prominence

Jennifer and an elderly neighbor Howard enjoyed walking everyday in the park near their houses. She was looking forward to having someone to talk to tonight because today had been a hectic day. Jennifer knew that a long walk would help her clear her head. She had worked too long today and was under a lot of stress. As soon as Jennifer got home from work, she went over to Howard's house to get him. As they walked, Jennifer told a story about the fight she had this morning with her boyfriend.

Second Character's Consistent Beliefs Elaboration

Howard listened to the story and had a hard time holding back his opinions. He knew Jennifer would do the right thing and end the relationship. He thought she was a strong person and would be happier on her own. Howard thought Jennifer would prefer being independent and not having to answer to anyone.

Second Character's Inconsistent Beliefs Elaboration

Howard listened to the story and had a hard time holding back his opinions. Howard thought that Jennifer was too dependent on people. He didn't support her tolerating a poor relationship simply to avoid being alone. He didn't think Jennifer had the courage to end her relationship with her boyfriend and be on her own.

Filler - Second Character Present

Jennifer and Howard were nearing the end of their walking path when she decided to ask Howard if they could have dinner together tonight. Jennifer knew he wouldn't pass up an offer to have a homemade dinner. When they arrived at her house, they went directly inside and had drinks while Jennifer finished preparing their dinner. When Jennifer's phone began to ring, she ran over and picked it up. Jennifer expressed her surprise to Howard upon hearing her boyfriend's voice.

Filler - Second Character Removed

Jennifer and Howard were nearing the end of their walking path when she decided to ask Howard if they could have dinner together tonight. Jennifer wasn't surprised when Howard accepted because he never passed up an offer to have a homemade dinner.

Because Jennifer still had to prepare dinner, Howard went home to shower.

As Jennifer walked into her house, her phone began to ring. She quickly shut the door and ran over to pick it up. Jennifer was surprised upon hearing her boyfriend's voice.

Target Sentences

Jennifer told him to never call again.
She didn't intend to see him anymore.

Conclusion

Jennifer got off of the phone as quickly as she could and started working on dinner. She was hungry and didn't want to keep Howard waiting.

Comprehension Question

Did Jennifer order pizza for dinner?

Introduction from Experiment 2

Kim Parks had been driving for fourteen hours straight. She was tired and asked her father to drive for a little while. Kim was moving to Los Angeles where she had gotten a job after college.

Introduction from Experiment 3 - Added Emphasis on Character Prominence

Kim Parks had been driving for fourteen hours straight. She was tired and asked her father to drive for a little while. Kim was moving to Los Angeles where she had gotten a job after college. She didn't realize how long it would take to drive across country. Kim enjoyed driving but was getting tired and bored being on the road this long. She knew she was too tired to drive now and wanted to try to take a nap. Kim was glad that her father was willing to help with the driving.

Second Character's Consistent Beliefs Elaboration

Kim's father was excited about Kim's new job. Mr. Parks was impressed with her salary and was sure she would be able to live comfortably on her own. In addition to covering her expenses, he thought Kim would have enough money to buy some furnishings for her new apartment. Mr. Parks was very proud of his daughter.

Second Character's Inconsistent Beliefs Elaboration

Kim's father was worried about Kim making this move. Mr. Parks didn't think Kim's salary was enough to afford an apartment in California. He didn't think she would be able to live comfortably or afford to buy furnishings for her new apartment. He was concerned that Kim's apartment would be empty and that she would be unhappy.

Filler - Second Character Present

Kim and Mr. Parks took a week to make the long drive across the country. When they arrived at her apartment, Kim started unpacking right away. After unloading all the things from the truck, Kim and her father decided to tour the city a little. Kim was excited to be in California and could tell that her father was having fun too. After the long day of walking around the city, they decided to head back to the apartment. On their way, they passed a large department store and decided to go inside. Kim and Mr. Parks looked around for a while and found some things they liked.

Filler - Second Character Removed

Kim and Mr. Parks took a week to make the long drive across the country. When they arrived at her apartment, Kim started unpacking right away. After unloading all the things from the truck, Kim and her father decided to tour the city a little because they were excited to be in California.

After the long day of walking around the city, Kim's father decided to head back to the apartment.

Kim continued to walk around for a little while longer, and during her walk she passed a large department store. Kim decided to go inside the store to look around. Kim found some things she liked.

Target Sentences

Kim ordered a large living room set.
She also needed to buy several lamps.

Conclusion

When she was finished looking at the furniture, Kim decided to look in the clothing department. She didn't really like anything she saw and decided to leave.

Comprehension Question

Was Kim moving into a new apartment?

Introduction from Experiment 2

Dan was in his senior year in high school and had recently become part of a team tutoring program. Today, he had to attend a meeting to meet his tutoring partner, Alice. While walking down the hallway toward the meeting room, Dan was surprised to find her already there waiting.

Introduction from Experiment 3 - Added Emphasis on Character Prominence

Dan was in his senior year in high school and had recently become part of a team tutoring program. Dan was taking a lot of hard classes this semester, and he was worried about all of the commitments he was making. He liked to be busy though and knew that this tutoring experience would look good on his resume. Dan was excited for the opportunity. In fact, today he had to attend a meeting to meet his tutoring partner, Alice. While walking down the hallway toward the meeting room, Dan was surprised to find her already there waiting.

Second Character's Consistent Beliefs Elaboration

Alice was excited to work with Dan. She thought he was good at both math and science. She figured he had taken every science course the school had offered. She imagined he probably even enjoyed the science labs they had to do. She thought Dan would be better at helping their student with those subjects.

Second Character's Inconsistent Beliefs Elaboration

Alice was worried about working with Dan. She didn't think he was good at either math or science. Alice thought that Dan would prefer to work on other subjects. She noticed that he never spoke in their science class. Alice assumed that he didn't raise his hand to answer questions because he probably didn't know the answers.

Filler - Second Character Present

As Dan and Alice stood in the hallway waiting, they watched the other students walk by. Because it was the end of the day, most of the students were packing their bags and heading for the buses that were parked in front of the school. Dan felt awkward standing there with his tutoring partner because he didn't know what to talk to her about. After waiting a few minutes, the director arrived and unlocked the door for them. Once they were all seated around the conference table, the director began explaining their duties. Dan and Alice listened as the director asked them what topics they were interested in tutoring.

Filler - Second Character Removed

As Dan and Alice stood in the hallway waiting, they watched the other students walk by. Dan felt awkward because he didn't know what to talk to his tutoring partner about.

When the director arrived, Dan listened as Alice explained that she wouldn't be able to stay for the meeting because of a doctor's appointment. The director excused Alice from the meeting and invited Dan to join her in the conference room.

Dan followed the director into the room and took a seat at the conference table. The director explained Dan's duties to him. Dan listened as the director asked him what topics he was interested in tutoring.

Target Sentences

Dan really wanted to tutor chemistry.

He was anxious to get started today.

Conclusion

After the meeting was over, Dan caught the late bus home. He was excited to review some of the materials he had been given at the meeting.

Comprehension Question

Was Dan a college professor?

Introduction from Experiment 2

This semester Lance had convinced a good friend of his to sign up to take a psychology class with him. On the first day of the class, the teacher had the students form small discussion groups. Unfortunately, Lance and his friend Sarah didn't end up in the same group.

Introduction from Experiment 3 - Added Emphasis on Character Prominence

This semester Lance had convinced a good friend of his to sign up to take a psychology class with him. Lance was majoring in psychology and really liked all of his classes. His grades seemed to be improving also. Lance was always excited to start a new class, and he had heard really good things about this teacher. He thought it would be fun to take this class with a friend. On the first day of the class, the teacher had the students form small discussion groups. Unfortunately, Lance and his friend Sarah didn't end up in the same group.

Second Character's Consistent Beliefs Elaboration

As the professor walked around the room, Sarah noticed her stop at Lance's group. Sarah thought that Lance probably enjoyed the attention. Sarah had the impression that Lance was outgoing and liked to talk a lot, especially when he was trying to get to know new people. She assumed that Lance was probably leading his group discussion.

Second Character's Inconsistent Beliefs Elaboration

As the professor walked around the room, Sarah noticed her stop at Lance's group. Sarah felt badly for Lance because of how uncomfortable he must have felt being observed. She didn't think Lance liked participating in this type of exercise. Sarah thought Lance was shy and awkward around people, especially when he didn't know them very well.

Filler - Second Character Present

After the professor finished observing all of the groups, the class took a ten minute break. Lance and Sarah both decided to go to the vending machines and get a snack. They had been in classes all day and were starving. After they both bought something to eat from the machine, they headed back to the class. Lance had gotten himself a candy bar, and he hurried to finish it before returning to the classroom. As Lance and Sarah took their seats, the professor asked for one person from each group to share their group's thoughts.

Filler - Second Character Removed

After the professor finished observing all of the groups, the class took a ten minute break. Lance and Sarah both went to the vending machines to get a snack because they were starving.

Lance bought something to eat from the machine, but Sarah decided to skip the second half of class and go get dinner.

Lance returned to class by himself. Lance had gotten himself a candy bar, and he hurried to finish it before returning to the classroom. As Lance took his seat, the professor asked for one person from each group to share their group's thoughts.

Target Sentences

Lance became the speaker for his group.
He had really enjoyed their discussion.

Conclusion

Lance gave a nice summary of his group's discussion. The professor asked him several questions and then commented on what a good job his group had done.

Comprehension Question

Was Lance taking a psychology class?

Introduction from Experiment 2

Lynn needed to buy some sunscreen before heading to the beach. She went to a sporting goods store near her house where the store manager Bob could recommend a good brand of sunscreen. While she was in the store, Lynn looked around a little.

Introduction from Experiment 3 - Added Emphasis on Character Prominence

Lynn needed to buy some sunscreen before heading to the beach. She had fair skin and worried about the damaging effects of the sun. Lynn loved the beach though, and she was determined to spend this beautiful day outside. She always felt refreshed by the ocean air. Lynn ran a quick errand to a store before she went to the beach. She went to a sporting goods store near her house where the store manager Bob could recommend a good brand of sunscreen. While she was in the store, Lynn looked around a little.

Second Character's Consistent Beliefs Elaboration

The store manager noticed Lynn looking at some of the bikes. He thought she looked like a serious rider and he was excited at the possibility of a sale. He figured Lynn would only be interested in the high priced items so he gathered some information for her. He thought she would probably want a light-weight bike.

Second Character's Inconsistent Beliefs Elaboration

The store manager noticed Lynn looking at some of the bikes and watched her for a few minutes. He didn't think Lynn looked like a rider. The manager didn't think she looked very athletic, and he figured she was probably just browsing. He didn't anticipate making a big sale with her on any of the bikes.

Filler - Second Character Present

Lynn was glad when she saw the store manager Bob walking toward her. She wanted to ask about the sunscreen she had chosen to see whether or not it was strong enough. He said that it was a good choice. Lynn also asked for some gift ideas for a friend who loved to play golf. The store manager led Lynn to the golfing department in the store and suggested a few gift ideas. After she had made some selections, he helped carry them to the cash register. When the manager Bob asked if those would be her only purchases, Lynn thought she might get something great for herself.

Filler - Second Character Removed

Lynn was glad when she saw the store manager Bob walking toward her. She wanted to ask about the sunscreen she had chosen to see whether or not it was strong enough. Lynn also asked for some gift ideas for a friend who loved to play golf.

The store manager led Lynn to the golfing department in the store and then had to go outside to help unload a delivery van.

Lynn looked around by herself for a gift. After she had made some selections, she carried them to the cash register. When the cashier asked if those would be her only purchases, Lynn thought she might get something great for herself.

Target Sentences

She decided to buy an expensive bike.

She picked the nicest model on display.

Conclusion

After loading the bike on her car, Lynn decided to go home and try out her new bike. Instead of going to lay out on the beach, she thought it would be nice to ride along the ocean.

Comprehension Question

Did Lynn collect bikes?

Introduction from Experiment 2

Ralph had recently made a lot of money for his company and was celebrating by going on a two week vacation to Hawaii. His business partner Joanne was constantly hearing about the trip. When she asked if he was ready to leave the next day, Ralph said everything was set except for the ride to the airport.

Introduction from Experiment 3 - Added Emphasis on Character Prominence

Ralph had recently made a lot of money for his company and was celebrating by going on a two week vacation to Hawaii. Ralph had never been to Hawaii and was excited to get away. He had never rewarded his hard work like this before, and Ralph couldn't seem to stop talking about the trip. He was leaving the next day, and he was really excited to go. His business partner Joanne was constantly hearing about the trip. When she asked if he was ready to leave the next day, Ralph said everything was set except for the ride to the airport.

Second Character's Consistent Beliefs Elaboration

Joanne thought that Ralph should drive himself to the airport. She thought Ralph would probably complain about anyone else's city driving. She figured that Ralph was probably an aggressive driver who was used to city traffic. She thought he would be nervous about getting to the airport on time if someone else drove him there.

Second Character's Inconsistent Beliefs Elaboration

Joanne hoped that Ralph didn't try to drive himself to the airport. Joanne thought he seemed really uptight recently and would have a hard time handling the heavy traffic. She didn't think Ralph had any experience driving in the city and that he would probably get really nervous because of all the traffic.

Filler - Second Character Present

Ralph told Joanne that before worrying about his trip any more, a lot of work needed to be completed. He wanted to make sure the new account would be handled appropriately while he was on vacation. Ralph had put a lot of time into that account and was proud of the success. Because the account was so important to the company, he wanted Joanne to oversee it instead of one of the employees. Ralph reviewed the account with her while having lunch together today. After they finished with their business, Joanne asked Ralph for the latest update on the travel plans.

Filler - Second Character Removed

Ralph told Joanne that before worrying about his trip any more, a lot of work needed to be completed. He wanted to make sure the new account would be handled appropriately while he was on vacation. Because the account was so important to the company, he wanted Joanne to oversee it.

He reviewed the account with Joanne's assistant because Joanne had to leave the office for the afternoon.

Ralph thought it would be nice to talk about the account over lunch. He chose a restaurant close to their building so that they could walk. After they finished with their business, Ralph started talking about his travel plans.

Target Sentences

Ralph decided to drive to the airport.

He thought the bus would take too long.

Conclusion

After lunch, Ralph went back to his office and resumed his work. He felt good about how his account would be handled in his absence.

Comprehension Question

Was Ralph going to Hawaii?

Introduction from Experiment 2

Drew was getting a ride across town from one of his good friends. They were on their way to a friend's birthday party when a great song came on the radio. Drew turned up the radio and listened to his friend Tricia sing along.

Introduction from Experiment 3 - Added Emphasis on Character Prominence

Drew was getting a ride across town from one of his good friends. They were on their way to a friend's birthday party. Drew was eighteen and he hated not owning his own car. This summer he planned to save enough money to buy one. As he thought about how great it would be to have a car, Drew heard a popular song come on the radio. Drew turned up the radio and listened to his friend Tricia sing along.

Second Character's Consistent Beliefs Elaboration

Tricia wondered why Drew wasn't singing. She thought Drew had a great voice. She had overheard him singing loudly once and was amazed at how nice he sounded. She didn't think Drew was aware of how nice his voice sounded. She thought he should be the lead singer in the band he had started with some friends.

Second Character's Inconsistent Beliefs Elaboration

Tricia was glad that Drew was not singing along with her. She thought Drew had a horrible singing voice and shouldn't sing in public. Tricia thought he should stick with playing the guitar in the band he started with some friends. She thought he would embarrass himself if he ever tried to sing in front of an audience.

Filler - Second Character Present

Just as the song on the radio ended, Drew and Tricia arrived at the birthday party. They went inside and helped decorate before the guest of honor arrived. Suddenly, Drew heard someone coming up the driveway, so he told everyone to hide. When the front door opened, the room erupted with shouts of "Happy Birthday." Drew quickly went into the kitchen to get the birthday cake. When all the candles were lit, he made his way to the living room where everyone had gathered. Tricia and the other guests began to sing "Happy Birthday" when Drew entered the room.

Filler - Second Character Removed

Just as the song on the radio ended, Drew and Tricia arrived at the birthday party. They went inside and helped decorate. When the guest of honor arrived, the room erupted with shouts of "Happy Birthday." Drew quickly went into the kitchen to get the birthday cake and realized that they wouldn't have enough plates and silverware for everyone.

He asked Tricia to run to the store and she quickly headed off in her car.

Drew finished lighting the candles on the cake. When he was finished, he made his way to the living room where everyone had gathered. The other guests began to sing "Happy Birthday" when Drew entered the room.

Target Sentences

Drew sang along as loudly as he could.

He kept the cake balanced as he walked.

Conclusion

He set the cake down on the table and waited for everyone to get a piece. There was plenty of cake for everyone and Drew helped himself to a second serving.

Comprehension Question

Did Drew carry the birthday cake?

Introduction from Experiment 2

Jimmy had been coming to this summer camp since he was little. He thought this would be his last year at camp and hoped to see an old friend Cheryl. Jimmy didn't know it, but she was hoping for the same thing.

Introduction from Experiment 3 - Added Emphasis on Character Prominence

Jimmy had been coming to this summer camp since he was little. This year Jimmy felt like he might be getting too old for camp. He hoped he wouldn't be the oldest kid this summer, because he just couldn't handle that. Jimmy had always enjoyed hanging out with older kids and dreaded being surrounded by younger kids. He thought this would be his last year at camp and hoped to see an old friend Cheryl. Jimmy didn't know it, but she was hoping for the same thing.

Second Character's Consistent Beliefs Elaboration

Cheryl was excited to see Jimmy because she thought he was hysterically funny. She had met Jimmy at camp last year and thought he was the funniest boy she had ever met. Cheryl thought all of his jokes were great and the way he told them made them even funnier. She was looking forward to hearing his new jokes.

Second Character's Inconsistent Beliefs Elaboration

Cheryl was excited to see Jimmy, but she hoped he wouldn't embarrass her this year. She couldn't stand that Jimmy was always trying to tell jokes. She thought that all of his jokes were corny and he just didn't have any sense of how to tell a joke. Cheryl always felt uncomfortable watching Jimmy embarrass himself.

Filler - Second Character Present

Jimmy and Cheryl ran into each other at lunch on the first day of camp. Jimmy spotted Cheryl in the cafeteria and she introduced him to all of her friends. He was surprised that some of her friends had never been to camp before. Jimmy told them a little about how things would be. He told them about all of the chores they would have to do. While Jimmy was talking, he noticed that some of them seemed nervous about being away from home for the first time. Jimmy wished he could make Cheryl's friends feel better.

Filler - Second Character Removed

Jimmy and Cheryl ran into each other at lunch on the first day of camp. Jimmy spotted Cheryl in the cafeteria and she introduced him to all of her friends. He was surprised that some of her friends had never been to camp before.

After Cheryl left to go help with kitchen duties, Jimmy told the other girls all about camp.

He told them about all of the chores they would have to do. While Jimmy was talking, he noticed that some of them seemed nervous about being away from home for the first time. Jimmy wished he could make them feel better.

Target Sentences

He told everyone one of his new jokes.

He had heard it on the radio that day.

Conclusion

After lunch, everyone was called outside for some orientation activities. Jimmy was glad that he had decided to come back to camp this year.

Comprehension Question

Did Jimmy eat lunch by himself?

Introduction from Experiment 2

Maggie lived in a quiet suburban neighborhood with her husband Adam and their three children. This Saturday, Maggie was helping do some work around the house. She had to help catch up on all the things they neglected during the week.

Introduction from Experiment 3 - Added Emphasis on Character Prominence

Maggie lived in a quiet suburban neighborhood with her husband Adam and their three children. Maggie was very particular about her home. She enjoyed keeping things neat, especially the flower garden in the front yard. Maggie always looked forward to her weekends when she could find the time to get things done around the house. This Saturday, Maggie was helping do some work around the house. She had to help catch up on all the things they neglected during the week.

Second Character's Consistent Beliefs Elaboration

Adam was excited because Maggie always found time on the weekends to cook something special for dinner. He loved her cooking and enjoyed the variety of foods she was able to prepare. He had always been impressed by how natural she seemed in the kitchen. Adam thought Maggie made gourmet cooking look easy.

Second Character's Inconsistent Beliefs Elaboration

Adam was glad that Maggie wasn't in the kitchen making another one of her mystery dinners. He was really getting tired of humoring her by always telling her that her cooking was good. Truthfully, he couldn't stand her cooking. He never told her how awful her cooking was because he didn't want to hurt her feelings.

Filler - Second Character Present

This afternoon, Maggie and Adam were working in the yard. Maggie had been bugging her husband all week about the lawn. Their new neighbors were moving in today and Maggie wanted their house to look nice for the new people. During the late afternoon, the new neighbors pulled into their driveway. Maggie and her husband went over to introduce themselves and offered to help unload the truck. Maggie pointed out to Adam that the new neighbors wouldn't be able to settle into their house today, and she thought of what else she could do to help.

Filler - Second Character Removed

This afternoon, Maggie and Adam were working in the yard. Their new neighbors were moving in today and Maggie really wanted their house to look nice for the new people. During the late afternoon, the new neighbors pulled into their driveway.

Maggie went over to introduce herself, as Adam left for his weekend softball game.

Maggie offered to help the neighbors unload the truck. As she was helping them unpack, Maggie realized that the new neighbors wouldn't be able to settle into their house today. She thought of what else she could do to help.

Target Sentences

Maggie decided to make dinner for them.
She would make them homemade lasagna.

Conclusion

The neighbors accepted the offer for dinner. Maggie got the impression that she was really going to like her new neighbors.

Comprehension Question

Did Maggie live in a house?

Introduction from Experiment 2

Owen and his classmate Ginny would be finishing graduate school soon and had already begun looking for jobs. Most job advertisements they found were academic positions which required both teaching and research. Both Owen and his classmate were concerned about what types of jobs they would get.

Introduction from Experiment 3 - Added Emphasis on Character Prominence

Owen and his classmate Ginny would be finishing graduate school soon and had already begun looking for jobs. Most job advertisements they found were academic positions which required both teaching and research. Owen had put a lot of effort into his job search. He was confident that the hard work would be rewarded in the end. Unfortunately, Owen had to fit his job search in around a lot of other work. He knew it would be a difficult time but was determined to stay optimistic. Both Owen and his classmate were concerned about what types of jobs they would get.

Second Character's Consistent Beliefs Elaboration

In addition to worrying about herself, Ginny was also concerned about Owen finding a good job. Ginny thought that Owen was a gifted instructor, and she really wanted him to get a good teaching job. She thought Owen related well to students. Ginny thought he would find a teaching job much more satisfying than a research position.

Second Character's Inconsistent Beliefs Elaboration

In addition to worrying about herself, Ginny was also concerned about Owen finding a good job. Ginny thought that Owen was a gifted researcher, and she hoped he would get a good research position. She thought he was a poor instructor and that his students probably didn't like him very much. She thought he would be happier doing research.

Filler - Second Character Present

A constraint that both Owen and Ginny faced in finding jobs was geographic location. Owen really wanted to stay in New England because he loved to ski. Recently, there hadn't been enough time to ski because he had gotten involved in the department undergraduate organization. Today he was going to have lunch with Ginny and try to convince her to get involved. At lunch, Owen asked her about the club meeting and she agreed to help. He was happy to have that issue settled and suggested that they spend the rest of their lunch break working on their job applications. Owen was excited to tell Ginny about a new job he had found.

Filler - Second Character Removed

A constraint that both Owen and Ginny faced in finding jobs was geographic location. Owen really wanted to stay in New England because he loved to ski. Recently, there hadn't been enough time to ski because he had gotten involved in the department undergraduate organization. At lunch today, Owen convinced Ginny to get involved and help him with the club.

He was happy to have that issue settled and thanked Ginny as she left to go attend a class.

Owen decided to spend the rest of his lunch break working on his job applications. He got on his computer and looked at the ads people had posted. Owen was excited about a new job he had found.

Target Sentences

Owen applied for a teaching position.

This university discouraged research.

Conclusion

After lunch, Owen had to attend a class. This was the last graduate class he had to take and then he would be totally done with school.

Comprehension Question

Was Owen looking for a job in New England?

Introduction from Experiment 2

As Emma finished unpacking the last of the boxes, she suggested to her husband Steve that they should take their daughter out to eat tonight. Emma thought it would be nice to take a break from unpacking. She had a long week ahead because it would be her first week of medical school.

Introduction from Experiment 3 - Added Emphasis on Character Prominence

As Emma finished unpacking the last of the boxes, she suggested to her husband Steve that they should take their daughter out to eat tonight. Emma thought it would be nice to take a break from unpacking. Emma had packed all of their stuff really well because she was nervous about things breaking during their move. After spending so much time packing, she was quickly growing tired of unpacking. Emma hoped some of the boxes could wait to be unpacked. She knew it would take a long time to get settled in their new house with all the other work they had to do. She had a long week ahead because it would be her first week of medical school.

Second Character's Consistent Beliefs Elaboration

Emma's husband Steve was amazed by how much energy Emma had. He thought Emma would do well in school and still find time to be with the family. He also expected that she would want to work a little to help with the family finances. Steve was confident that Emma could handle taking on that many responsibilities.

Second Character's Inconsistent Beliefs Elaboration

Emma's husband Steve noticed that she was tired from all the moving. He was concerned about how Emma would handle the demands of school and her family. He didn't think she could handle trying to accomplish so much. He also didn't think she would have time to work in order to help with the family finances.

Filler - Second Character Present

Emma and Steve agreed that they should go out to eat. They decided to get some sandwiches and take them to the nearby beach. Their daughter loved playing at the beach and Emma thought the fresh air would feel good. On their way to the beach, they stopped at the local convenience store to buy some snacks. When she was in the store, Emma decided she wanted to buy the local newspaper. Emma and Steve were interested in learning about the area.

Filler - Second Character Removed

Emma and Steve agreed that they should take a break so that their daughter could play outside. Emma thought it would be nice to go to the nearby beach.

Steve decided he would stay at the house and continue working and let Emma take their daughter to the beach.

On their way to the beach, Emma stopped at the local convenience store to buy some snacks. When she was in the store, Emma decided she wanted to buy the local newspaper. She was interested in learning about the area.

Target Sentences

Emma looked for a new job in the paper.
She wanted to see what was available.

Conclusion

Emma enjoyed their time at the beach. She was happy that they had moved to such a beautiful part of the country.

Comprehension Question

Was Emma studying to be a lawyer?

Introduction from Experiment 2

It seemed hotter than normal in the gym today. Sophia was working on the uneven bars and the humidity in the gym was making it difficult for her to grip the bars. Her coach Roger kept reminding Sophia to put extra chalk on her hands.

Introduction from Experiment 3 - Added Emphasis on Character Prominence

It seemed hotter than normal in the gym today. Sophia was working on the uneven bars and the humidity in the gym was making it difficult for her to grip the bars. She hated working out this late in the afternoon, after a long day at school. Today Sophia stayed after school to help decorate for a dance. She was very excited to go to the dance Saturday night and couldn't stop thinking about it. As she thought about the dance, Sophia kept losing her concentration. Her coach Roger kept reminding Sophia to put extra chalk on her hands.

Second Character's Consistent Beliefs Elaboration

Coach Roger was getting frustrated because he thought Sophia needed the practice. He wanted her to compete seriously this year. He was confident that her floor routine was the best one she had ever done. He was also proud of the improvements she had made on the uneven bars. He was sure that this would be Sophia's year to win.

Second Character's Inconsistent Beliefs Elaboration

Coach Roger was getting frustrated because he thought Sophia needed the practice. He didn't think her training was going well and he didn't feel confident about entering her in any competitions. He thought her floor routine was the worst one she had ever done. In general, the coach didn't think this would be a good year for Sophia to compete.

Filler - Second Character Present

The gym where Sophia trained was in the process of being renovated. Everyone was excited for the improvements. Sophia was most excited about the air conditioning that was being installed today as she practiced. By the end of the week, she wouldn't have to deal with all this uncomfortable heat. At the end of her practice, she had to go meet with her coach and the office manager at the gym in order to set up a training schedule for the next week. The manager asked Sophia and Coach Roger how they felt about her training and what plans they were making for some of the upcoming events.

Filler - Second Character Removed

The gym where Sophia trained was in the process of being renovated, and Sophia was excited about the air conditioning that was being installed. By the end of the week, she wouldn't have to deal with all this uncomfortable heat.

At the end of her practice, she talked to her coach as he walked to his car to leave for the day.

When she returned to the gym, Sophia had to meet with the office manager. She set up a training schedule for the next week. The manager asked Sophia how she felt about her training and what plans she was making for some of the upcoming events.

Target Sentences

Sophia said she felt ready to compete.
She would work out her schedule today.

Conclusion

Her workout schedule had to be flexible because she relied on her parents for transportation to the gym. She would talk to her mom tonight and work out a schedule for the next few weeks.

Comprehension Question

Was the gym being renovated?

Introduction from Experiment 2

Vince had been working as a nurse for five months. He worked in the emergency room and found his job very challenging. Vince recently had switched to working nights and had to get used to working with the new chief of staff, Dr. Diane Kennon.

Introduction from Experiment 3 - Added Emphasis on Character Prominence

Vince had been working as a nurse for five months. He worked in the emergency room and found his job very challenging. When he wasn't working, Vince liked to play golf. He recently entered an amateur competition and took second place. Vince wanted to improve his game and was considering taking lessons. In order to get some more time on the golf course, he needed to find free time during the day. Vince recently had switched to working nights at the hospital and had to get used to working with the new chief of staff, Dr. Diane Kennon.

Second Character's Consistent Beliefs Elaboration

Dr. Kennon always felt comfortable with Vince's work. She felt that he was a talented nurse who really cared about the patients. She trusted that he would take good care of her patients. Dr. Kennon thought that Vince was the most competent nurse on the staff and she tended to give him more responsibility.

Second Character's Inconsistent Beliefs Elaboration

Dr. Kennon never felt comfortable with Vince's work. She always felt that she needed to check up on her patients to make sure Vince had done his job. She didn't understand why he was a nurse or how he had been on the job this long. Dr. Kennon thought he was the most incompetent nurse on the staff.

Filler - Second Character Present

At the hospital tonight, Vince was helping organize a blood drive. He expected to spend the entire night in the supply closet making sure everything was ready. While counting some boxes, he heard someone in a nearby waiting room scream for help. Vince ran as quickly as he could and was the first person to respond. He found a woman kneeling near a man on the floor. He determined that the man had a heart attack and quickly began chest compressions. Vince continued doing what he could as Dr. Kennon ran over to help.

Filler - Second Character Removed

At the hospital tonight, Vince was helping organize a blood drive. While in the supply closet counting some boxes, Vince heard someone in a nearby waiting room scream for help. He ran to the room and found a woman kneeling near a man on the floor.

Vince knew Dr. Kennon was busy in surgery, so he would have to take care of this on his own.

Vince determined that the man had a heart attack and quickly began chest compressions. He told the panicked woman that everything was under control. Vince continued doing what he could as other nurses ran over to help.

Target Sentences

Vince had saved the young man's life.
He was proud of what he had just done.

Conclusion

Vince sat down against the wall and tried to calm down. He was upset by what had just happened. Vince thought he needed some time to relax before he returned to complete his inventory.

Comprehension Question

Was Vince organizing a blood drive?

Introduction from Experiment 2

Today Katie's third grade class was going to an assembly. Her school had invited a man to bring in his pet snakes to show the children. Katie's teacher Mr. Smith kept asking the students in the class to quiet down.

Introduction from Experiment 3 - Added Emphasis on Character Prominence

Today Katie's third grade class was going to an assembly. Katie loved getting out of her class for any reason. Her favorite times of the day were lunch and recess. She was excited to have an extra break from class this afternoon. Today, her school had invited a man to bring in his pet snakes to show the children. Katie could tell that her classmates were excited about the assembly because everyone was making a lot of noise in the classroom. Katie's teacher Mr. Smith kept asking the students in the class to quiet down.

Second Character's Consistent Beliefs Elaboration

Mr. Smith thought the children were excited to see the snakes, especially Katie. Mr. Smith thought that Katie was his brightest student and that she would enjoy learning about the snakes. He had noticed that Katie always seemed very curious about new things. He hoped she could get a seat up close and maybe touch one of the snakes.

Second Character's Inconsistent Beliefs Elaboration

Mr. Smith was worried about taking his class to the assembly today. He was worried that some of the younger children like Katie would be afraid of the snakes. He thought Katie was a very timid child who would get scared easily. He expected that she would not be willing to sit up close or touch the snakes.

Filler - Second Character Present

Before the assembly, Mr. Smith had the children clean out their desks. Katie finished before anyone else, so she got to lead the line of students down the hall toward the auditorium. As they entered the auditorium, Katie saw a friend of hers from another class. Katie took a seat near her friend and they began talking. As the lights began to dim and the guest speaker came onto the stage, Mr. Smith leaned over and told Katie and her friend to pay attention. When the speaker asked if anyone wanted to come up on stage, Katie noticed Mr. Smith look around at all of his students.

Filler - Second Character Removed

Before the assembly, Mr. Smith had the children clean out their desks. Katie finished before anyone else, so she got to lead the line of students down the hall toward the auditorium. When they entered the auditorium, Katie took a seat near a friend of hers from another class.

Once all the students were seated, Katie saw Mr. Smith leave the auditorium.

When the lights dimmed, the guest speaker came onto the stage. Katie paid close attention to the man. When the speaker asked if anyone wanted to come up on stage, Katie looked around at all of the other students.

Target Sentences

Katie was the first girl to volunteer.
She quickly made her way to the stage.

Conclusion

Katie was the first person to hold the snake. She was surprised at how long the snake was and how heavy he felt around her shoulders. She didn't think she would ever forget this experience.

Comprehension Question

Was Katie in high school?

Introduction from Experiment 2

Laura had just started her freshman year in college. She had decided to attend a small college in Vermont. The school was three hours away from home, and Laura missed seeing her older brother Taylor.

Introduction from Experiment 3 - Added Emphasis on Character Prominence

Laura had just started her freshman year in college. She had decided to attend a small college in Vermont. Laura had chosen the school because it was surrounded by great places to ski. She had practically been raised on downhill skis. Laura loved being outside and she didn't mind the cold weather. She also loved the mountains in the summer because she enjoyed hiking. Unfortunately, the school was three hours away from home, and Laura missed seeing her older brother Taylor.

Second Character's Consistent Beliefs Elaboration

Taylor didn't think that Laura was ready to be away from home. He thought Laura had a hard time meeting people and would probably be more comfortable at a school closer to home. Taylor worried that Laura might be unhappy so far away from her family. He hoped she would consider transferring to a school closer to home.

Second Character's Inconsistent Beliefs Elaboration

Taylor had been excited when Laura decided to go away to school. He thought she was incredibly bright and friendly which would help her adjust in a new environment. He also thought it was important for Laura to be away from their parents and gain some independence. He thought Laura would love the college she had chosen.

Filler - Second Character Present

Laura talked to Taylor often while away at school. She liked to hear about her brother's interesting job as a movie critic. In fact, he was doing some business close to Laura's school this weekend and was taking Laura to a movie screening. Laura was happy to see her brother when he came to get her in the dorm. She felt special being dressed up and riding with him in a limousine to the movie screening. While they were in the car on the way to the city, Laura announced that she had some news to tell Taylor.

Filler - Second Character Removed

Laura talked to Taylor often while away at school, and she liked to hear about her brother's interesting job as a movie critic. In fact, he was doing some business close to Laura's school this weekend and was taking Laura to a movie screening.

When her brother's limousine arrived at her dorm, the driver told Laura that her brother would be meeting her at the screening.

While in the car on the way to the city, Laura chatted with the driver. She had met him before. As they were driving along, Laura announced to the driver that she had some news to share.

Target Sentences

Laura told him she was quitting school.
She wanted to go to a school near home.

Conclusion

There was a college within commuting distance from her house, and Laura thought she would like to apply for the Spring term. She would still give college a chance.

Comprehension Question

Was Laura at college in Vermont?

Introduction from Experiment 2

Chris and Martha were celebrating their twentieth wedding anniversary. Chris had wanted to take his wife to a special dinner, but he had been asked to attend a school board meeting tonight. It was a good thing that his wife didn't mind waiting until tomorrow to celebrate.

Introduction from Experiment 3 - Added Emphasis on Character Prominence

Chris and Martha were celebrating their twentieth wedding anniversary. Chris met his wife when they were in high school. He had admired her for years before he finally got the courage to ask her to go on a date. Every year on their anniversary, Chris thought about the beginning of their relationship. He was a very sentimental man and wanted to make their anniversary a special celebration this year. Chris had wanted to take his wife to a special dinner, but he had been asked to attend a school board meeting tonight. It was a good thing that his wife didn't mind waiting until tomorrow to celebrate.

Second Character's Consistent Beliefs Elaboration

Martha was proud of her husband's community service. She was amazed at how well he balanced all his volunteer activities and committee work with spending quality time with their kids. She admired her husband's desire to help less fortunate people. Martha was glad Chris had recently been recognized for all his hard work by a local volunteer group.

Second Character's Inconsistent Beliefs Elaboration

Martha thought that Chris was upset about having to attend the meeting tonight. She couldn't picture her husband enjoying sitting through the meeting, and she didn't think he was interested in getting involved in a community volunteer program. Martha hoped his meeting was short and that he wouldn't have to go back again. She assumed Chris wasn't interested.

Filler - Second Character Present

In order to make up for not celebrating their anniversary tonight, Chris made special plans to take Martha to a concert tomorrow night. Chris enjoyed hearing new music and his wife said this group was really good. They typically liked the same music. Chris had also bought her a beautiful necklace which he planned to give her when he returned home tonight. As he sat through the meeting, Chris thought about how Martha would react when she saw the necklace. As he thought about Martha, Chris heard the gentleman conducting the meeting ask for volunteers for an upcoming charity ball.

Filler - Second Character Removed

In order to make up for not celebrating their anniversary tonight, Chris made special plans to take Martha to a concert tomorrow night. Chris had also bought her a beautiful necklace which he planned to give her when he returned home tonight.

As he sat through the meeting, Chris stopped thinking about his plans with Martha and tried to concentrate on what was being said.

As he paid attention, Chris listened to the concerns of the board members. He recognized some of the people around him. He listened as the gentleman conducting the meeting ask for volunteers for an upcoming charity ball.

Target Sentences

Chris raised his hand to offer to help.
He thought it would be a nice gesture.

Conclusion

Chris hurried home after his meeting because he couldn't wait any longer to give Martha her present. He was pleased when he saw how much she loved the necklace.

Comprehension Question

Did Chris buy his wife a new car?

Introduction from Experiment 2

Gary and his co-worker Janet both worked for a large car manufacturing company. They had become good friends because they worked next to each other on the final assembly of the vehicles. Recently, Gary had been offered a promotion to be supervisor of his own production team.

Introduction from Experiment 3 - Added Emphasis on Character Prominence

Gary and his co-worker Janet both worked for a large car manufacturing company. They had become good friends because they worked next to each other on the final assembly of the vehicles. Gary had always loved cars and dreamed of designing them as a young boy. He was in the process of building a car that he had designed. Gary wouldn't let anyone see it until it was finished. The skills he had learned while building the car had actually helped him become more productive at work. Recently, Gary had been offered a promotion to be supervisor of his own production team.

Second Character's Consistent Beliefs Elaboration

Janet felt Gary was perfect for the promotion because she thought he was very good at acting as an authority figure. She thought Gary was very competitive and that he would be good at overseeing projects. She thought he would probably enjoy being able to fire people who were not qualified to work for the company.

Second Character's Inconsistent Beliefs Elaboration

Janet thought it was a bad idea for Gary to accept the promotion. She thought he worked well in his current position and would be a bad supervisor. She didn't think he enjoyed being competitive and she was sure he would have trouble firing people. Janet thought it would be a bad idea for him to take the job.

Filler - Second Character Present

Today at lunch, Gary joined Janet and some of his other friends at their table. Gary had brought some cookies in to share with people. He often stopped by a local deli that had the best desserts and had been telling people about the place. Gary brought in the cookies to give his friends a sample of some of their desserts. Everyone loved the cookies and several people asked for directions to the deli. Gary planned to bring in a cake tomorrow to celebrate some good news with Janet and his friends.

Filler - Second Character Removed

Today at lunch, Gary joined Janet and some of his other friends at their table. Gary had brought some cookies in to share with people. He often stopped by a local deli that had the best desserts and had been telling people about the place.

Janet excused herself from the table when everyone started to eat dessert and she went out for a walk.

Everyone loved the cookies and several people asked Gary for directions to the deli. Gary planned to bring in a cake tomorrow. He wanted to celebrate some good news with his friends.

Target Sentences

Gary told his friends he took the job.
He was excited to get this promotion.

Conclusion

Everyone at the table was shocked by the news. Gary was pleased that people were happy for him and willing to support him in any way they could.

Comprehension Question

Did Gary work for a car manufacturer?

Introduction from Experiment 2

Jane was a single mother who had one son in preschool. She recently went on a few dates with a man who was new at work. Jane had told a close neighbor Jack all about this new boyfriend and asked whether or not she should reveal that she had a son.

Introduction from Experiment 3 - Added Emphasis on Character Prominence

Jane was a single mother who had one son in preschool. She struggled to make it on one income and was proud of her accomplishments. Jane was secure in her job and was hoping to get a raise soon. Jane also had a great group of friends at work who she enjoyed spending time with. In fact, she recently went on a few dates with a man who was new at work. Jane had told a close neighbor Jack all about this new boyfriend and asked whether or not she should reveal that she had a son.

Second Character's Consistent Beliefs Elaboration

Jack thought that Jane should tell this new guy about her son. He felt that it was important for her to be honest with people and that it wasn't fair for her to hide her son from her dates. Jack thought that the guy had a right to know about something this important before the relationship got serious.

Second Character's Inconsistent Beliefs Elaboration

Jack didn't think that Jane should tell this new guy that she had a son. He felt that if Jane told the guy, he wouldn't want to see her anymore. Jack thought that she should let the guy get to know her better first. He thought Jane needed to feel secure with this guy before she mentioned her child.

Filler - Second Character Present

While Jane was talking to Jack, she thought it would be a good time to ask him for his help tomorrow evening. Jane had offered to watch someone's dog all week and wouldn't be able to walk the dog tomorrow after work. Jane had to go to her mother's house for dinner tomorrow. It would be more convenient to leave after picking her son up from preschool. Jane was grateful when Jack agreed to help. As they continued talking, Jane told Jack that she had decided to take her son out for an important evening tonight.

Filler - Second Character Removed

While Jane was talking to Jack, she thought it would be a good time to ask him for his help tomorrow evening. Jane had offered to watch someone's dog all week and wouldn't be able to walk the dog tomorrow after work. Jane was grateful when Jack agreed to help.

When they finished talking, Jane said goodbye to Jack and returned to her house to relax for the evening.

While relaxing on the couch, Jane thought about how she wanted to spend her evening. Her son was bored and wanted to go out. She decided to take her son out for an important evening tonight.

Target Sentences

Jane wanted him to meet her boyfriend.
She thought she had waited long enough.

Conclusion

Jane was a little nervous as she got ready to leave. She called her new boyfriend and asked if she could come over. Jane was glad when he said he would be home.

Comprehension Question

Was Jane married?

Introduction from Experiment 2

Joe worked in an art studio that he rented with several old classmates from design school. He was working in the studio tonight with a friend who was a sculptor. Joe wanted to become a famous painter, and the sculptor Susie asked to see some of his new paintings.

Introduction from Experiment 3 - Added Emphasis on Character Prominence

Joe worked in an art studio that he rented with several old classmates from design school. When they first rented this studio, Joe had worked hard to make the place look nice. He tried to divide the room into separate areas so that each person could have their own space. Joe had designed his work space in such a way that he had enough room to work on several ongoing projects at once. He enjoyed spending time there late at night. He was working in the studio tonight with a friend who was a sculptor. Joe wanted to become a famous painter, and the sculptor Susie asked to see some of his new paintings.

Second Character's Consistent Beliefs Elaboration

Susie thought that Joe was a very talented artist, and she was impressed by his latest work. She thought he should try to sell his work by displaying them at a nearby gallery. She thought his latest paintings would help him build his reputation in the art community and that people would be interested in buying them.

Second Character's Inconsistent Beliefs Elaboration

Susie didn't think that Joe was very talented, and she didn't like his recent work. She felt badly for him as she looked at the paintings because she thought they were very poor. Susie hoped Joe didn't plan on showing his recent work publicly because she thought it might ruin his reputation in the art community.

Filler - Second Character Present

As Joe was showing Susie the paintings, the phone rang. He ran through the messy studio to grab the phone. It was one of the other artists who shared the studio calling to invite them to a party nearby. Joe convinced Susie that it would be fun to get out for a while. Joe was excited to see a lot of his friends at the party who he hadn't seen in a while. He was especially happy to see one friend who recently got a job at a museum. As they were talking, his friend asked Joe and Susie if they were interested in having a showing together.

Filler - Second Character Removed

As Joe was showing Susie the paintings, the phone rang. He ran through the messy studio to grab the phone. It was one of the other artists who shared the studio calling to invite them to a party nearby.

Joe decided it would be fun to get out for a while, but Susie stayed behind to work.

Joe was excited to see friends at the party who he hadn't seen in a while. He was especially happy to see one friend who recently got a job at a museum. As they were talking, his friend asked Joe if he was interested in having a showing.

Target Sentences

Joe agreed to show his favorite pieces.
He hoped to earn money by selling them.

Conclusion

Joe said he would need a few weeks to pull things together for a show. He had a lot of work in progress that he would like to finish.

Comprehension Question

Did Joe share studio space with friends?

Introduction from Experiment 2

Amy and her husband Brian decided to make a New Year's resolution together this year. She had thought about it a lot and came up with a great idea. Amy suggested that they resolve to try something new every month.

Introduction from Experiment 3 - Added Emphasis on Character Prominence

Amy and her husband Brian decided to make a New Year's resolution together this year. She had thought about it a lot and came up with a great idea. Amy suggested that they resolve to try something new every month. Amy thought it was important to always stay active in some way. She enjoyed learning new things and thought that it was important for her to make that a priority in her life. Amy enjoyed the idea of trying new things and sharing that time with her husband.

Second Character's Consistent Beliefs Elaboration

This month, Brian wanted to try something dangerous such as rock climbing. He thought Amy would be excited about the idea. He thought she was pretty daring when it came to trying new things. He was sure that she would find the danger exciting. Brian always felt that Amy was a brave person who would take risks.

Second Character's Inconsistent Beliefs Elaboration

This month, Brian wanted to try something dangerous such as rock climbing. However, he didn't think Amy would like that idea. He didn't think Amy was a very brave person. He was sure she would refuse to try something dangerous like that. He suspected that Amy was somewhat afraid of taking risks like that.

Filler - Second Character Present

Last month, Amy and her husband Brian treated themselves to a weekend at a resort just a few hours away from where they lived. While they were there, Amy spent most of her time at the spa. She got a massage each day and enjoyed being pampered. While Amy was inside all day, Brian spent a lot of time relaxing in the sun and reading novels. They wished they could get away like that more often. They talked about doing something similar this month, but Amy told Brian she had a better idea.

Filler - Second Character Removed

Last month, Amy and her husband Brian treated themselves to a weekend at a resort. While they were there, Amy spent most of her time inside at the spa, and Brian spent a lot of time relaxing in the sun and reading novels.

This month, Amy had to make the plans on her own because Brian was away on several business trips.

Amy decided to make the plans a big surprise. She discussed her ideas with a very good friend. Amy thought she had a really good idea for this month.

Target Sentences

Amy suggested that they go parachuting.
She looked into how much it would cost.

Conclusion

Amy didn't have a hard time convincing Brian that she had a good idea. He loved the suggestion and Amy made reservations right away.

Comprehension Question

Did Amy dislike her time at the spa?

Introduction from Experiment 2

While walking down the city street to their new apartment, Tucker felt angry that his mother made them move to this place. He was upset and thought about all the friends he had left behind. When they moved into this new neighborhood, some boys from the local Boy's Club came and introduced themselves to Tucker.

Introduction from Experiment 3 - Added Emphasis on Character Prominence

While walking down the city street to their new apartment, Tucker felt angry that his mother made them move to this place. He was upset and thought about all the friends he had left behind. Tucker loved his old neighborhood. He knew everyone there and had many close friends. Tucker had always been very popular, and he wondered how he would make new friends here. When they moved into this new neighborhood, some boys from the local Boy's Club came and introduced themselves to Tucker.

Second Character's Consistent Beliefs Elaboration

Tucker's mother thought it would be a great way for him to meet people. She thought Tucker would really enjoy spending time with these boys. She knew that having friends in his new neighborhood would help him adjust to the move. Plus, she thought the nice young boys could help him out in his new school.

Second Character's Inconsistent Beliefs Elaboration

Tucker's mother thought it would be better for him to make new friends at school. She was worried that being in a social group like the Boy's Club would distract him from his school work. She thought that Tucker should get serious about school and she wasn't going to allow him to spend all his time at some club.

Filler - Second Character Present

Tucker would be starting school next week. This new school was much bigger than his old school, and he wanted to make a good impression on the first day. Today Tucker's mother was taking him shopping for some new school clothes. There was a nice mall close to their new apartment. As Tucker and his mother walked to her car, Tucker stopped to talk to some guys he had recently met. When one of the boys asked him to come over and play later that night, Tucker asked his mother if it would be alright and she approved.

Filler - Second Character Removed

Tucker would be starting school next week, and he wanted to make a good impression on the first day. Today Tucker's mother was taking him shopping for some new school clothes at a nice mall close to their new apartment. As Tucker and his mother walked to her car, he stopped to talk to some guys he had recently met.

His mother went ahead and waited for him in the car.

Tucker was going to talk to the boys for just a minute. One of the boys asked him to come over and play later that night. Tucker said he would come over after dinner.

Target Sentences

Tucker really intended to join the club.
He was sure to make good friends there.

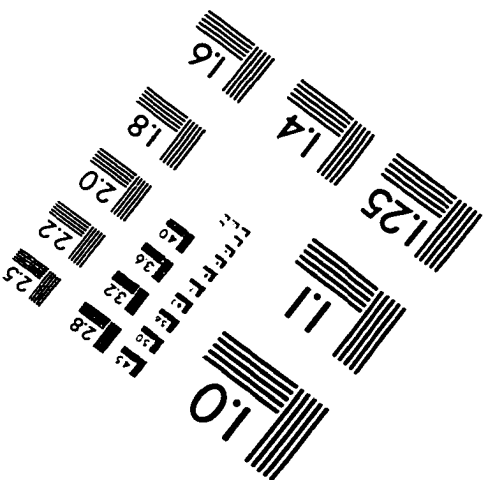
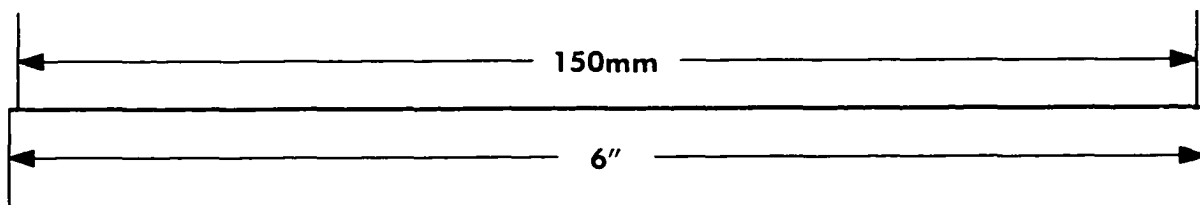
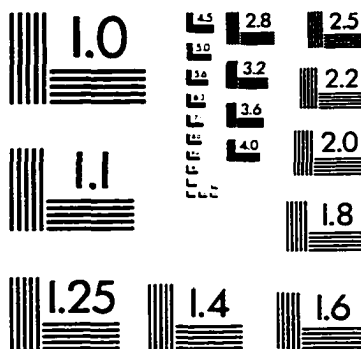
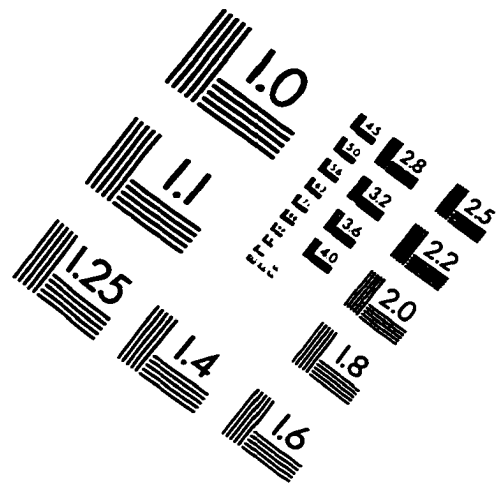
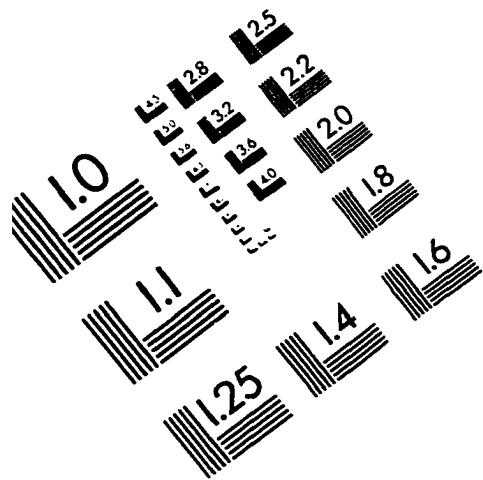
Conclusion

Tucker said goodbye to the boys and continued walking toward his mother's car. He was feeling a little better about living in this new neighborhood.

Comprehension Question

Did Tucker join a gang?

IMAGE EVALUATION TEST TARGET (QA-3)



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