THE UNIVERSITY OF CALGARY

The Interface Between Narrative and Social Cognition: A Neo-Piagetian Analysis of Low- and High-literacy Adults

by

Norma Lorraine Templeton

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "The Interface Between Narrative and Social Cognition: A Neo-Piagetian Analysis of Low- and High-literacy Adults" submitted by Norma Lorraine Templeton in partial fulfilment of the requirements for the degree of Master of Science.

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Abstract

The primary purpose of this exploratory study was two-fold: 1) to seek information on the ways that low-literacy adults compose and recall narratives and, 2) to compare those ways to the ways high-literacy adults compose and recall narratives. A secondary purpose was to assess the level of the subject's understanding of social behavior and to compare this social knowledge to his/her literary knowledge.

There were two groups, high- and low-literacy, composed of 10 adults in each group. The experimental tasks were from two domains, narrative and social cognition. Within the narrative domain, there were two tasks, narrative composition, and narrative recall. The results of the tasks were interpreted within a neo-Piagetian theoretical framework that proposes that there exists a central conceptual structure for intentional thought which underlies performance on both domains.

The results of the study provided new information in two areas, 1) neo-Piagetian theory and 2) the field of adult literacy research. The findings suggested that both high- and low-literacy adults tend to perform consistently across the domains of narrative and social cognition, domains that differ in terms of their surface features but that share a common conceptual underpinning. This result provided further support for the neo-Piagetian contention that intentional thought is a central conceptual structure. The

finding that low- and high-literacy adults do not appear to share the same understanding of how human motivation drives behavior provided further support for the calls for more research in the field of adult literacy, but suggested that a cognitive developmental theoretical perspective may offer new information and insights not available with more traditional research approaches.

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DEDICATION

This thesis is dedicated to three special women:

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CHAPTER I

Introduction

To be literate is to have access to one of the most valuable tools for gaining information available to our culture. There are those, however, who would maintain that the importance of literacy goes far beyond access to information (Olson, 1986, 1987, 1988b; Goody & Watt, 1968). Olson, among others, proposed that there are cognitive consequences to literacy that affect the ways whole cultures think. He maintained that having a written text allows a culture to make the distinction between what is a "given" and what is "interpretation". That is, what is given, or held as truth, about information does not require reflection or explanation. Interpretation, on the other hand, moves beyond this stance and examines and reflects on the explanation or truth. According to Olson, the former is typical of the oral tradition (e.g., folk or moral tales, oral histories), whereas the latter is typical of literate cultures.

It is largely, though not exclusively, in coping with written language, and in developing traditions for dealing with written language, that one can locate the propositional content (of a text), and then decide whether to believe or doubt it, to decide whether it was meant literally or metaphorically. One can begin to reflect on text rather than remember it (Olson,1988a).

A question of interest in the present context that arises from this is: What are the cognitive consequences of illiteracy or low-literacy in a literate culture (Fingeret, 1983)? More specifically:

1) Are the ways of distinguishing between the given and an interpretation available to the members of a literate society even though they cannot read and write? and 2) Can illiterate and low-literate adults make the distinction between the given and an interpretation in areas other than text, for example in social situations?

Traditionally, research in adult literacy has been driven by the concerns of functional literacy (Cervero, 1985) and the "literacy as empowerment" model (Friere, 1970). Although these two frameworks are very different from each other in the models of learning and of the learner that they espouse (see for example Knox, 1980 and Lindeman, 1961), both have considerably advanced our understanding of how adults learn to read. Functional literacy education has demonstrated the importance of learning being relevant to the learner. The literacy as empowerment model reminds us that literacy is a skill embedded in a specific social and cultural milieu and has ramifications which extend beyond being able to read and write. In spite of these insights, there are still calls in the literature for more research in the field of adult literacy (Chall, Heron & Halferty, 1987). In particular, some researchers have noted that literacy programs are least successful with the students who read at the lowest levels (Norman & Malicky, 1986). The calls for more research, and the lack of success with the students who appear to be in the most need, suggest that further work with low-literate adults may add to the knowledge in the field. In order to address these issues, the current study, although drawing on work from these traditional approaches, is derived from a separate domain, cognitive

developmental psychology.

Rationale

More than two million Canadians cannot read well enough to gain information from newspapers, health and welfare publications, or even school and community notices (Statistics Canada, 1990). Many of these adults are immigrants, but many more are Canadian-born and have had at least some schooling. As Olson (1988b) noted, illiteracy has been cited as the cause of many of society's problems from crime to poverty to business inefficiency. Although those problems actually stem from myriad sources, of which illiteracy may only be one, it is still fair to say that to be literate is to have use of one of the important tools for success in our culture (Olson, 1988b). Without the skill of reading, low-literacy adults are, in many ways, outside of the mainstream, and cut off from the processes and institutions that permit their full participation in the decisions and benefits of this culture (Fingeret, 1983). In other words, literacy is the tool that facilitates access to the accumulated knowledge of our society (Olson, 1987) which is recorded in a variety of literary forms: the essay, the newspaper, letters, and in narrative, each with its own specialised content and style.

The Study of Narrative

It is in narrative that many novice readers first practice the skills of integrating print into their lives, and thus, narrative can

serve as a link between the context-laden world of the oral tradition and the almost context-free world of the essayist. Narrative often takes the form of "speech in print", where the understanding of why people behave as they do is assumed to be a given. That is, there is an implicit and shared understanding of human motivation between the story teller and the reader/listener. This is unlike the essayist tradition in which the assumptions are explicitly stated and the conclusions must follow logically (Olson, 1988a).

Bruner (1989) made a clear distinction between the narrative and the logico-scientific or paradigmatic modes of thought. Narrative, he proposed, deals in human or human-like intention, action, and their consequences. It is in the interaction of problem, characters, and consciousness that one finds the structure of stories. By contrast, the paradigmatic mode is an attempt to fulfil the formal system of description and explanation by employing categorisation, and the operations by which instantiated, idealised categories are related to one another to form a system. He contended the narrative and paradigmatic modes of thought represent two types of cognitive functioning and provide distinctive ways of ordering experience and thus of constructing reality.

Applebee (1978) postulated a similar dichotomy but referred to the two types of text as the "poetic" and the "transactional". He defined poetic as works which attempt to symbolise subjective experience, and transactional, as works which are "validated against a background of rules of evidence and accepted procedures which govern their own specialised disciplines" (p 12). Unlike the linear, analytical structure of transactional language, poetic

language specifies relationships which can occur on many levels simultaneously.

Because narrative draws on one's everyday experiences, can be understood within shared social conventions, and can be expressed in one's everyday language (Bruner, 1989), it is a potentially fruitful place to begin to study the conceptual links created in the acquisition of literacy. Thus, the primary goal of the current study is to examine low- and high-literacy adults' competency in narrative composition and recall.

The Study of Social Cognition

It is generally accepted that narrative is understood within a framework of shared social conventions (Thorndyke, 1977). These shared social conventions are culture specific understandings of how and why people behave as they do. Bruner (1989) suggested that they comprise a "folk psychology" and he maintained that members of a culture use folk psychology to "contextualize what is ordinary about us..." (p 11). In this way, folk psychology makes clear both what does and what does not need explaining. It is a generally held, yet untested assumption, that low- and high-literacy adults are equally knowledgeable in these social conventions, or folk psychology, because all adults have a lifetime's experience of social interaction. It is further assumed that both groups draw on this knowledge when understanding and interpreting narrative. Thus, a second goal of the current study is to examine the level of the subject's social understanding relative to the interpretation and prediction of social

behavior. A third goal is to investigate the the interaction between knowledge of human action and narrative competency. In order to achieve these goals, low- and high-literacy adults' performances on tasks measuring competency in story composition, story recall, and social cognition will be analysed for similar conceptual underpinnings and for characteristic differences.

Theoretical Framework

Developmental Analysis

Several authors, notably Bruner (1986), Applebee (1978), and McKeough (1987, in press), have proposed that there is a developmental progression in narrative organisation that moves from a focus on situations and events in the physical world, to a focus on the inner psychological world of the story's characters.

Bruner postulated that "narrative deals with the vicissitudes of human intention" (p 16), and proposed that what distinguishes a story, which always contains intentional action, from a story which contains the psychological development of the character, is the manner in which the plight, characters, and the consciousness of the protagonist interact. Plots or subplots dealing with the inner or psychological world of the characters grow out of this interaction. Bruner (1985) accounted for this developmental progression in narrative, as he did for all cognitive growth, as a dialectic process in which the child is both product and creator of his/her world. That is, understanding is shaped by the cultural system in which it occurs

and this cultural system is passed on the the members of the culture through experience and instruction.

McKeough (1986,1987,in press) in work with children and adolescents noted a developmental progression in narrative composition in which stories moved from a recitation of scripted events (around 4 years) to a description of action sequences motivated by the protagonist's physical wants or needs (between 6 and 10 years), to more complex stories in which the inner world of the protagonist as well as the outer world is developed (by adolescence). She referred to these states as a) the level of action, b) the level of intention and c) the level of the psychological development of the characters. McKeough accounted for developmental change using a neo-Piagetian perspective (Case, 1985, in press) that integrates the notion of cultural transmission, as advocated by Bruner, with a stage theory of cognitive development.

Case (1985, in press) proposed there are general stages of cognitive development through which all children progress. Each of these stages is a stable system with its own characteristic form of cognitive operation and structure. Movement through the stages is thought to occur as a result of two factors, maturation and experience. Case proposed that an age-related increase in working memory capacity caused by "mylenization of neural tissue" (p. 383) paves the way for cognitive development. However, he further maintained that, especially for higher order cognitive processes such as reading and writing, instruction and experience play progressively more important roles. "Increasingly as children grow older the culture is seen not just as presenting children with the opportunity

for development, but as providing direct assistance in the developmental process by facilitating their construction of the tools that are necessary to solve the higher order problems they will encounter independently at later points in their lives" (p. 27). Using this theory, McKeough (1986,1987) noted that there are qualitative shifts in children's narrative composition between the ages of 4 and 6, and again between the ages of 10 and 12. This research has shown that the first shift allows children to coordinate two qualitatively different categories of events (i.e., the world of action and the world of intention). The second stage shift permits them to move from stories in which intentional actions of the protagonist are reported, to stories in which the intentions are reflected on within the story. That is, by adolescence, story tellers are able to coordinate two qualitatively different types of problem structures, one dealing with the protagonist's intentions and the other dealing with why the protagonist's holds these intentions. (McKeough, 1987, in press).

Schema Theory

Developmental changes in knowledge of narrative, (i.e., story schema) have been well documented (Mandler, 1978; Stein & Glenn, 1979; Waters, 1981; Bischofshausen, 1985). It is generally accepted that through experience with stories, people mentally construct a well organised set of expectations about what will be included in a story, that facilitates both the composition and comprehension (i.e., encoding and retrieval) of story elements (Rumelhart, 1977; Thorndyke,1977). Cognitive developmentalists

postulate that having a well-developed schema for a task reduces the amount of mental capacity required for processing information (Chi,1985; Bereiter & Scardamalia,1982). Consequently, developmentalists would expect novices to produce less complex stories in a story-telling task (Waters & Hou, 1987).

This concept of story schema will be used in the current study to examine the narratives composed and the narratives recalled by low-literacy adults as compared with those of high-literacy adults. Because low-literacy adults may have less experience with written narratives, they are thought to have less well developed story schema than high-literacy adults. Therefore, in the current study, it was predicted that the low-literacy adults would produce less complex stories than the high-literacy adults. More specifically, the stories composed by both groups were expected to contain action-intentional subplots, but it was anticipated that only the stories composed by the high-literacy adults would contain plot(s) which are moved forward by the inner or psychological world of the character(s). Put another way, the stories of the low-literacy adults were expected to deal with the actions and intentions of the protagonist as the substance of the story (i.e., the given), whereas the stories of the high-literacy adults were expected to contain action-intentional plots and an interpretation of the actions and intentions of the protagonist.

Similarly, because of having less experience with stories and consequently a less well developed story schema, it was expected that the low-literacy adults would recall fewer details in the story recall task. Research in memory for prose, however, has indicated

that subjects of all ages favour main ideas in recall relative to non-essential details (Petros, Tabor, Cooney & Chabot, 1983) although children recall less than normally functioning adults and are more dependent on familiar schemata for retrieval (Mandler, 1978). In the current study, it was expected that: a) both the low- and high-literacy groups would recall the main ideas from the story equally well, but b) that the high-literacy adults would recall more of the details of the story. By analysing the narratives composed and the narratives recalled by both groups, and by comparing the results between the groups, it was expected that the first step would be taken toward describing a path in narrative discourse processing that is followed by low-literacy adults .

Statement of the Problem

The primary purpose of this study was two-fold: 1) to seek information on the ways that low-literacy adults compose and recall narratives and 2) to compare those ways to the ways high-literacy adults compose and recall narratives. The underlying hypothesis throughout was that low- and high-literacy adults share the same knowledge of human motivation that drives action, but they differ in their knowledge of how this is rendered in literary form. A secondary purpose was to assess the level of the subjects' social understanding relative to the interpretation and prediction of social behavior, and to compare this social knowledge to their literacy knowledge.

This ex post facto study (Neale & Leibert, 1986) was

exploratory, and although it is based in work that has gone before with children as subjects, it was designed to test new hypotheses rather than to confirm prior work. Specifically, the study investigated the mental representation of narrative held by low- and high-literacy adults by looking at three types of information. The first type of information was sought from an analysis that looked for patterns in the story compositions indicating the subject composed a story containing only intentional-action plot(s), or a story containing plots which included the psychological development of the character (McKeough, 1987). That is, did the story move beyond the given of the intentional-action plot to take a meta-position that offered an interpretation of the actions and needs of the characters? These constructs are elaborated on in the Literature Review and the Scoring Criteria and Procedures sections to follow. The second type of information was gained by an analysis of the amount and type of information recalled in the narrative recall task. This will be done by looking for the overall number of content items as well as information that indicated that the subjects recalled information that was given (i.e., direct physical action or stated intention) or interpreted (i.e., a mental operation). A more detailed explanation of these terms and how they were assessed follows in the Literature Review and the Scoring Procedures sections. The third type of information was derived from an assessment of the level of understanding of the psychological nature of social behaviour in a non-literary task. A detailed explanation of the assessment and analysis procedures of this task follows in the Screening Tasks and Scoring Procedures sections.

In summary, the questions posed were as follows: 1) What, if any, is the difference in complexity of the plots of the stories created by low- and high-literacy adults?; 2) What if any, is the difference when low- and high-literacy adults recall information from a story that was read to them?; and 3) What, if any, is the difference between the low- and high-literacy adults' understanding of how a character's psychological nature (i.e., character traits) drive action in social situations?

Organisation of the Thesis

Chapter One contained the introduction, rationale, theoretical framework and the statement of the problem. Chapter Two is a review of the relevant literature on narrative schema and social cognition with the specific hypotheses that arose from the statement of the problem. Chapter Three contains detailed descriptions of the methods and tasks used to investigate the hypotheses. It also includes information on subject selection and the pilot study. Chapter Four presents the scoring procedures and the resulting qualitative and quantitative data as well as the methods of analysis and the rationale for their choice. Chapter Five interprets the findings, both expected and unanticipated, offers suggestions for further research, and outlines the delimitations and limitations of the study.

CHAPTER II

Review of the Literature

This exploratory investigation into the representation of narrative of low-literacy adults is supported by prior work in three fields: a) research in narrative representation done with children and adolescents, b) work done with children, adolescents and high-literacy adults in the field of social cognition, and c) work in the field of adult literacy. The general theoretical framework within which it was conceived was neo-Piagetian. Although the current study is a departure from prior work, either because of population (low-literacy adults) or theoretical orientation (cognitive developmental) each of the above mentioned fields guided both the formulation of the hypotheses and the methods used to investigate them. In this chapter, relevant research from the three areas will be reviewed and an overview of neo-Piagetian theory will be presented.

Narrative Schema in Adults and Children

Schema theory proposes that through experience with stories, people develop a well organised set of expectations about what will be included in a story that serve to facilitate both encoding and retrieval. A schema is a cluster of knowledge comprised of a set of concepts and associations that describe the properties of the concepts in question (Thorndyke & Yekovich, 1980, Rumelhart, 1977). This conceptual framework has been used by many researchers to

explain comprehension and recall of prose (Bower, 1976; Mandler & Johnson, 1977; Thorndyke, 1977; Rumelhart, 1975, 1977; Stein & Glenn, 1979; Mandler & Goodman, 1982; Yusson, Huang, Mathews, & Evans, 1988). Research in story schema has proceeded on three fronts: 1) story grammar analysis which focused on the abstract level of the structural framework of the story, or story syntax 2) goal analysis which considers both structure and the semantic content of the story, and 3) a developmental approach. Each form of analysis has added to the specification of story schema and merits a brief discussion.

1. Story Grammar Analysis

Story grammars capture one aspect of narrative schema - specifically its structural organisation. Story grammars are defined as " a formal rule system used to describe regularities in story structure" (Mandler & Goodman, 1982). This method of analysis, used for both narrative composition (McKeough, 1982, Gordon, 1991) and narrative recall analysis (Stein & Glenn, 1979), identifies underlying structural elements that are common to all stories. The assumption of this form of analysis is that "insofar as people are able to identify a particular story as an example of a general and previously learned framework, they will use that framework to encode and comprehend a particular text.... Story grammars propose that stories contain unique parts that are conceptually separable although rarely are they explicitly partitioned" (Thorndyke, 1977). Although there are variations among the grammars proposed, typically they propose that the story will begin with a setting in which the characters and

location in time and place are introduced. This is followed by an initiating event and a reaction to that event. The reaction in turn leads to an attempt at a resolution that may itself become an initiating event. The episode ends with a statement of outcome. Stories can, of course, contain many episodes. The story itself also ends with a statement of outcome that often includes information about the long range effects of the preceding episode(s) (Mandler & Johnson, 1977; Thorndyke, 1977; Bower, 1976; Rumelhart, 1975, 1977).

Research in story grammars has proposed that comprehensibility and recall are a function of the amount of inherent plot structure, independent of the plot content (Thorndyke, 1977: Rumelhart, 1975). A further commonality of story grammarians is the investigation of the hierarchical organisation of the structural elements of a story. For example, one episode schema, consisting of the protagonist, a goal, an attempted resolution, and an outcome, may be embedded in another similarly constituted episode. Grammarians propose that recall is better for information that is at higher levels in the hierarchical structure and decreases with descending level in the representational hierarchy (Mandler & Johnson, 1977; Thorndyke, 1977; Rumelhart, 1975, 1977). Work in story grammars has produced several generalities of text processing that are of relevance to the current study. They are:

1) People can recall only a subset of the story information they read

2) Some story propositions are consistently and significantly recalled better than others

3) Subjective ratings of propositional importance are correlated with recall probability (Thorndyke & Yekovich, 1980).

Story grammar analysis is not without its limitations however. "One major limitation of current grammars for story structure is they do not describe how semantic information in the input stream is matched to the syntactical categories posited by the grammars" (Thorndyke & Yekovich, 1980). Other recent criticism of story grammars have suggested a need for more content based approaches to the study of narrative (Black & Wilensky, 1979; de Beaugrande,1982; Wilinsky, 1983; Walters & Hou, 1987).

2. Goals Analysis

Work in goals analysis has been generated by a group of investigators who hold that knowledge of narrative entails more than a representation of categories of events and how they are related (Black & Wilinsky,1979). Following Schank and Abelson (1977), these authors proposed that the hierarchical structure of narrative text can better be understood within a motivational framework that includes the protagonist's goals and that is based on an understanding of how and why people behave as they do (Jose & Brewer, 1983). In this perspective, goal directed behaviour sequences are interpreted and encoded according to the structural relationships in a "plan" schema. Research has shown that recall of action sequences is higher for goal oriented actions, and that there is low recall for non-goal directed actions (Lichenstein & Brewer, 1980). Further, Brewer and Lichenstein (1980), Jose and Brewer (1983), and Jose (1988) have proposed that in addition to goal

attainment, goal importance is a critical component of storyhood. Although there is knowledge of the canonical sequencing of stories that is a result of literary or linguistic experience, knowledge of the behaviour of characters can come from the readers' knowledge of the structure of goal directed action sequences. Lichenstein and Brewer (1980) hypothesised that the ability to reconstruct the canonical sequence of story information may be as much a function of the subject's knowledge of the structure of naturally occurring events as of their knowledge of the structure of stories. Wilensky (1983) also maintained that the notion of story is not separate from its content. He proposed the concept of story points which he defined as the structures that define those things that a story can be about. He further proposed that there are two kinds of points, external (goal of the story teller) or internal (some part of the story itself that generates interest). Many content points of stories have to do with a human dramatic situation, however he notes that the mere appearance of a problem does not make a story. The problem must appear in a form that spells out its implications.

Individuals can use their schemata for understanding behavioral events to assist them in understanding and reconstructing stories. Although story grammar analysis and content analyses of stories have focused on different aspects of story schema, researchers generally agree that stories have an underlying structure that remains relatively invariant in spite of wide differences in the content of the stories and that knowledge of both story structure and of human goals are necessary in narrative processing

3. Developmental Plot and Character Analysis

A third group of researchers, noting a developmental pattern in the changes in schema for stories, pursued a different line of research that focused on both structural and content aspects of narrative which work together to form the story's plot. Applebee (1978) proposed that children's narratives became more complex in accordance with the methods they used for structuring plots. He suggested the plots of stories may be treated as a "series of elements or incidents which have a series of attributes (characters, actions, setting, themes)" (p. 57). In his work with children aged 2 to 6 years, he found that there are age related differences in the organisational complexity of plots. He proposed that there are two types of conceptual structures that children must produce and coordinate to create narratives. He called these "chaining" and "centering". With chaining, elements in the story are linked one to another on the basis of complementarity or similarity. One child (aged 4 years 9 months) generated the following chained episode:

> Davy Crockett he was walking in the woods, then he swimmed in the water to get to the other side. Then there was a boat that picked him up. Then he got to the other side. He went into the woods. He was in the place where Indians made. The Indians came and got him. Then pretty soon he got loose. The Indians let him loose. (p. 65)

With centering, each element is linked to one special aspect, for example character, or theme or setting. One child (aged 5 years 8

months) generated the following centered narrative:

> There was a boy named Johnny Hong Kong and finally he grew up and went to school and after that all he ever did was sit all day and think. He hardly even went to the bathroom And he thought every day and every thought he thought up his head got bigger and bigger. One day it got so big he had to go live up in the attic with trunks and winter clothes. So his mother bought some gold fish and let them live in his head-he swallowed them-and every time he thought, a fish would eat it up until he was even so he never thought again and he felt much better. (p. 66)

Once a composition has the structure of true narrative, it can itself become an element to be bound by chaining and centering within a more complex structure. Applebee proposed that the ways these processes combine determine the amount of narrative form with which we will credit a work. As an illustration of the range of narrative forms he describes two examples from adult literature. A James Bond adventure story is one form in which the main character is held constant and the incidents are closely and sequentially chained together. In contrast , a work such as *King Lear* is one in which the chaining and centering are in such a complex relationship that it is difficult to separate an item as belonging to any individual chain or centre.

In other work on response to narrative, Applebee (1978) contended that a reader's response to narrative is a complex, assimilative, personal formulation that comes from the spectator role. In mapping out the developmental change that occurs in narrative interpretation he examined the response to narrative of subjects aged 6 to 17 years. One of the questions he posed was "Why

did you like/dislike the story?" At a preadolescent level there was little evidence that these subjects differentiated between objective and subjective responses. For example, one subject stated:

> I do not like *Heartsease* because it is hard to understand and is also boring. (p. 101)

As can be seen, the child did not differentiate between the qualities of the text and her response to it. During adolescence however, Applebee (1979) found that there is an increasing ability to analyse stories and generalise from the analysis to an interpretation of the world. For example, one subject described a book he had read as:

> A book which tells of life before the fall of an empire-the Roman Empire. The book tries to suggest that rather than the fall being attributed to a general loosening in control exercised over outside powers, it was in fact largely to be blamed on the corruptions which developed within the Roman Empire. The slackening in control over their own actions naturally led to the Romans being incapable of preventing the complete collapse of the Empire. (p. 110)

This developmental change was also noted by Bruner (1986) who described the progression in narrative composition as a move from the "landscape of action" to the "landscape of consciousness". The landscape of action consists of the "agent, intention or goal, the situation, instrument and something corresponding to a story grammar". The landscape of consciousness involves what the characters "know, think or feel or what they do not know, think, or

feel" (Bruner, 1986, p. 14). Bruner contends that a good story must construct the two landscapes simultaneously.

A similar phenomenon was observed by McKeough (1986,1987, in press). She noted in her work with children and adolescents, that narrative compositions progressed from scripted descriptions of stereotypic event sequences which remained largely on the "landscape of action" in preschoolers to simple plot structures which appealed to the protagonist's wants and desires (intentional stories) during the elementary school years. By adolescence, stories took on a "psychological" dimension where the inner world of the protagonist was developed in addition to the outer one. Prototypical stories from her work with 4, 6, 8, 10 and 14-year-olds presented below clearly show a developmental progression. The 4-year-old story is an example of a stereotypical script based on a well known set of events and temporal format.

Once I'm playing with my daddy with--with a ball and it go on the street.

By six years, stories take on an intentional quality which gives rise to a simple plot as the following story illustrates:

There once was a girl that didn't know how to read. She went to school and she asked her teacher, "May I try to read?" And the teacher gave her an easy to read book. And then she started to try and read it and then she could read the whole book.

It can be seen that the protagonist identifies a desire and formulates a plan that allows her to meet her need. Whereas the 4-

year-old story presents only the "landscape of action", the 6-year-old story offers a glimpse of the 'landscape of consciousness". As Figure 1 shows, in 6-year-old narratives, children differentiate between actions (lower sequence) and the mental states that motivate them (upper sequence). In terms of the example story, an event (lack of the ability to read) causes a state of affective disequilibrium (implied) which leads to the formulation of a plan or idea (requesting help from the teacher) When the plan is put into action, it produces the sought after outcome which restores the affective balance . The literary result is a simple plot consisting of a problem and its resolution.

By 8 years of age, children were able to coordinate both the problem/resolution structure and introduce a complicating episode. As the following story illustrates, the protagonist's desire is stymied and so a second attempt or "idea" must be generated.

Once upon a time there was a boy named Sean and he didn't know how to get to school. So he asked somebody that went to this school and then watched how to get there. And he went to school and he did his math and then he came home for lunch and the he tried to remember how to get there and he got there. And then he did his work. And then the next morning they were doing work on the road and he couldn't go this way and so he had to go another way and he didn't know how to go. So he had to ask another person and he went that way and he did it and then he came home for lunch and went that way. And then he forgot how to go the other way so he had to go the same way that he usually went and he just went that way. And he went to school and he came back and he was going to his baby sitter's house and he wasn't quite sure how to get there. So he had to go to his mom's house and then he came back the same

Figure 1 Story structure 6-year-old level

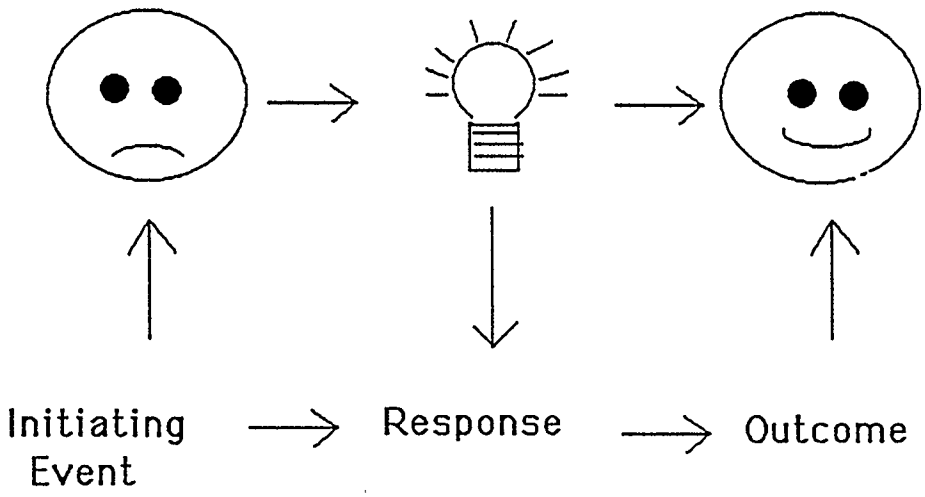
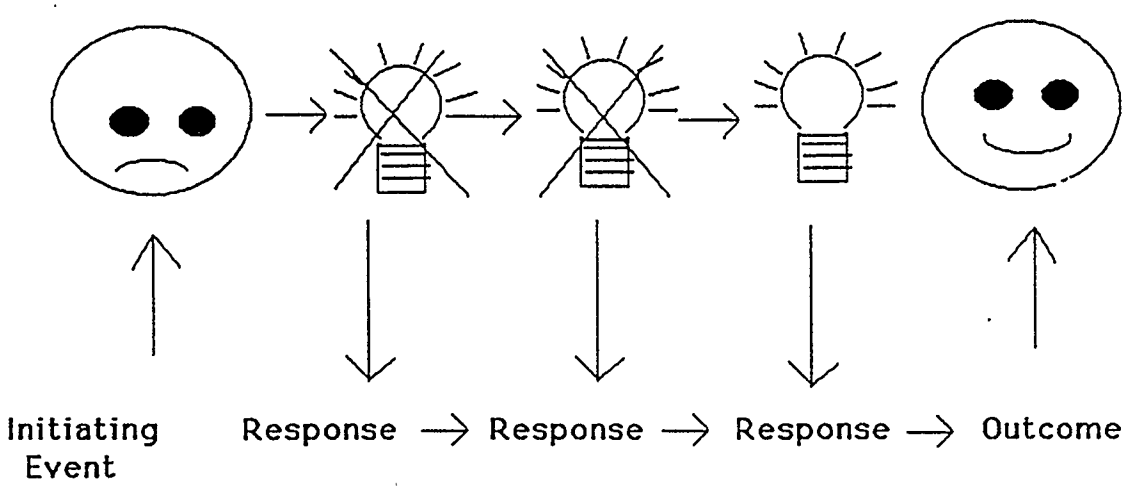
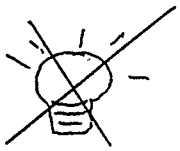


Figure 2. Story structure 8-year-old level



way he usually does and he was late for school and he asked his mom how to get to school.



In 8-year-old stories, often several failed attempts are generated prior to a successful one. A representation of the 8-year-old story structure is given in Figure 2.

At 10 years of age the children's stories include an increasing number of complicating events, but, more importantly, the intervening complications and final resolutions were integrated more effectively with the original problem.

This is the story called 'Why Me?' It's about a girl who's taking ballet. She's quite good at it and in a few weeks she's going have to do a ballet exam to get into a company and she's working very hard. And the, all of a sudden she gets stuck with diabetes and she's trying to fight it so she can go back to ballet and get into a company. And she goes through a lot of things and like every morning she has to have a needle and she has to eat on time and she has to keep in shape and stuff like that. And she has to eat a special amount of food and really watch for a thing call insulin reaction. And if she, what happens is, if she doesn't eat enough and there's too much sugar in her body--no--there's not enough sugar in her body, and she gets all dizzy and she sometimes she faints and she has to eat sugar right away to regain her strength and stuff. She works hard trying to fight the diabetes and soon she gets out of the hospital and starts up back at ballet. And she's working really hard. And finally, it's the day of the exam and she walks in the room and she tries the best she can and she's almost makes the thing for the company, but she didn't. She's an apprentice. And if she works really hard and gets better at her ballet and she will go into the company

In other work with 10-18 year-old subjects McKeough (1987) noted a dramatic change in plot structure that occurred beginning at

about 12 years of age. Subjects at this level composed stories that coordinated "two problem constellations". The first consisted of problems that were occasioned by internal mental states but took place in the outer or action oriented world. The second consisted of a struggle that took place in the inner or mental world of the protagonist. This inner struggle could be against an environment which stymied the protagonist's happiness (e.g., too strict parents) or it could be a struggle in which two facets of the self are in conflict (e.g., the need to be popular versus the need to be truthful). An example of this level of story composition is given below:

Only the second week of school and already everyone's on my case. First my mom lectured me on not dressing properly for school; then I got in trouble from Ms. Hogan, my History teacher, for not understanding the assignment she gave us. She says I don't pay attention. Finally, to top it all off, Nancy, my supposed best friend, started giving me dirty looks. Lord only knows why. I wish just once things would go my way, but no. That's just too much to ask.

The only good thing about today is that I get to go to Jenn's party tonight. It should be a blast; everyone's going. Anyway, I hope Chad goes. Oh, he's so good-looking. Just picture this; an A-1 student, made the football team and is the most popular, very sincere, and above all, the most gorgeous! What more could a girl ask for? The only problem is that he could have the choice of any girl in the school, so he'd never fall for a girl like me.

That's the problem with some of my friends. Popularity is such an important thing to them. If you're not popular, you're definitely not one of them. I don't think they ever really accepted me. Sometimes, I hate the way they criticise and make fun of people who don't live up to their standards. Now that I think about it, I'm really getting annoyed with the way they do things. It's like a water faucet. Sometimes they're you best friends, with your best interests at heart. But when they don't feel like it, they can turn off

friendship just like that and have no feeling at all. I'm sick of having to please them and prove myself to them. The problem is, I don't have enough guts to tell them how I really feel. I wonder what they'd do it I did.

THE NEXT DAY

Jenny's party was absolutely awful. It was the worst. Linda was flirting with Chad all night. Her and her phony act. I couldn't believe Chad fell for all the garbage she was dishing out. Well, I can kiss my chances with Chad goodbye. Oh, it got worse. As if this wasn't enough already. Nancy comes to me and says I was ignoring and avoiding her. Meanwhile, it was her who was doing the ignoring and avoiding during school.

I just want to forget about this whole week. Thank God it's Friday. I can't wait to get out of here and go home. Everyone's probably going to the movies tonight. They're not going to see me there, not after tonight. I'm probably going to stay home all weekend and veg out, but knowing my mother, she'll have me working around the house in no time at all.

I just finished talking to Linda on the phone. She kept going on and on about Chad. I tried to be very calm about it. I never told anyone I liked Chad, but for some reason it felt like she was trying to rub it in. Thank God she doesn't like long conversations, or I would have been there forever.

I've got to find a way to break apart from my friends. It's come to the point where I can't stand them. You know, when you think about it, it's all very stupid. I mean, it wasn't long ago when I would have done anything to get into their group, and now that I'm with them, I'll do almost anything to get out. I've just got to break apart from the slowly, and hopefully find people that know the meaning of friendship. I can't wait for the day to come. The day that I can be me and the day when someone will like me just for being myself.

McKeough proposed that there is a hierarchical progression in plot complexity with a qualitative shift occurring between stories

containing only intentional-action plots and stories which contain psychological plots that develop the inner world of the protagonist. She proposed and delineated 5 developmental levels of narrative composition:

Level 0, a non story

Level 1, an event sequence

Level 2, one problem is resolved

Level 3, failed attempts are inserted before the resolution

Level 4, one impediment/attempt is more significant than the others, the resolution is well-planned

Level 5, the inner/psychological world of the protagonist is developed in addition to the outer/physical world.[1]

In summary, McKeough suggested a distinction between intentional action stories and interpretive stories reflecting the major stage shift proposed by Case (1895). Intentional action stories are about conflicts that are resolved in the external world. The problem resolution may come about through a plan formulated in the protagonist's mind but that plan is acted upon in the physical world. That is, although the problem is usually stated in terms of the character's wants, needs or intentions, the solution to those wants, or intentions is reached through action in the physical world.

By contrast, stories that are composed by adolescents are classified as interpretive and contain both an action-intentional plot

[1] Level 5 narratives represent a qualitative shift signifying a major stage shift in complexity. Preliminary work has been done to specify the substage development through this stage (McKeough, 1987).

and a plot that takes place in the inner world of the character(s). In these stories the solution to the problem or conflict is found, at least in part, in a change or reevaluation of the protagonist's thinking. There are several features that may be found in an interpretive story:

1. The central problem or conflict is stated as an emotional or philosophical one.

2. The main character changes or reevaluated his/her thinking in a significant way, and this is made explicit in the text.

3. Characters are described by traits or affects that transcend the current situation and that clearly motivate the action.

4. References to past events (flashbacks) shape the importance of the current events and these are clearly signalled by the text.

5. The story may include details that reinforce mood or theme using for example, the sympathy of nature literary device.

Based on this work on developmental plot and character analysis, the following questions arose: 1) Will both high- and low-literacy adults compose stories that contained action-intentional plot(s)? 2) will only the high-literacy adults compose stories that contained the interpretive element in the plots? That is, will only the high-literacy adults be able to use the "given" of an action-intentional plot structure as an item of reflection of the protagonist and have that reflection become an integral part of the story?

Social Cognition

The second area of study that has bearing on this research is

the work done in the field of social cognition. Social cognition can be defined as how people think of themselves and others. "Implied in the concept of social cognition is the ability to make inferences about other people's capabilities, attributes, expectations, feelings and potential reactions " (Muuss, 1982). In the earlier stages of development, these inferences, are largely based the "given" of a person's overt behavior whereas, in later stages they are derived from "interpretations" of events that are inside of the other. In other words, social cognition becomes increasingly psychological in nature.

Flavell (1980) proposed that the development of social cognition shares many similarities with general cognitive development. The common elements of particular interest to the current study are:

1) surface to depth. Children begin by attending to only the most external and immediately perceptible attributes and overt behaviors and only later do they use these to make inferences about the covert social-psychological causes that may underlie them.

2) invariant formation. Children come to gradually think of themselves and others as stable human beings who conserve many attributes over time and circumstance.

3) metacognition. By adolescence, people become more introspective and more concerned with the thoughts of others about one's own inner world. However, Flavell also makes the point that the object of social cognition, people, is different from non-social cognition in a significant way. People, unlike physical objects, are "sentient beings who can intentionally behave and reveal/conceal

information about themselves" (p. 156). This changing object of social cognition, be it oneself or another, creates a more dynamic relationship than is called for in understanding for example, a math problem. Having made that point, he cautions that it would be unwise to exaggerate the role of domain specific processes in understanding social cognition, for it is "the same human mind that does the thinking" (p.127) in both cases.

Selman's (1980) model of interpersonal development specified five stages with characteristic forms of thought at each stage. These are:

Stage 0. The egocentric undifferentiated stage (ages 3-6 years)

Stage 1. The differentiated and subjective perspective-taking stage (ages 5-9 years)

Stage 2. Self-reflective thinking or reciprocal perspective-taking stage (ages 7-12)

Stage 3. The third person or mutual perspective-taking stage (ages 10-15)

Stage 4. The in-depth and societal perspective-taking stage (ages 12 to adult).

In other work that specifically focused on adult social cognition, Kramer (1986) proposed that social cognitive development moves from a relatively undifferentiated stage in childhood, through progressively more differentiated and integrated levels that culminate in the development of fully-formed relativistic and dialectical thought which allows an adult to create a coherent and integrated structure in which multiple perspectives and changing

cultural/historical contexts can be coordinated.

Marini (1984) working from a neo-Piagetian perspective proposed that students who have reached various levels of abstract reasoning as outlined in Case (1975) are able to apply those levels of reasoning in social situations. That is, he proposed that growth in social understanding could be understood as a result of the same developmental processes that produce general cognitive growth (i.e., maturation and instruction). He determined that school-aged children are able to diagnose the type of personality a story character exhibits, but it is not until they are approximately 12 years of age that they are able to use their diagnosis to make predictions about that character's behavior in a new setting. To conduct this study, he devised a new social cognitive measure to assess students' developing ability to abstract properties in social systems. He presented short anecdotes of characters in a variety of situations, and asked what the character would do next and why. He proposed four levels of reasoning:

Level 1. The student is able to extract a character trait by focusing on both the behavior and the context of the character or, the student is able to analyse a dilemma faced by a character by focusing on both the problem situation and the obstacle preventing resolution.

Level 2. The student is able to extract a personality trait from a description of the character's behavior in a situation and predict the character's behavior in another situation based on that information.

Level 3. The student is able to extract two personality traits

from descriptions of the character's behavior, coordinate them into one overall personality characteristic, and predict future behavior based on the more appropriate trait for the new situation.

Level 4. The student will be able to simultaneously coordinate two personality traits and the situations under which they were exhibited, with the effects of a temporary situation and predict future behavior. The Test of Social Cognition (Marini, 1984), in a form revised for this study, was used in the current study (see Appendix C).

Work in the Field of Adult Literacy

Although there is no work reporting specifically on the representation of narrative held by low literacy adults, justification for using research on children as a starting point comes from other work in the field of adult literacy. Similarities in the strategies used by novice readers, whatever their age, have been noted by researchers investigating various dimensions of reading (Mudd,1987). Fagan (1988) in his study with novice adult and children readers, determined that when the subject matter is familiar and easy to read, both adults and children can make use of their existing background knowledge to aid in understanding. However, with difficult to read materials, this strategy breaks down for both adults and children resulting in poorer levels of comprehension.

In other work, Norman & Malicky (1987) and Malicky & Norman (1982,1989) have noted two stages in the development of reading in

adults that parallel the development of reading in children. Using miscue analysis in their study of 123 adults reading at grade levels from 1-8, they noted that there are two main adult stages in reading. At grade levels 1-3 there was little difference in the ability of adults to use print-based as compared to knowledge-based strategies. At reading levels above grade 4 however, there was a marked increase in the use of language knowledge to predict words while reading. The authors proposed that the ability to integrate print based and knowledge based strategies may be necessary before the adults can begin to rely more heavily on their background knowledge (Malicky & Norman, 1987).This work with students in Adult Basic Education (ABE) classes offers a potential categorisation of students into two appreciably different groups with distinctive needs, those who read below a grade three level and those who read above it. The shift is marked by the reader's ability to integrate their language and background knowledge with print based strategies for predicting words (Norman & Malicky, 1987). While acknowledging the difficulties involved in testing for specific grade levels, the research suggests that a shift appears in strategy use in the transition between pre- and post-grade three reading. It is reasonable to assume that the effect of pre- and post-grade 3 level of competency in reading would similarly be felt in composition.

Other work in the field of adult literacy has attempted to specify a grade level that corresponds to being literate. While acknowledging that there is no consensus in the field of literacy instruction on what level of reading constitutes the demarcation

between literate and illiterate (Cervero, 1985), a level of grade eight is generally considered sufficient for most everyday reading tasks (Graves & Kinsley, 1983; Report to Canadian Council of Ministers of Education, 1988).

Although work done in the field of social cognition has uniformly had children or high-literacy adults as subjects, it offers a potential starting place for the current investigation. It is an untested yet pervasive belief in the field of Adult Basic Education that the principle difference between low-literacy adults and children who read at the same level is the life experience that the adults bring to the learning situation (e.g., Ward, 1986). Recent work in the field of adult literacy has shown that many illiterate and low-literate adults are far from being the stereotypically inadequate, dependent adults that the literate community might expect. Some lead lives characterised by regular contact with literate and well educated adults, economic success, and frequent and effective interaction with the demands and institutions of the larger literate society. It is true however, that some illiterate and low-literate adults are dependent on family and caretakers, geographically immobile, and live in poverty. Whatever their life situation however, virtually all low-literacy adults live in a community. "Although illiterate adults cannot decode print, they constantly are decoding the social world. Social action may be seen as available for interpretation and dissociation from the actors, in the same way as text is interpreted distinct from reference to the author's intentions" (Fingeret, 1983).

From the literature review, the following question arose: Do

high- and low-literacy adults share the same understanding of why people behave as they do?

Neo-Piagetian Theory

This study was conceived within a neo-Piagetian framework. According to this view, the classical developmental position, as articulated by Piaget (1970), has been modified. Equilibration as the mechanism of developmental change has been replaced with the concepts of information processing capacity and experience/instruction and the broad and general structure Piaget proposed (i.e., the structure d'ensemble) has been replaced with more domain specific knowledge structures. These are referred to as central conceptual structures (Case, 1985).

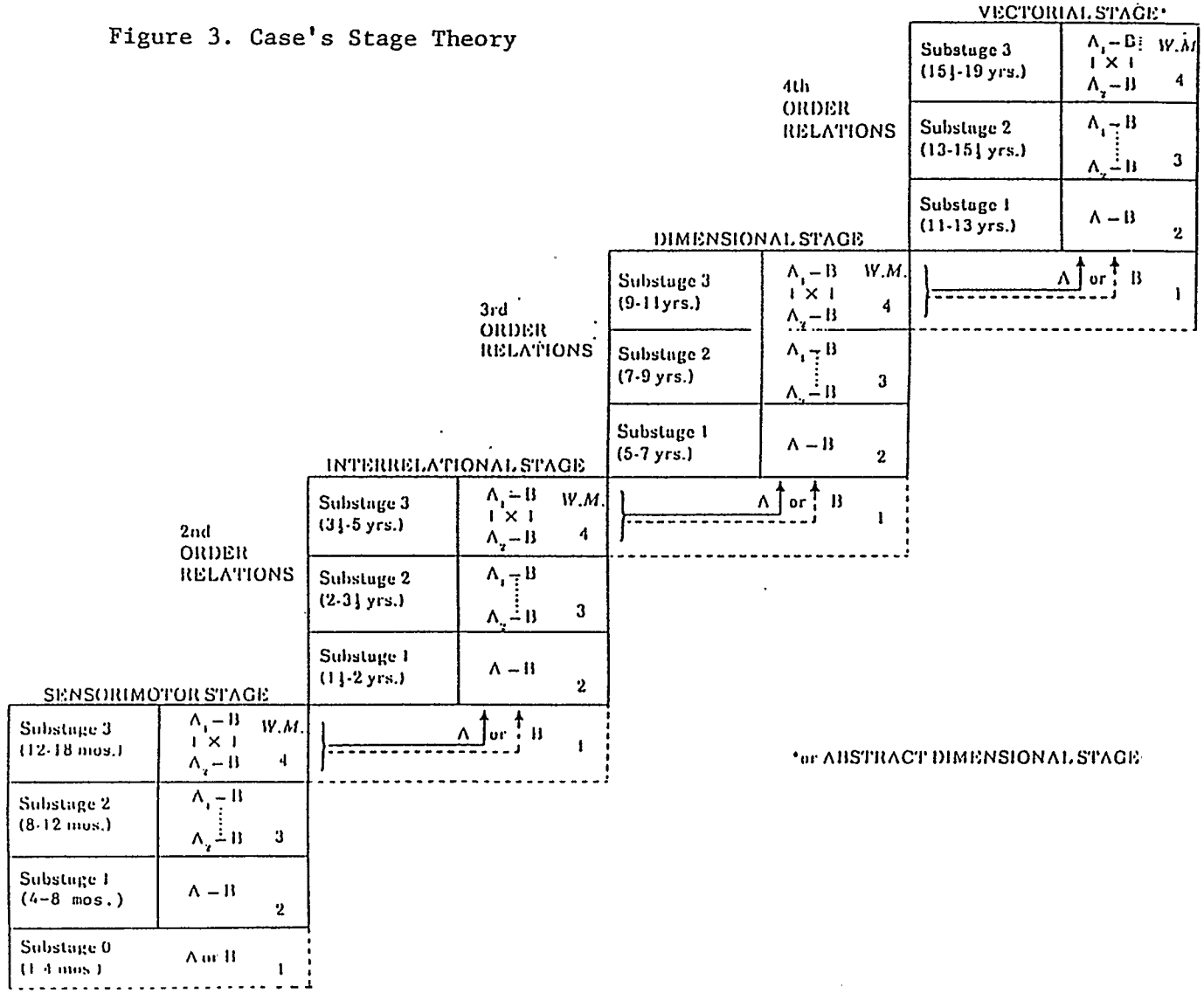
Case's theory can be summarised in the following six postulates:

1. In any given content domain, individuals assemble executive control structures, the content of which is a function of the domain in question, but whose structure has a universal form depicted in Figure 3.

2. Stage transition takes place when two qualitatively different control structures, assembled independently during the previous stage are coordinated ("A" and "B"). Substage transition occurs when additional schemes are integrated into a structure ("A1 - B" and "A2 - B").

3. An upward limit is set on stage and substage progression by working memory capacity, which is a measure of the number of

Figure 3. Case's Stage Theory



mental schemes that can be entertained.

4. As children grow older, their working memory capacity increases, as a function of maturation and operational efficiency.

5. The rate at which individuals move through the sequence might vary as a function of their experience in the domain, gained through either independent exploration or instruction.

6. Individuals are actively involved in the process by which the control structures are assembled and this leads to tagging certain structures as having a high rate of application and being central to a range of tasks across content domain.

From empirical work done based on Case's theory, three central conceptual structures have been identified:

1) an intentional structure which maps out the development of children's understanding of the relation between human action and mental states that underlie it.

2) a dimensional structure that maps out the development of children's mental representation of the number concept and

3) a spatial structure that maps out the development of an axial representation of three dimensional space.

The intentional structure is the focus of the current study as it is thought to underlie performance on both narrative and social cognition tasks. McKeough's (1987, in press) work on intentional structure in the narrative domain has been described in the section above on Developmental Plot and Character Analysis. Other work in the area of social cognition, conducted within this theoretical framework has demonstrated a progression in intentional thinking that parallells that found by McKeough. Specifically, the research

investigated three areas, a) children's understanding of mother's role (Goldberg-Reitman, in press), b) children's understanding of feeling words (Griffin, in press), and c) empathic cognition (Bruchkowsky, in press). Each of these studies merits a brief discussion.

1. In the *Understanding of a Mother's Role* study, children were presented with several cartoon sequences, for example, a little girl is sitting on a roof and she starts to slip off. The cartoon was read to the child and then the child was asked, "What did the mother do?" and "Why?". Goldberg-Reitman found that, pre-intentional 4-year-olds explained the mother's actions exclusively in the world of action (e.g., "The mother will catch her because she is falling"). Intentional 6-year-olds explained the mother's actions with reference to the mother's motivates (e.g., "The mother will catch her because she doesn't <u>want</u> her to get hurt"). The criteria used for differentiating between a pre-intentional and intentional response was:

Does the child reassert and event depicted in the comic strip? (e.g., she's falling)

NO=empty cell

YES

Does the child make additional reference to the mother's mental state (e.g., she wants, she doesn't like, she's worried, she thinks)

NO=level 1

YES

Does the child stipulate 2 of the above mental states to

account for the mother's actions?

NO=level 2 YES

Does the child stipulate at least one mental state in addition to "she doesn't want her to get hurt because she loves her daughter")

NO=level 3 YES=level 4

2. In the *Explaining the Meaning of Feeling Words* study, children were asked to explain what it means to be "happy'" and what it means to be "sad". Griffin found that between the ages of 4 and 6 years, children move from thinking of an emotion as an event to thinking of it as a mental state. For 4-year-olds, "sad" meant "your mummy sends you to your room". For 6-year-olds, "sad" meant "your feelings go down when your mummy sends you to your room". The criteria used for differentiating between pre-intentional and intentional responses was:

Does the child offer an action or a behavior?

NO=empty cell YES

Does the child make reference to two of the following: feeling (e.g., "You feel sad"), a judgment (e.g., "It's not nice), or an event (e.g.,"You laugh)?

NO=level 1 YES

Does the child make reference to three of the following: feeling, judgment or event?

NO=level 2 YES

Does the child make reference to two of the following: and then you're sad because you don't have him anymore..He's gone; or two perspectives (e.g. "Other people might be feeling sorry for you because you are sad.")

NO=level 3 YES=level 4

3. In the *Empathic Cognition* study, subjects were shown videotapes of children in affectively laden situations and asked how the person felt and why she felt that way. Bruchkowsky found that children aged 4, 6 and 10 were all able to accurately identify the target character's feeling, however they differed in the way the explained the feeling. As in the other studies, the 4-year-olds explained the character's sadness by an event in the world of action (e.g.,"cause her dog was killed) whereas the older children offered an explanation that made reference to the feelings of the character (e.g., "she really liked her dog") The criteria for differentiating between a pre-intentional and intentional response was:

Does the child assert the event depicted in the video? (e.g.,the car hit the dog)

NO=empty cell YES

Does the child make additional reference to the little girl's feeling state (e.g., she loved him) or a judgment? (e.g.,"The driver shouldn't have hit him.")

NO=level 1 YES

Does the child make reference to the little girl's feeling state and a judgment (e.g., "She wanted to play with him") or does the child name two feeling states and an explanation consisting of an event related to each feeling? (e.g., she was happy when she was playing with her dog and sad when he died")

NO=level 2 YES

Does the child stipulate an event feeling or judgment as well as an overarching long-term mental state (e.g., "She'll miss him")

NO=level 3 YES=level 4

Each of these studies, as well as the work on narrative done by McKeough (1987, in press) illustrated a developmental progression in intentional structure, from a) undifferentiated reference to action, to b) differentiation between mental states and action, to c) consideration of two mental states, and finally to d) an integration of multiple mental states. The majority of children at each of the 4 levels, (i.e., 4,6,8,10) were found to perform similarly on all tasks.

Although children showed parallel performance on these intentional tasks, in the current study, it was expected that such parallells across domains would not exist for the low-literacy adults. Specifically, it was predicted that although the low-literacy adults would demonstrate delayed performance on the narrative composition task, they would perform in a fashion similar to the

high-literacy group on the task measuring social cognition. Case's theory would account for the different level of performance as a result of different levels of experience in the two domains.

Hypotheses

Guided by prior work done in the fields of narrative schema and social cognition, this research proposed to explore the conceptual links between story telling, story retelling and level of social understanding by investigating the following hypotheses:

1. The stories composed by the high-literacy subjects will contain a action-intention plot(s) and an interpretive plot(s).

2. The stories composed by the low-literacy subjects will contain only action-intentional plot(s).

3. There will be no significant difference in the number of the level 1 t-units[2] recalled by the high- and low-literacy adults.

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[2] A t-unit analysis (Hunt, 1977) of stories to specify the content of the items recalled is one form of analysis that has been used (Brake, cited in Fagan & Currie, 1983). The details of the method of analysis, the rationale for its choice, and the method of determining the hierarchical level of the t-units are explained in detail in the Methods section to follow. Briefly though, "A t-unit is the shortest grammatically complete sentence that a passage can be cut into without creating fragments." (Hunt, 1977, pp. 92-93). T-units were chosen as the unit of analysis because they allow for the level of complexity of recall that was being investigated (Fagan & Currie, 1983). For the purposes of this study, t-units at the highest level of the hierarchy were designated as level 1 t-units and t-units lower in the hierarchy were designated as level 2 and level 3 t-units.

4. There will be a significant difference in the number of level 2 and level 3 t-units recalled by the high- and low-literacy groups. This difference will be in favour of the high-literacy group.

5. There will be no significant difference between the high- and low-literacy groups in their level of understanding of how character traits drive social behaviour.

CHAPTER III

Research Design

General Method

This study is an exploratory, ex post-facto design, using 10 subjects in each of two groups, a high-literacy and a low-literacy group. A more detailed explanation follows in the specific materials and procedures section, however, briefly stated the method was as follows. The researcher met individually with each of the potential subjects who had volunteered to participate. Each subject was given an honorarium of $10 for each session in which they participated in order to cover travel expenses. The purpose of the study was explained as an investigation of how adults tell and remember stories. An initial individual screening of each of the ten subjects in each group was carried out to ascertain if he/she met a set of predetermined criteria (described later) for his/her group. As well, all potential subjects were asked to make up a story. Each subject who met the criteria for his/her group was asked to return for a second session.

The second session consisted of 3 activities. First, the subjects were given an opportunity to revise and complete the story begun in the first session or alternatively, to tell a different story. Next, all subjects listened to a taped story and were asked to recall it orally. Finally, all subjects completed a series of tasks that

assessed social cognition. A detailed description of the tasks is offered in the Experimental Tasks and Rationale for Their Choice section to follow.

Recruitment Procedures

Coordinators of Adult Basic Education classes in Calgary and Red Deer were contacted by telephone or mail, sent an outline of the proposed research, including confirmation of University of Calgary Ethical Approval, and requested to reply regarding their willingness to allow the researcher to approach their students as potential subjects. Coordinators from whom permission was received, were sent a package containing a summary of the research to be read by the coordinator/teacher to the students, letters to potential subjects, and consent forms. (Letters and consent forms are attached in Appendix A). The coordinator/teacher conducted an initial informal screening of potential subjects and only proposed participating in the study to those ABE students whom the coordinators judged to read at a grade three level or below and who were educated in English as children. The reason for this selection of "grade three or below" is explained in the preceding Literature Review section of the paper. Briefly, however, it is based in findings from work with in the field of adult literacy and reading, where a difference in the ability to integrate print-based strategies and knowledge-based strategies has been noted between pre- and post-grade three reading levels (Malicky & Norman, 1982: Fagan, 1987). The first ten adults who met with the researcher, completed the

consent form, met the criteria set for their group, and for whom all the data were available became the subjects for the low-literacy group.

Similarly, for the high-literacy group, the Academic Vice-Presidents from the Southern Alberta Institute of Technology, and Mount Royal College were contacted, sent an outline of the proposed research, including confirmation of University of Calgary Ethical Approval, and requested to contact the researcher regarding their willingness to allow the researcher to solicit high-literacy subjects from among their students. Permission was received from both institutions and notices were distributed around the campuses soliciting subjects for a study on adults and story telling (See Appendix A). Subjects who called the researcher expressing an interest in being in the study were asked to meet individually with the researcher. The first ten adults who met with the researcher, completed the consent form, met the screening criteria for their group and for whom all the data was available became the high-literacy group.

Screening Tasks and Rationale for their Choice

There were two tasks used to screen potential subjects for the study: 1) the Silvaroli Classroom Reading Inventory Form D (Silvaroli, 1986) and 2) the Weschler Adult Intelligence Scale-Revised, (WAIS-R) Similarities Subtest (Weschler, 1981). The Silvaroli Classroom Reading Inventory Form D was used to assess reading levels of the subjects. It was chosen because it had been

normed on adults across the reading competency levels required for this study and the content is geared toward the interests of adults. This informal reading inventory includes a graded test of sight words and high interest, low vocabulary stories. The word list ranges in difficulty from the pre-primer level to grade eight, and the stories range in difficulty from grade one to grade eight.

Each potential subject was also screened using the Weschler Adult Intelligence Scale-Revised, Subtest of Similarities. The selection measure was included to permit the selection of a relatively homogeneous sample by excluding very high and very low ability subjects from the study. The Subtest of Similarities contains 14 pairs of words. The pairs range from two highly similar items, "orange and banana" to opposites "praise and punishment". Each subject was asked to explain the similarity between the two words. This measure was selected because this subtest is a good measure of "g" and correlates best with Vocabulary and Comprehension Subtests on the WAIS-R (Sattler, 1988, p 243). Low verbal language skills have been noted in low-literacy adults in other research (Gold & Horn, 1982), however, the items of the Similarities Subtest did not appear to include words that were unfamiliar to any of the subjects and thus provided a measure that could be used to screen potential subjects for both the high- and low-literacy groups.

It is important to note that this subtest was administered in a non-standard way. The non-standard administration is explained in detail in the Method, Session One section to follow. The reasons for this non-standardised administration of the test were two-fold:

a) The test was included to give a very general indication that

the subjects fell within the normal range of intelligence. It was included as a screening device to eliminate only the extremely high or low scoring subject (Gold & Johnson, 1984), and was not intended as an actual measure of I.Q.

b) This test was the first item in the data collection. In order to allow the subjects every opportunity to perform as well as possible, the researcher attempted to provide a more relaxed administration of the test.

Experimental Tasks and Rationale for Their Choice

There are two classes of tasks in the study: literary and social. These were given to the subjects who had met the preset screening criteria. The literary task has two components, narrative composition and narrative recall. The social task has one component, the prediction and interpretation of human action in everyday situations.

Narrative Composition Task

For the narrative composition task the subjects were asked to tell a story about an adult who had a problem he/she wanted to solve. The story was to be for an adult audience and was to include a surprising or unexpected ending. By structuring the narrative composition task through the above instructions, based on the work of McKeough (1987, in press), the researcher attempted to elicit a complex story that would represent an optimal story-telling performance by the subjects.

Narrative composition is a cognitively complex task requiring the story teller to hold many separate items in memory and to coordinate those items to produce a coherent story. Character(s), setting, and plight and the relationships between them can quickly overwhelm the memory resources of the story-teller if a well developed story schema is not available to lighten the cognitive demands of the task. It was anticipated, that because of their greater experience with stories, and thus more well-developed story schema, the high-literacy adults would compose more complex stories than would the low-literacy adults.

Narrative Recall Task

For narrative recall task the subjects were asked to listen to a taped story and to then orally retell the story as though they were telling it to someone who had not heard the story before (C. Braun, personal communication,1991). This technique was used to elicit the most complete retelling possible yet not demand exact recall. The story used for the recall task was selected from an anthology of short stories written by adolescents (Bowen,1988) although it was modified somewhat to reduce the amount of dialogue and to make some passages clearer. It was selected for two reasons. First, it met general standards for interestingness for this population. The characters are adults, the story takes place in a familiar setting, and the goal of the story is both important and difficult to attain (Mandler, 1983; Jose & Brewer, 1983; Hedberg & Stoel-Gammon, 1986). Second, it contained both action-intentional and an intentional-interpretive subplots and therefore this story allowed

for retellings that could be action-intentional or intentional-interpretive. The text of the story used for the recall task is presented in Appendix B.

The retelling of a story is a story in itself and reflects a selection process by the listener that illuminates the structure and content chosen (Tindal & Marston, 1990). That is, in any task too complex for total recall, the listener will select what to remember, and hence what will be available for recall. The memory demands of retelling a story of more than 4700 words, as in this study, would necessitate some selection and restructuring of the story. The more well-developed the story schema of the listener the more complex will be the retelling because a well developed story schema provides the listener with a means to structure the incoming information. It was expected that because of having a more well developed story schema, the high-literacy adults would provide a more complex retelling of the story than would the low-literacy adults.

Social Cognition Task

The final task of the study was the Revised Test of Social Cognition (based on the work of Marini, 1984). This test consists of: 1) short descriptions about one character's behavior in various situations, and 2) questions asking how that character would behave in another situation. As some of the characters in the original version of the test of Social Cognition were children or adolescents, the descriptors of the characters have been modified to make the characters adults. For this task, the researcher read the short descriptions of characters in everyday situations and then asked the

questions that follow. The complete revised Test of Social Cognition in Appendix C. The purpose of this task was to assess the level of understanding of social behavior of the subjects in a non-literacy based task.

Because narratives are understood within a shared cultural context, one's understanding of why people behave as they do is a prerequisite to understanding narrative. It is generally held that the primary difference between low-literacy adults and children who read at the same level is the life experience that adults bring to the comprehension of narrative. Insofar as all adults share the same general life experiences, both low- and high-literacy adults were expected to score equally well on a test of social cognition. However, it was anticipated that, although the two groups shared the same level of social understanding, the low-literacy adults would not be able to incorporate their knowledge of how human motivation underlies behavior into their stories as well as would the high-literacy adults because of their limited familiarity with and experience with literature.

There are limitations of the screening tasks and the experimental tasks used in the current study. These are discussed in the Delimitations and Limitations section of the paper to follow.

Method

Subjects

The first 20 adults who completed the consent form and met the selection criteria for their respective groups were included in the study. The criteria for inclusion in the low literacy group were:

1) average level of functioning on the WAIS-R Test of Similarities (non-standard administration) (i.e., a scaled score greater than or equal to 8 and less than or equal to 15) and, 2) a score of independent reading level of grade three or less on the Silvaroli Form D Reading Test. All low-literacy subjects were drawn from publicly funded literacy programs in Calgary and Red Deer Alberta.

The criteria for inclusion in the high literacy group were: 1) average level of functioning on the WAIS-R Test of Similarities (non-standard administration) (i.e., a scaled score greater than or equal to 8 and less than or equal to 15) and, 2) a score of independent reading level of grade eight on the Silvaroli Form D Reading Test. The high-literacy subjects were drawn Mount Royal College and the Southern Alberta Institute of Technology in Calgary.[3]

Session One

Selection procedures.

[3] Session One-Subjects not Selected

Subjects who did not meet the criteria for their group, were still asked to tell a story. These stories were not scored and were not included in the study. These subjects were asked for a story because the study had been presented as research on adults and story telling. The researcher believed that the subjects would expect a story telling component and may have felt that they had failed if they did not contribute that kind of data. This concern was particularly significant for the low-literacy adults. In view of the findings that indicate many low-literacy adults have low self-confidence for literacy related tasks (Norman & Malicky, 1986), this researcher concluded that it was better to have the subject complete a story telling task than to risk the subject feeling he/she had somehow failed in the study.

The researcher met with each potential subject individually. The purpose and procedure of the study was explained as follows:

" My name is Lorraine Templeton. I am a graduate student at the University of Calgary. This is a study to investigate how adults tell and remember stories. There are three parts to the study: a reading part, a story telling part and a story retelling part. I'll need some adults for both the reading and story telling part and some for the reading part, story telling part and the story retelling part. To begin, I would like to ask you a few questions about yourself that have to do with my study. I'll be taping almost all of the time because you can talk faster than I can write.

1. What is your name?

2. May I ask how old you are?

3. Do you have any health problems that might bother you while you're in this study-for example hearing, or vision problems?

4. Is English your first language? (If no, "How long have you spoken English? Were you educated in English?)

5. Is there anything else about you that you think I need to know that might have to do with my study before we begin? Remember, you may stop at anytime if you no longer want to be in the study. Any questions?"

For all subjects, the screening assessment consisted of two standardised tests:

1) WAIS-R, Similarities Subtest(Weschler, 1981). On this test subjects are asked to tell how two things are similar. The question was posed as "How are _____ and _____ similar? If the

subjects answered the first question, "How are a banana and an orange similar?" as "fruit" they were told "Yes, that is correct. Some people answer 'You eat them both' but fruit is a better answer". If they didn't answer the first item correctly, they were told the correct answer. It is important to note that this test was not given in a standardised fashion. Many non-content prompts were given to encourage the subjects to think of several ways the items might be similar and the subjects were encouraged to take as much time as they required. The researcher explained that when they were asked to keep thinking of more ways the items were similar, it did not mean their answer was wrong and that other people had found that if they tried to think of lots of ways the items were similar, they sometimes came up with answers they thought were better than their first answer. If the subjects gave answers that explained how the items were different, they were reminded of the answer to the first pair and encouraged to try again.

2) Silvaroli Classroom Reading Inventory, Form D (Silvaroli, 1886). The subjects were asked to read a word list into the tape recorder. Low-literacy subjects were started at the pre-primer level and continued to read through the graded lists until they made more than four errors at one level. High-literacy subjects were started at the grade seven level.

All low-literacy subjects who could read the pre-primer and grade one word lists were asked to read the grade one story. Administration of the subsequent grade levels continued until the subject met the frustration level, outlined in the manual. Instructional levels were established according to standard

procedures (Silvaroli, 1986). Subjects whose instructional levels were established as less than grade 4 and who met the criterion level of the WAIS-R Similarities Subtest were included in the study.

All high-literacy subjects were asked to read the grade seven level story. If they scored at the independent level on that story, they were asked to read the grade eight level story. Subjects whose reading level was established at independent grade eight and who met the criterion level of the WAIS-R Similarities Subtest were included in the study.

Narrative composition task.

For the subjects who met the criteria for their group, the final task of the first session is the scored story-telling task. The instructions were as follows: "I want you to make up a story. Imagine that you are telling the story to a group of adults. You may tape the story, or you may write it down, or I can write it for you (this part of the instructions was only given to the low-literacy adults) or you may use both the tape recorder and paper and pencil. Use whatever feels the most comfortable for you. If you decide to write the story, I will have you read it into the tape recorder when you are done so you don't need to worry about it being neat or about spelling. You will have lots of time to work on the story, so please don't feel that you have to hurry. When you come back for the next session you can continue to work on this story if you want to. I can stay here while you work on it, or I can leave the room-whichever you prefer. Any questions? Now, these are the instructions for the story.

Make up a story about someone about your age, who has a

problem that they want to solve. Tell a story that has a surprise ending, something unexpected or unusual. I can repeat the instructions anytime you wish."

These instructions are based on the work of McKeough (1987, in press). At the end of the first session an appointment was made for the second session.

Session Two

The researcher met individually with each subject for the second session. This second and final session consisted of three tasks: story telling, story retelling, and the revised Test of Social Cognition.

Narrative composition task.

At the beginning of the second session all subjects were offered the choice of editing, revising or completing the story from the first session or telling a different story. They were asked "Would you like to work on the story you told in the first session or would you like to make up a new story?" In either case, the complete story telling instructions, as outlined above, were given again.

When the subjects finished their stories, those subjects who wrote it were asked to read their story into the tape recorder thereby eliminating the need for attention to the mechanics or writing. The researcher kept the written copy of the story (when available) as a back-up version in the event that the tape was difficult to understand.

Narrative recall task.

The second part of the second session consisted of the story-recalling task. Initially, an unscored practice story was presented.

The practice stories used in the story recall task have been drawn from stories used in work on memory and aging (Dixon, Hertzog & Hultsch, 1989), although they were modified somewhat to make them more story-like (Jose, 1988). The subject was told "Listen to this story on the tape recorder. You may listen to it once and then I would like you to tell the story back. You don't have to remember the exact words of the story, but imagine you are telling it to someone who hasn't heard it before. I will record you telling the story on the tape recorder."

These instructions were chosen to elicit the most complex recall possible while not requiring rote memory. After the subject had completed the recall, the researcher asked him/her to describe the main character. This allowed the subject another opportunity to tell what they remember of the story by framing the recall in another way (Surber, 1983). If the subject had not remembered the story, or appeared to be telling the story as if the listener had heard the story, the instructions would have been repeated and a second unscored practice story would have been given. The practice story recall was not scored, although the recall was taped in the same manner as the target story in order to familiarise the subjects with the procedure.

Next, the scored recall story, *Revenge* (see Appendix B), was presented. The same instructions as outlined above for the practice story were given. In addition, the subject was told: " This story takes about 20 minutes on the tape so please make yourself comfortable before we begin." Both the practice and the target stories for the story retelling task were tape recorded.

Social cognition task.

At the end of the second session, all subjects were given the Revised Test of Social Cognition. The instructions to the subjects were: "Listen while I read you some short descriptions of how people behave. After each description, I will ask you some questions about the person and I will tape your remarks. Although some of the stories sound similar, they are all different so please listen carefully. I can read the descriptions again if you want me to."

Finally, at the close of the session, the researcher thanked the subjects and offered to explain the purpose of the various parts of the study and to answer any questions the subject had. All the subjects stayed after the study was over to ask questions.

Pilot Study

A pilot study was undertaken to determine the suitability of the research procedures and materials as are outlined above. Two low-literacy adults, and one high-literacy adult participated. The low-literacy adults were suggested as potential subjects by their teachers and the high-literacy adult was a member of the clerical staff of a University. They were each offered $10 per session for the two sessions in order to cover travel costs.

The procedures were the same as those described for the current study, with the following notable exception. A change was made in the intellectual screening instrument. The original

screening instrument chosen was the PPVT-R (Dunn & Dunn, 1981), a standardised test of receptive vocabulary. The PPVT-R was administered in the standardised manner following the procedures outlined in the test manual The original criteria for inclusion in the low-literacy group were: 1) a standardised score of 80 or greater on the PPVT-R. and 2) a score of an independent reading level of grade 3 or less on the Silvaroli Form D Reading Test. The original criteria for inclusion in the high-literacy group were: 1) a standardised score of 80 or greater on the PPVT-R. and 2) a score of an independent reading level of grade 8 on the Silvaroli Form D Reading Test. Both the low-literacy pilot subjects scored in the 60-70 range on the PPVT-R and at or below an independent reading level of grade 3 on the Silvaroli Form D Reading Test The high-literacy adult scored at an above 80 on the PPVT-R and at an independent reading level of grade 8 on the Silvaroli Form D Reading Test. Low verbal skills on the part of adults in ABE classes have been noted by other researchers in the field (Gold & Horn, 1982), and so, using a vocabulary test as a screening instrument for this population, may underestimate the cognitive abilities of the low-literate adults. Consequently, the PPVT-R was not considered a suitable screening instrument for this population. The WAIS-R Similarities Subtest (Weschler, 1981), as described in the Screening Tasks and Rationale for Their Choice section of the paper, was chosen as an alternative and administered to the two low-literacy and one high-literacy subjects in the pilot study. A standard score of greater than or equal to 8 and less than or equal to 15 was set as the criterion for inclusion as these scores define the upper and lower limits of

average ability. The WAIS-R Similarities Subtest was administered in the non-standardised way described in the preceding Method section. The two low-literacy and one one high-literacy subjects in the pilot study all met the preset criterion.

The pilot study was also used to test the procedures and instructions for the story telling, the story retelling, and the revised Test of Social Cognition tasks. These items are described in the Experimental Tasks and Rationale for Their Choice section. The method of administration of these items is given in the preceding Methods section. Upon completion of the pilot study data collection, one low-literacy subject and the high-literacy subject in the pilot study were asked to make suggestions for any changes in the administration of the study. Neither felt any changes were needed.

Scoring Procedures

Narrative Composition Task

One story per subject was scored. If only one story was composed in the two sessions, the taped version was considered the final draft and was scored. If two stories were composed, the taped version of the second story was considered the final draft and scored. (Eight of the ten low-literacy subjects and four of the ten high-literacy subjects composed a second story.)

An initial assessment was made classifying the composition as either "story" or "non-story". Non-stories include those productions that did not have a story format, having instead an essay structure. Secondly, all stories were globally classified as either a

blend of action/intentional plot(s), or as a blend of action intentional and interpretive plot(s) (see Figure 4, bold type).

Action intentional stories recount human behavior which is intentionally driven. Interpretive stories broaden or deepen the hearer/readers' understanding of people, or they use the plot to illuminate some aspect of human nature or behavior (Perrine, 1966). One could say interpretive stories take a meta-position to action-intentional plots. That is, the actions and intentional states of the protagonist of the action intentional story, become the object of reflection of the protagonist in the interpretive story.

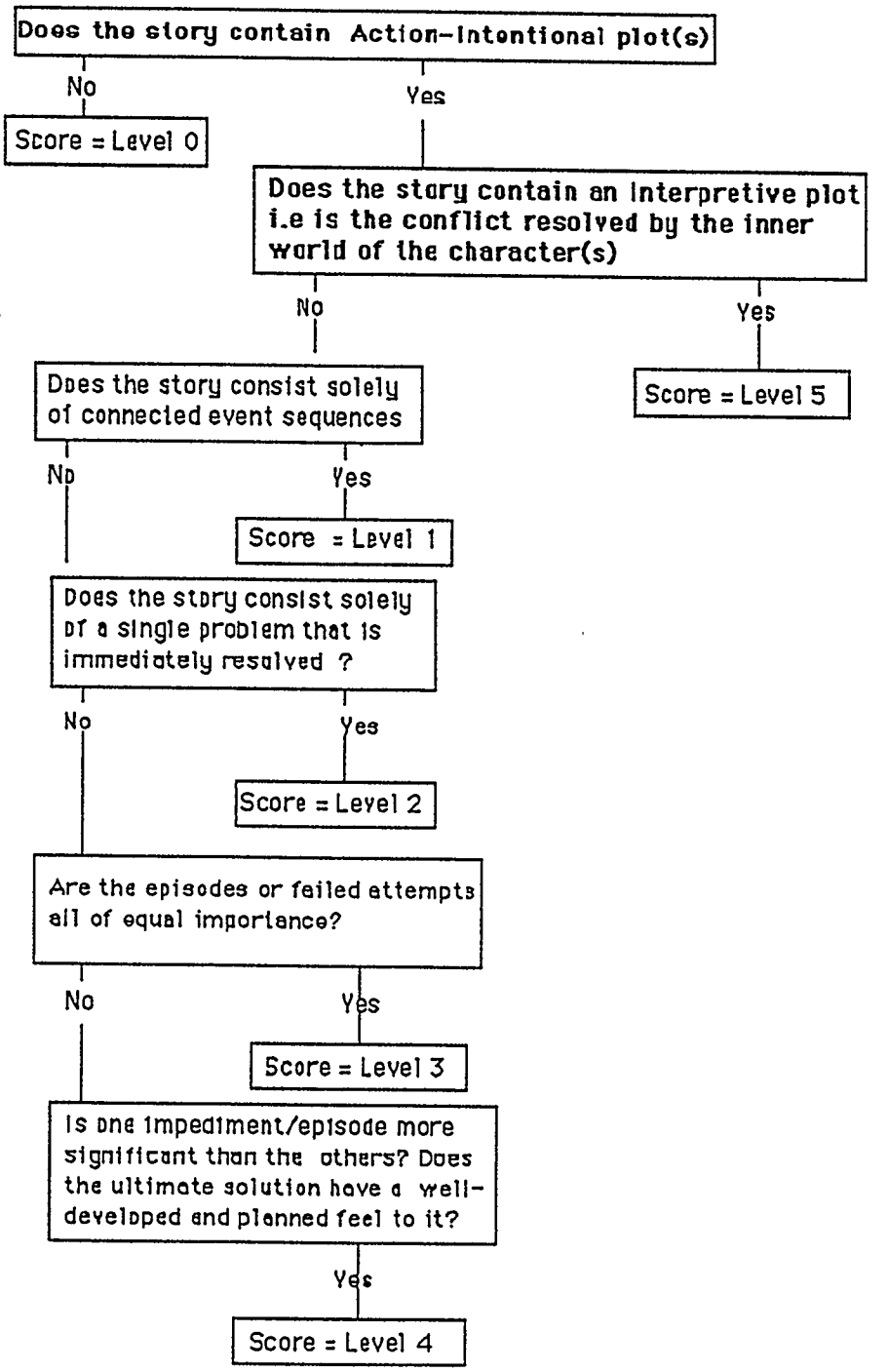
A second level of analysis offered further specification as to the level of complexity of plot. This assessment is based on the work of McKeough (1986,in press) who noted a developmental trend in plot complexity, and delineated five levels (see Figure 4).

As can be seen, the fifth level stories represent a qualitative shift from intentional to interpretive. That is, level 5 stories contain a plot that is resolved in the inner or psychological world of the protagonist(s). In these stories there is a change in, or reevaluation of the thinking of the main character(s) and this at least in part, resolves the conflict. An example of an action-intentional story from the current data is given in Appendix D. An example of an interpretive story from the current data is given in Appendix E.

Narrative Recall Task

The method of scoring recall protocols is modelled after

Figure 4 Flow chart for scoring narrative compositions



gist recall paradigm (Tindal & Marston, 1990). This form of recall involves memory of the content of the story rather than recall of the exact wording (Kintsch, 1977). One way to measure gist recall is through the use of t-units (Brake, cited in Fagan & Currie, 1983). T-units, or terminable units, are defined as "a single clause plus whatever other subordinate or nonclauses are attached to, or embedded within, that one main clause. A clause is defined here as a subject (or coordinated subjects) with a finite verb or coordinated finite verb" (Hunt, 1977, pp. 92 & 93). T-units are the shortest grammatically complete sentences that a passage can be cut into without creating fragments.

The target story was given to nine raters who were good readers. They included three adolescents, aged 13,14, and 16, and six adults ranging in age from 38-70. This wide age selection provided a range of opinions and allowed for a consensus that was representative of skilled readers. The raters were asked to read the story and select clauses from the story that were: a) most important to the plot development and b) least important to the plot development. All proposed high importance clauses from the raters were listed, typed onto a sheet in the form of t-units (Hunt, 1977), and the raters were again asked to rate them . This time however, they were told they could rate a clause (t-unit) as of level 1, level 2 or level 3 importance. Level 1 importance was described as of most importance to the plot development. Level 2 importance was described as of intermediate importance to the plot development. Level 3 was described as of least importance to the plot development (but not unimportant). This was done in order to

achieve a consensus among the raters for the level 1 t-units. To ensure that the clauses selected as Level 1 represented a clear consensus, t-units for which 7 of 9 raters agreed were rated as level 1 importance. This procedure left much of the story as yet unclassified. By default, all clauses not yet specified were classed as level 2 importance. The researcher compiled a list of all unselected clauses written as t-units. These, plus the t-units previously rated as level 2 or level 3 importance, were retyped onto a sheet and the raters were asked to rate them as level 2 or level 3. Ratings of the remaining t-units were assigned by simple majority (i.e., 5 of 9 raters). This level of agreement is based in the work of Brown & Smiley (1977).

T-units recalled were further assessed for type. T-units types were defined as follows:

a) Descriptive t-units describe the setting. Examples are, "the sky was grey, dull and heavy", or "she is on a deserted road".

b) Action t-units describe physical movement. Examples from the story are, "she ran across the gravel" or "she reads the journal";

c) Intentional t-units describe first order mental states such as wants, needs, wishes and plans. An example is "she decided that she had to escape";

d) Interpretive t-units refer to second order mental states that clarify (or interpret) action or intentional t-units. This clarification can take three forms:

1. The form of a justification for an intention or action. An example is, "She was uneasy about getting in the van because she didn't trust men." The initial clause of the example, "she was uneasy

about getting in the van" would have been an intentional clause if it stood alone. By the addition of the the information "because she didn't trust men", the whole clause is upgraded to an interpretive t-unit.

2. Interpretive t-units may also be those which describe the character traits of the protagonist which underlie the actions or intentions. An example is "She never complained about bad service in restaurants because she was a shy person." The initial clause of the sentence, "she never complained about bad service" would be an action t-unit if it stood alone. By the addition of the information, "because she was a shy person", the whole clause becomes an interpretive t-unit.

3. A third type of interpretive t-unit is one in which the intention has consequences that symbolically extend to other times or situations. An example would be "she takes revenge not only against Ferdinand, but against all the other males she hated". A schematic chart of the format of the analysis is given in Figure 5.

Assessment of the type of t-unit was done by the researcher and two additional raters. There was agreement of 83%. Disagreements were resolved by discussion. (see Tables 1, 2, and 3 for a list of the t-units, their types, and the number of raters who selected them)

Transcriptions were made from the tape recodings of the recalls. Recall protocols were analysed for: 1) the presence of the t-units recalled, 2) level of importance of the t-units recalled and 3) the type of t-units recalled (i.e., descriptive, action, intentional, or interpretive).

Figure 5 Schematic of t-unit analysis

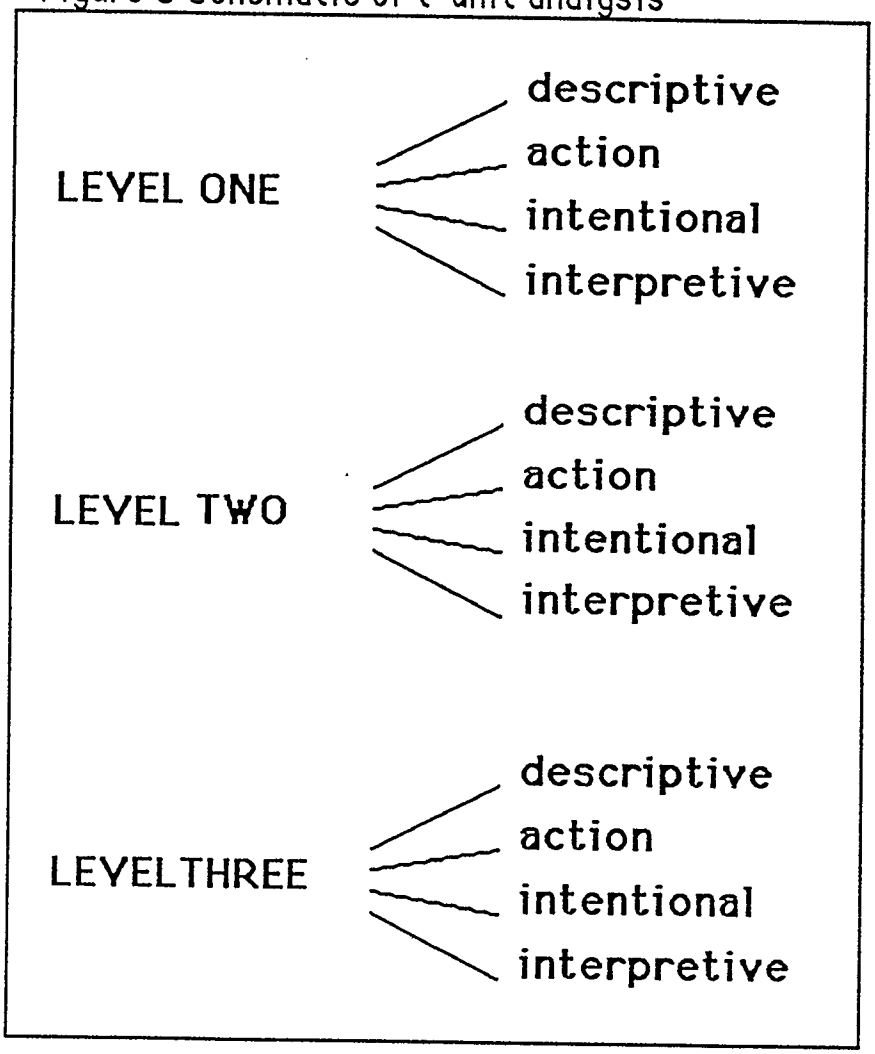


Table 1

Level 1 t-units		
T-UNIT	T-UNIT TYPE	Selected by __ raters of 9
a woman was teased a lot as a child	action	9
she runs out of gas	action	9
she is on a deserted, or unfamiliar road	description	7
Ferdinand, or a man, picks her up	action	9
she reads the journal	action	7
Ferdinand, or the man, captures her	action	9
she decides to, or resolves to escape	intentional	7
she formulates a detailed attack, or escape plan	intentional	7
she takes revenge, not only against Ferdinand but against all males or the school boys	interpretive	9
she is reluctant to explain everything to the lawyers, police, judges because they are (hated) males	interpretive	7
she imprisons him, locks him in, chains him to a pipe	action	9
she takes his money, invests his money, appropriates his money	action	7

Table 2

Level 2 t-units (page 1)		
T-UNIT	TYPE OF T-UNIT	Selected by ___raters out of 9
she had a meek personality, not assertive, so she never struck back	descriptive	9
she hated men	intentional	9
the boys were the worst teasers	descriptive	6
it was getting dark	descriptive	5
she wonders what to do	intentional	5
a van pulls up	action	6
she asks for help, flags down the van	action	8
the driver pushes something under the seat	action	8
she is apprehensive about getting in the van with a man because she distrusts men	interpretive	9
he is vague, or preoccupied, inattentive	descriptive	7
she lies about herself because she distrusts men	interpretive	7
she wonders why the trip is taking so long	intentional	7
she asks why the trip is taking so long	action	7
she asks what he is taking to his friend	action	5
he says he's returning butterfly collecting things to a friend	action	5
he takes her to a farmhouse or a friend's house or a country house down a road	action	8
he goes around the back, into the cottage	action	5
the cottage seems old, deserted, no lights on, date above the door	descriptive	6
she remembers he pushed something under the seat	intentional	5
she finds, pulls out the journal	action	8
tshe becomes suspicious of Ferdinand because of the contents of the journal	intentional	9
she decides she is in danger, becomes frightened	intentional	9
she decides to run away	intentional	9

Table 2 (continued)

Level 2 t-units (page 2)		
T-UNIT	TYPE OF T-UNIT	Selected by ___raters out of 9
she askes herself if she should sneak away or run for it	intentional	6
she runs blindly into a stone wall or fence and can't get over it	action	8
she feels a cloth over her mouth,breathing in her ear, hand on her shoulder	action	8
she wakes up	action	5
she thinks her hands are bound	intentional	5
she is kept in a locked room, windowless room, cell	action	8
there is no door handle	description	8
she argues with him, begs to be set free	action	8
he takes care or her, brings her food, tells her she is safe	action	5
he will not let her go because she has seen the journal	interpretive	9
she becomes angry about being imprisoned	intentional	5
she looks around the room for a weapon, looks for a way to escape	action	8
she tries all the shelves on the book shelf	action	5
she works a board or book shelf loose	action	9
it takes several (or nine) days	description	5
she practices hitting him, swinging the board	action	5
she hits Ferdinand again and again	action	9
he is all bloody, unconscious	description	5
she feels exhilarated or powerful about escaping	intentional	8
she cannot find a phone	action	5
she looks for the van keys	action	6
she finds out that Ferdinand is wealthy	intentional	7
she decides not to report this to the police	intentional	9
she felt her sense of power fading, felt meek and mousey again	intentional	7
she wonders if he is still alive	intentional	5
she buys a gun to keep Ferdinand under control	action	7

Table 3

Level 3 t-units (page 1)		
T-UNIT	TYPE OF T-UNIT	Selected by ___ raters of 9
she goes to University now	action	7
the sky was grey (descriptions of the sky or clouds)	descriptive	8
there were no bird calls, or nature seemed silent	descriptive	9
there were no cars at the stop signs, (details reinforcing how empty the road is)	descriptive	6
she continually checked her gas gauge	action	6
she came to the top of the hill and coasted down	action	7
she stopped with the tires of one side on the road and the tires of the other side in the gravel	action	9
she looked at the weed and grasses	action	9
she put on the weak, little girl act	intentional	5
she smiles at the man	action	5
the man is about 35, ordinary looking, dark hair, plain clothes	descriptive	6
she goes back to pick up her purse, lock up the car	action	9
she only gives brief replies to his questions	action	6
she says she is a nursing student	action	7
he asks if she minds the detour	action	8
she is disgusted by the idea of any kind of collecting because she thinks beauty is in the movement of the animals	interpretive	7
it was a quiet evening	descriptive	5
there is a small fence encircling the property	descriptive	7

Table 3 (continued)

Level 3 t-units (page 2)		
T-UNIT	TYPES OF T-UNITS	Selected by __ raters of 9
a dog is barking in the distance	action	5
it was written that the sketch pad was suitable for pencil, charcoal or ink	descriptive	5
the date October 14 is in the journal	descriptive	5
the room is hot, dark	descriptive	5
she crawls across the room	action	5
she finds the light switch, turns on the light	action	5
there is a brilliant orange carpet, other rugs, whitewashed walls, a sink, a bed	descriptive	9
she sees her captor, or plain but well-worn leather shoes	action	9
he watches her carefully when he is locking and unlocking the padlocks	action	7
the top shelf is bowed in the middle, loose	descriptive	5
she can't sleep, she sits up all night with the board	action	7
he tells her what a beautiful morning it is, says good morning	action	5
she pulls him further into the room	action	5
she goes upstairs or into the kitchen	action	7
she goes up to London	action	6
she arranges to take her classes by correspondence	action	5

Issues that arose in the scoring of the presence of t-units recalled were dealt with in the following way (based on the work of Dixon, Hertzog & Hultsch,1989):

1) A constructive error, that is, a t-unit that is consistent with the text but is recalled incorrectly, was included in the scoring. An example of an constructive error is " a man picked her up in a car" instead of "a man picked her up in a van"

2) An intrusion error, that is, a t-unit that is inconsistent with the text, was not included in the scoring. An example of an intrusion error is "she had heard on the news that women had been abducted"

3) An elaboration error, that is, a t-unit that is consistent with the text but not actually in the text, was not included in the scoring. An example of an elaboration error is "she put up the hood of her car as a signal that she needed help".

4) Repetitions, that is a t-unit that is repeated with no added information is only scored once. An example of a repetition error is "She detests men. She really hates men."

5) Comments or statements about the subject's own recall, recall process, or editorial comments on the story itself were not included in the scoring. "it's a kind of a Victorian Gothic horror story".

One further issue arose as an artifact of the scoring technique. The assignment of type of t-unit is based on the actual wording of the recalled unit. Thus, "She is on a deserted road" is scored as a descriptive t-unit. If it was recalled as "I saw no one on the road",

it was scored as an action t-unit. Because of this, the predetermined number of t-units of each type is offered only as a general guideline. It is important to note that this kind of transformation of t-unit type did not occur for interpretive t-units because of their complexity.

Each subject was assigned two scores: one based on the number of t-units recalled at each level of importance, and the other a score based on the type of t-units recalled at each level. (see Appendix F for a two scored story recalls, one from a high-literacy subject and one from a low-literacy subject)

Social Cognition Task

The social cognition tasks were scored according to the procedures developed by Marini (1984). The subject's answers consist of two components, prediction of the character's action and explanation of the character's action. The scoring was based on how well the subject's explanation integrates what they have learned about this character's personality traits from the anecdote presented with the prediction of the character's actions in the new situation. This analysis yielded a score for each subject expressed as a level. An example of a prototypical answer for one anecdote from each level is given below.

Level 1

One morning as Mary was waiting for the bus, another person tried to get ahead of her. Mary told the person that she did not like people getting in the line ahead of her and asked the person to move.

What type of person is Mary?

Why?

To receive a score of Level 1, the subject needs to identify the character trait or the problem situation. An example of a level 1 answer is "She's a bossy person. She doesn't like anyone pushing ahead."

Level 2

Lisa wanted a new dress for a dance. She heard about a half-price sale at a local store, so she decided to go. At the sale, Lisa found a nice dress and joined the line of people waiting to be served by the cashier. Lisa laid the dress on the counter and while she was counting her money another customer grabbed the dress. As the other person was checking the dress, Lisa left the store. That afternoon when she arrived home, Lisa found that a neighbour had taken her gardening tools and was using them.

What do you think Lisa did?

Why?

To receive a score of Level 2, the subject gives some evidence of abstracting a character trait and predicts how the character would behave based on that trait. An example of a Level 2 answer is "She wouldn't do anything because she didn't do anything about the dress.

Level 3

Scott read an advertisement in the paper about a sale on bicycle parts. He needed a new set of tires for his bicycle, so he went into the store to buy them. While he was counting his money to see if he had enough, someone grabbed the last pair of tires that he had intended to buy. As the other person went to pay for the tires, Scott left the store. On his way to work that afternoon, Scott saw a person having problems starting his car. He offered to help and the person accepted. When Scott arrived at work, he found that another

person had taken some of his tools and was using them.

What do you think Scott did?

Why?

To receive a score of Level 3 the subject gives coordinates 2 traits and predicts what the person would do. The subject could resolve the dilemma based on one of the traits while acknowledging the effect of the other trait. An example of a level 3 answer is "I think if he needed the tools he went and spoke with them in a courteous manner indicating he needed them. If he didn't need them I think he would just leave them to let the person use them and not say anything, because he's didn't do anything at the bicycle store. But at the same time, he was assertive and thoughtful in going to ask the person if they needed help with their car.

Level 4

Cathy was waiting in line to get her scissors and knives sharpened and just as her turn came up they announce that the shop was closing. Cathy told the people at the shop that she had been waiting a long time and she wanted her scissors and knives sharpened before they closed the shop. After shopping, she went over to see her friends. Late in the afternoon, she remembered that she had to be home because relatives were coming, so she excused herself and started to leave when her friend asked for her help in planning the menu for a party. Cathy helped her friend with the menu plan and then left for home. On her way home she slipped and ruined her favourite pants. When she got off the bus, a person approached her asking for directions.

What do you think Cathy did?

Why?

To receive a score of level 4, the subject makes reference to 2 traits and a temporal situation facing a character and shows evidence of resolving the conflict by taking into account the effect

of permanent traits and the effect of the temporal mood of the character. An example of a level 4 answer is "I think at this point, Cathy's probably not in a very good mood and she probably barks out fairly short directions if she gives any directions at all, because she was assertive in the scissor shop. But she was also helpful with her friend. But I think she's probably not in a very good mood as a result of falling down and wrecking her pants and she's already late for meeting her relatives, so she's probably feeling pressed and not terribly helpful.

The intentional action/interpretation distinction can also be applied to the social cognition tasks. Level 1 represents a well-developed intentional structure wherein subjects can differentiate between actions and the mental states that underlie them. As can be seen from the level 1 response above, the subject referred to a character's mental state (i.e., "She doesn't like ") and to a behavior (e.g., "pushing ahead"). In addition, a character trait was extracted suggesting a integration of the mental and action dimensions. Levels 2,3 and 4 represent interpretive thought wherein a metaposition is taken to the intentional state. In these three levels of responses, subjects extracted at least one character trait and then used it as a means of predicting future behavior. That is, whereas for level 1 responses, extracting the character trait was the "end", for levels 2,3 and 4 responses, the character trait was a "means" to a new end, that is, the prediction of future behavior. The shift to interpretive responses at level 2 is thought to reflect a qualitative shift (i.e., a major stage shift) in subjects' thinking. Levels 3 and 4 denote an increasing complexity of reasoning wherein subjects consider an

increasing number of character traits.

Each subject was assigned a level in two ways. First, a subject was assigned a level based on the highest level of anecdote answered correctly. That is, each anecdote was scored on pass or fail according to the outlined criteria. If any of the three items at level 1 were passed, level 1 was assigned. If either of the two items at level 2 were passed, level 2 was assigned, and so on for levels 3 and 4. This was the method used by Marini (1984) in his original study. Second, a less stringent scoring method was devised in which a subject was assigned a level based on the highest level of answer given in response to any anecdote. Thus, for the second score, if a subject did not give a level 3 answer to a level 3 anecdote yet gave a level 3 answer to the level 4 anecdote, the subject was assigned a level 3.

Summary

The current study presented three types of tasks to two groups, low- and high-literacy adults. The tasks were narrative composition, narrative recall and a test of social cognition. Scoring criteria were developed allowed the researcher to score them as intentional or interpretive. Specifically, for the narrative composition task, stories were classified either as a) intentional-action stories that dealt with the mental states the motivate action or b) interpretive stories that dealt with why the protagonist held the specified mental states. For the narrative recall task, recalls were scored both for how many items were recalled, and for what

type of items were recalled (i.e., intentional-action or interpretive). Intentional-action recall items dealt with the needs, wants or desires of the protagonist that motivated the action of the story, whereas interpretive recall items dealt with the reasons why the protagonist had those wants or desires. The third task, the Test of Social Cognition, was scored in two ways: 1) according the the protocols developed by its author (Marini, 1984) and 2) by assigning a score based on the highest level of reasoning exhibited. In both cases, level 1 responses were intentional (i.e., differentiated and coordinated mental states and action) and levels 2,3, and 4 were interpretive with each subsequent level demonstrating a more complex form of interpretive thought.

CHAPTER IV

Results

The current study collected information from 20 adults divided into two groups, high- and low-literacy, for three experimental tasks, a story composition, a story recall and a test of social understanding. In the current chapter, the descriptive statistics for the sample are presented first followed by the results of the analyses of performance on each of the three tasks. Finally, the analysis of the relation among the three tasks is presented. Three types of multivariate analyses were performed on the scores from the experimental tasks. The first, a MANOVA, was selected because it allowed the researcher to ascertain if a difference existed between the two groups, low- and high-literacy in the presence of multiple dependent measures. The dependent measures were: 1) the number of level 1 t-units recalled, 2) the number of levels 2 and 3 t-units (summed) recalled, and 3) the social cognition scores (two types). The results for the dependent measures are summarised in Table 4.

Where a statistically significant difference (α =.05) between the two groups was found, a second analysis of the dependent variables was performed using univariate ANOVA's. This test was selected because it provides information about the relative importance of each of the dependent variables as though they had been investigated in isolation.

Table 4

Summary of task results					
	Highest level social cognition	Highest social cognition score	Average level of complexity	No. of level 1 t-units	No. of levels 2&3 t-units recalled
Low literacy	1.5	2.1	2.6	8.0	25.0
High literacy	3.0	3.0	4.8	10.4	37.0

Third, as a consequence of the results of the MANOVA, secondary level of analysis was performed. Finally, a Pearson's correlation coefficient was calculated between each of the dependent variables. This test was chosen to summarise the strength of a linear relationship between the highest social cognition score[4], the number of level 1 t-units recalled, the number of levels 2 and 3 (summed) t-units recalled and the level of complexity of the narrative composition. All statistical analyses were done using SPSS/PC+ V2.0 statistical program

Population Description

A total of 22 potential low-literacy subjects and 10 potential high-literacy subjects were interviewed to become part of the low-literacy group and the high-literacy group respectively. Of the 22 potential low-literacy subjects, 8 did not meet the screening criteria of greater than or equal to 8 for the non-standard administration of the WAIS-R (Weschler, 1981), and 3 were not included because all the data required was not available for them. The first 10 potential subjects for the high-literacy group met all the screening criteria provided a complete data set and were included in the study.

Each of the high- and low-literacy groups consisted of 10

[4] Because the less stringent method of scoring gives credit for competence wherever it appeared and was not tied to performance in a specific situation, it was used for the purposes of comparison in the correlation analysis that is discussed later.

adults. There were 4 women and 6 men in the high-literacy group and 2 women and 8 men in the low-literacy group. The average age for the high-literacy group was 33.1 years of age and the average age for the low-literacy group was 35.5 years of age. All of the high-literacy adults spoke English as their mother tongue. Of the low-literacy group, 7 spoke English as their mother tongue, and the remaining 3 were all educated in English. The results are summarised in table 5.

Narrative Composition Task

The mean length of the narratives composed by the low-literacy group was 302 words. The mean length of the narratives composed by the high-literacy group was 672 words. See Table 6 for a summary of the descriptive data for the narrative composition task and Figure 6 for the distribution of the length of narratives composed by each subject.

The narrative compositions were scored for level of complexity according to the procedure described in the preceding Scoring Criteria and Procedures section of this paper. The average level of complexity of narrative composition for the low-literacy group was 2.6. The average level of complexity of narrative composition for the high-literacy group was 4.8. Table 7 contains a summary of the results of this analysis.

For the high-literacy adults, 9 of the 10 stories contained an interpretive plot(s). Thus, the evidence supports Hypothesis 1.

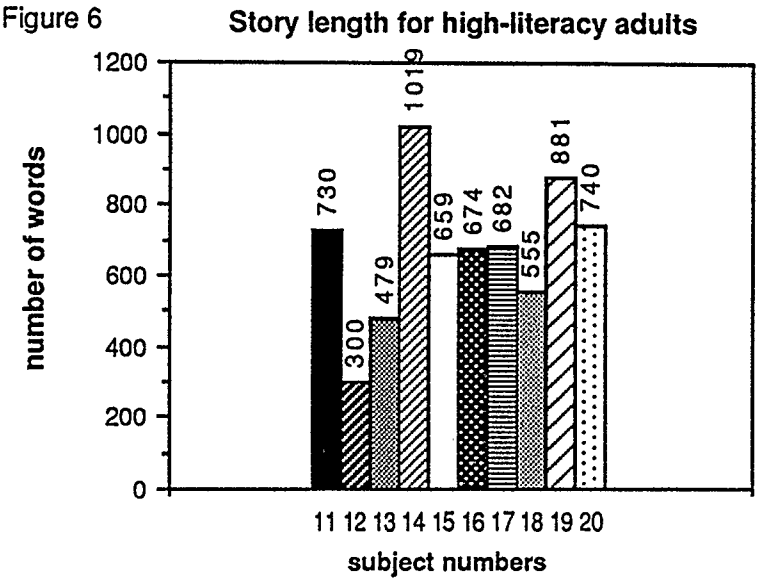
For the low-literacy adults, 7 of the 10 stories contained only

Table 5

Summary of descriptive information for subjects

	TOTAL NUMBER OF SUBJECTS	NUMBER OF MALES	NUMBER OF FEMALES	AVERAGE AGE in YEARS	ENGLISH MOTHER TONGUE
Low literacy	10	8	2	35.5	7
High literacy	10	6	4	33.1	10

Figure 6


Story length for high-literacy adults
number of words
1200
1000
800
600
400
200
0
730
300
479
1019
659
674
682
555
881
740
11 12 13 14 15 16 17 18 19 20
subject numbers

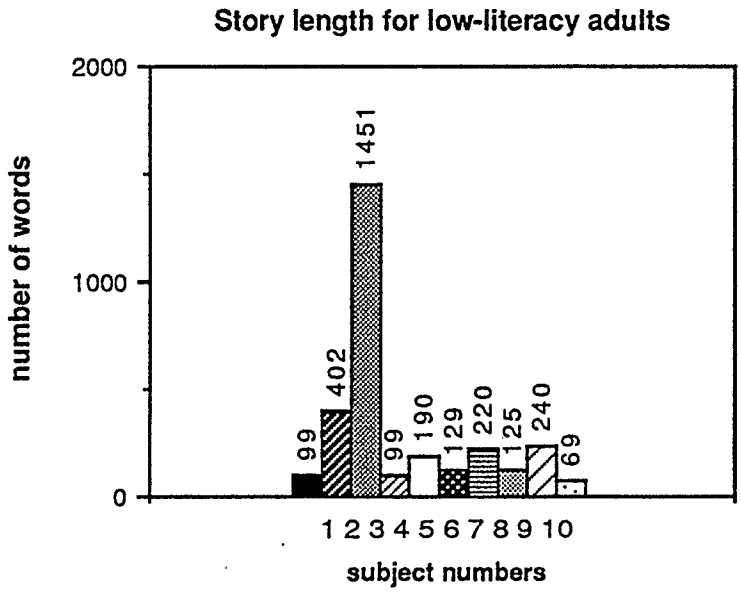

Story length for low-literacy adults
number of words
2000
1000
0
99
402
1451
99
190
129
220
125
240
69
1 2 3 4 5 6 7 8 9 10
subject numbers

Table 6

Summary results for the narrative composition task			
	Average Story Length	Range of Story Length	Standard Deviation of story length
Low literacy	302 words	99-1451 words	415
High Literacy	672 words	300-1091 words	200

Table 7

Number of subjects who scored at each level in the narrative composition task								
	Level 0	Level 1	Level 2	Level 3	Level 4	Level 5	$\overline{X}$	Std. Dev.
Low literacy	2	0	3	2	2	1	2.6	1.5
High literacy	0	0	0	1	0	9	4.8	0.6

action-intentional plot(s). Thus, the evidence supports Hypothesis 2. An examination of the results revealed no further statistical analysis was required.

Narrative Recall Task

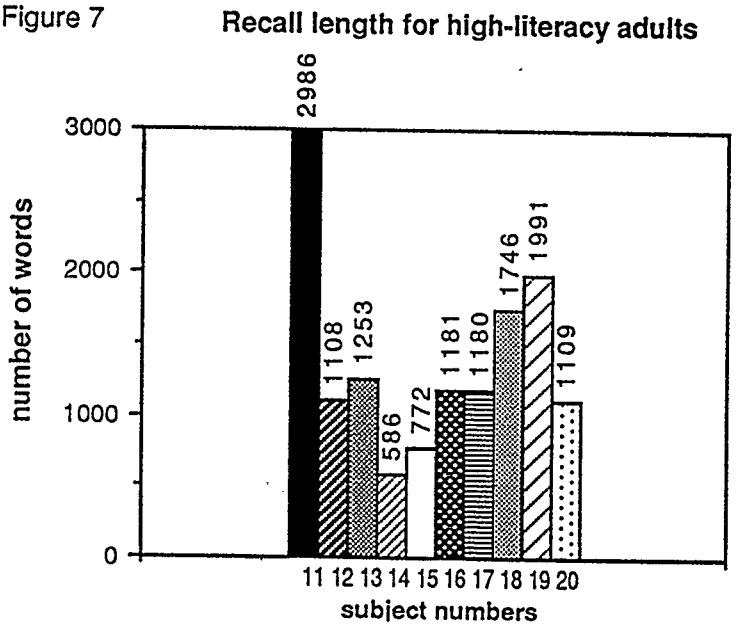
The mean length of story retold for the low-literacy group was 992 words. The mean length of story retold for the high-literacy group was 1391 words. See Figure 7 for a histogram showing the distribution of the length of narratives recalled for each subject by group.

The recalls of both groups were analysed according to the procedures outlined in the preceding Scoring Criteria and Procedures section for the presence of level 1 t-units recalled and levels 2 and 3 t-units (summed) recalled[5]. The results from the narrative retelling task are summarised in Table 8.

Two MANOVA's were performed. For the first, the independent variable was group, high- and low-literacy. The dependent variables were: 1) number of level 1 t-units recalled, and 2) number of levels 2 and 3 t-units recalled, 3) highest level of anecdote passed on the Test of Social Cognition (results for social cognition scores are discussed in the section on Social cognition task to follow). Using

[5] The level 2 and 3 t-units were combined for analysis because the comparison in recall performance was between items high and low in story importance. Additionally, one-third of the items at level 2 and more than one-third of the items at level 3 were selected by a bare majority (i.e., 5 of 9 raters) leading the researcher to conclude that there was not clear consensus for which items belonged at which levels.

Figure 7


Recall length for high-literacy adults
number of words
3000
2000
1000
0
2986
1108
1253
586
772
1181
1180
1746
1991
1109
11 12 13 14 15 16 17 18 19 20
subject numbers

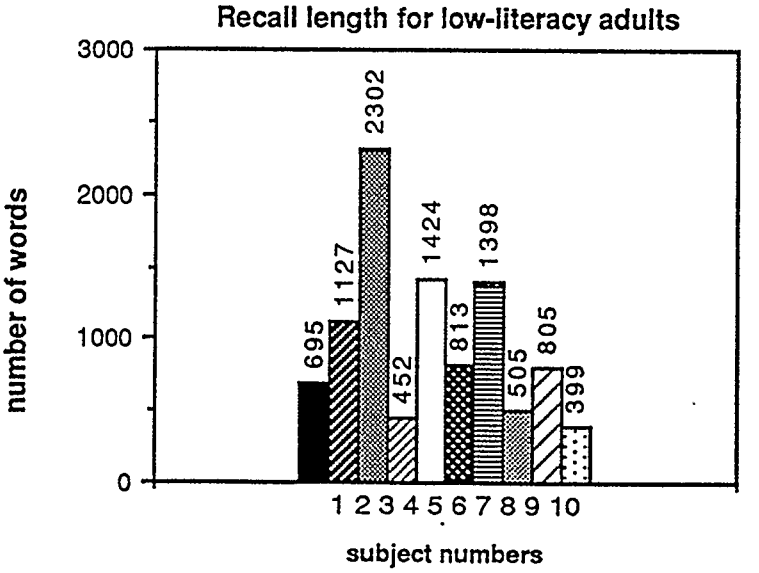

Recall length for low-literacy adults
number of words
3000
2000
1000
0
695
1127
2302
452
1424
813
1398
505
805
399
1 2 3 4 5 6 7 8 9 10
subject numbers

Table 8

Summary from narrative recall task							
	Average Recall Length original = 4753 words	Range of recall length	Standard Deviation	No. of Level 1 T-units recalled	Standard deviation no.of level 1 T-units recalled	No. of Level 2 & 3 T-units recalled	Standard deviation no. of level 2 &3 T-units recalled
Low literacy	992	399-2302	588.9	8.0	1.89	25.5	12.8
High literacy	1391	586-2986	693.5	10.4	1.01	37.5	12.4

Wilkes criterion (with α set at .05), the analysis revealed that the two groups were different when all three dependent variables were considered [P (Λ ≤ .40) ≤.05]. For the second MANOVA, the independent variable was group, high- and low-literacy. The dependent variables were: 1) number of level 1 t-units recalled, and 2) number of levels 2 and 3 t-units recalled and 3) highest level of reasoning exhibited on the Test of Social Cognition (results for social cognition scores are discussed in the section on Social Cognition Task to follow). The analysis revealed that the two groups were different when all three dependent variables were considered [P (Λ ≤.49) ≤ .05]. Because the results of the MANOVA indicated the groups differed when all the dependent variables were considered, univariate ANOVA's were performed to investigate each of the dependent variables individually.

A significant difference between groups was found for the number of level 1 t-units recalled [$F(1,18) = 12.23$, $p \leq .05$]. Thus, the evidence fails to support Hypothesis 3. The low- and high-literacy groups did not recall the high-level t-units equally well. An examination of the data showed that the high-literacy group recalled more level 1 t-units than did the low-literacy group.

A significant difference between groups was found for the number of levels 2 and 3 t-units recalled [$F(1,18)= 4.53$, $p \leq .05$]. Thus, the evidence supports Hypothesis 4. An examination of the data showed that the high-literacy group recalled more low-level t-units than did the low-literacy group. Table 9 contains the results of the univariate analyses.

The recall protocols were also subjected to further scrutiny.

Table 9

Univariate analyses of variance: high- and low-literacy Groups			
Dependent Variable	F	d.f.	signif of F
Social cognition score, highest level anecdote passed	19.28	1,18	.001
Social cognition score, highest level answer overall	10.56	1,18	.004
number of level 1 t-units recalled	12.22	1,18	.003
number of levels 2 &3 t-units recalled	4.53	1,18	.047

At each level of importance, t-units were classified as being of one of four types: descriptive, action, intentional, or interpretive. The results for both the high- and low-literacy groups are summarised in Table 10.

Social Cognition Task

The results of the revised Test of Social Cognition are reported in two ways. The first is the highest level of anecdote passed. The mean level for the low-literacy group is 1.5, and the mean level for the high-literacy group is 3.0. The second way of reporting these results is to report the highest level of social reasoning exhibited in response to any anecdote. The mean level response for the low-literacy group for this form of reporting is 2.1, and the mean level response for the high-literacy group for this form of reporting is 3.0. The results from the social cognition task are summarised in Table 11.

Because of the results of the MANOVA, and ANOVA was performed to investigate the differences between the groups on the social cognition scores. A significant difference between groups was found for the results of the Test of Social Cognition both for the highest level of anecdote scores [$F(1,8) = 19.29$, $p \leq .05$] and for the highest level of reasoning scores [$F(1,18) = 10.57$, $p \leq .05$]. Thus, no matter which form of scoring for the Test of Social Cognition is used, the evidence fails to support Hypothesis 5. The two groups did differ in their understanding of how character traits drive social behavior. An examination of the data showed that the high-literacy

Table 10

Mean number of each type of t-unit recalled for the two groups

	Level 1 t-units			Levels 2 and 3 t-units (Summed)		
	High-literacy Group	Low-literacy Group	Expected from Task Analysis	High-literacy Group	Low-literacy Group	Expected from Task Analysis
Descriptive	1.0	.5	1.0	6.7	4.6	21.0
Action	6.2	6.0	7.0	18.8	15.1	37.0
Intentional	2.1	2.0	2.0	8.2	5.2	13.0
Interpretive	1.2	.6	2.0	1.6	.6	4.0

Table 11

Summary results of the social cognition task

	Pass/Fail highest level						Highest level response given for any anecdote					
	Level 1	Level 2	Level 3	Level 4	$\bar{X}$	Std. Dev.	Level 1	Level 2	Level 3	Level 4	$\bar{X}$	Std Dev
Low literacy n=10	7	1	2	0	1.5	.85	1	7	2	0	2.1	.57
High literacy n=10	0	2	6	2	3.0	.67	0	2	6	2	3.0	.67

group scored higher on the test than did the low-literacy group.

Relations Among Tasks

In light of the above findings, a further analysis was performed on the data. A correlation analysis between all of the dependent variables across the whole sample (n=20) was performed. The results are summarised in Table 12.

Summary

This chapter contained the results from two groups, high- and low-literacy for the three experimental tasks, narrative composition, narrative recall, and social cognition. The descriptive statistics for the population and for each of the tasks was presented as well as the inferential statistics for each of the tasks. Finally, an analysis of the degree of the relationship among the tasks was presented.

Table 12

Correlation Analysis (n=20)

	Level of Complexity of the Narrative Composed	Number of Level 1 t-units Recalled	Number of Levels 2 &3 t-units Recalled	Highest Score on the Test of Social Cognition
Level of Complexity of the Narrative Composed	1.0	.62*	.53*	.57*
Number of Level 1 t-units Recalled	.62*	1.0	.59*	.58*
Number of Levels 2 & 3 t-units Recalled	.53*	.59*	1.0	.35
Highest Score on the Test of Social Cognition	.57*	.58*	.35	1.0

CHAPTER V

Conclusions and Implications

The present study was designed with three goals in mind. The first was to seek information concerning the way low-literacy adults compose and recall narratives. The second was to compare the performance of low-literacy adults to that of high-literacy adults. The third was to explore the relationship between the tasks in the narrative domain and the level of social understanding of the subjects. More specifically, it was hypothesised low-literacy adults would not be able to incorporate their knowledge of human motivation and of narrative into the stories that they created. However, it was also hypothesised that the two groups would not differ significantly in their ability to retell the main ideas from a story, nor in their understanding of why people behave as they do.

The current chapter is organised as follows:

1) Each hypothesis will be discussed within the heading of the experimental task in which it was proposed.

2) Anticipated and unexpected findings will be discussed, and explanations for the findings will be presented. In view of the exploratory nature of the study, individual as well as group results from the experimental tasks are discussed with special attention to performances that appeared to be anomalous.

3) Theoretical implications will be presented.

4) Suggestions for future research are given.

5) Delimitations and limitations of the study will be noted.

Narrative Composition Task

Research has shown a developmental progression in narrative composition that moves from action stories of preschoolers that focus on stereotypic event sequences in the real world to interpretive stories of adolescents that focus on the inner or psychological world of the characters (Applebee, 1978; Bruner, 1984; McKeough, 1986, 1987). From this work arose two hypotheses regarding performance on the narrative composition task of the current study.

Hypothesis 1

It was hypothesised that the compositions of the low-literacy adults will contain only action-intentional plots. For 7 of the 10 subjects, the findings supported the hypothesis. The neo-Piagetian theoretical framework of the study postulates that for cognitive development to occur, both maturation and experience/instruction are needed. For higher level skills such as reading and writing, and for adult learners, experience and instruction become increasingly important (Case, 1985). Although low-literacy adults live in a literate culture, it may be that extensive personal experience with written narrative is required to enable them to to incorporate both intentional action and an interpretation of them when composing a story. That is, experience and instruction in narrative may be required in order for the distinction between actions, wants, and needs (of action intentional stories), and the reflections on and

extrapolations from them that occurs in interpretive stories to be made. This seems a reasonable conclusion in light of the work done indicating that individuals typically require formal instruction in order to perform at a formal operations level on Piagetian tasks (Novak,1989).

An interesting finding of this assessment of the narratives composed by the low-literacy group was the source of the compositions. By their own report, nine of the ten compositions were based on personal experience. As stated at the beginning of the paper, narrative acts as a bridge between the oral tradition and the literary one. The current findings suggest that one of the steps of the bridge is the personal experience story, and that a later step is the more fictionalised narrative in which characters and events are composites of those in real life. The ability to decenter from a personally experienced plot and/or character(s) can be viewed as a substage in the mastery of narrative. Atypically, 2 of the low-literacy subjects produced compositions that were not classified as narratives. One of the non-stories was a somewhat rambling observation on life, and the other was short report of a visitor to the subject's school. In view of the findings from other work that children as young as 6 years can compose simple narratives given instructions similar to those used in this study (McKeough, 1987), it seems likely that these subjects are capable of composing a narrative but did not. Suggestions for ways to encourage the subjects to compose a story are given in the Suggestions for Future Research section to follow.

One low-literacy subject composed a story that contained a

(sub)plot that included the psychological development of the protagonist. A discussion of the origins of this type of narrative structure is presented under the discussion of Hypothesis 2.

Hypothesis 2

It was hypothesised that the high-literacy adults would incorporate a plot in which the psychological or inner world of the character was developed in addition to the outer one. The findings supported this hypothesis. Nine of the ten narratives composed by the high-literacy group were of the interpretive type.

McKeough (1987, in press) working from a neo-Piagetian perspective, proposed that intentional and interpretive narratives represent two qualitatively different stages in narrative composition. Interpretive stories require the coordination of two problem constellations, one dealing with intentional action and a second interpreting the intentions. Recall that the critical factors in the move from intentional action stories to interpretive ones, are thought to be experience and instruction. Experience, both with written narrative and with the narrative conventions that allow a storyteller to coordinate the two constellations, is likely to be more available to the (probably longer educated) high-literacy subjects. As this group of high-literacy subjects was drawn from a population of adults who have completed high school and who are currently in school, it is reasonable to assume that, on average, they have more schooling than do the low-literacy subjects.

It is also important to note that the lack of variance in the scores of the high-literacy subjects on the narrative composition

task is an artifact of the scoring procedure. Whereas there are clearly delineated levels of complexity for the action-intentional stories (McKeough, 1987), as yet no such specification exists for the substages of the intentional-interpretive stories, although preliminary work in specifying substages of level 5 narratives has been done (McKeough, 1986). Hence, all interpretive stories, no matter how well crafted or complex are all assigned the score of level 5.

Summary

The findings of this study suggest that low-literacy adults typically compose stories that report characters' actions and the thoughts or desires that motivate them. By contrast, high-literacy adults report why their characters have those thoughts and desires. Thus, the point of the story of the low-literacy adults (describing actions and intentions of the character) becomes the means by which high-literacy adults make the point of their stories (describing the inner world of the character). In other words, the low-literacy group took a metaposition to action thereby producing intentional narratives, and the high-literacy group took a metaposition to characters' intentions, thereby producing interpretive narratives.

Narrative Recall

Research in narrative recall has shown a developmental progression in not only how much information but also what type of information will be recalled from a story. Stein & Glenn (1979) found developmental differences in 1) total number of items

recalled, 2) recall of internal responses, and 3) the number of inferences added to recall. Other research has shown that subjects of all ages favour main ideas in recall relative to non-essential details (Mandler, 1978; Petros et al, 1983). From this work arose two hypotheses (hypotheses 3 & 4) regarding performance in the narrative recall task.

Hypothesis 3

It was hypothesised that the high- and low-literacy groups would perform equally well on the narrative retelling task as measured by the number of high level t-units (i.e., the most important gist items) they would generate when retelling the target story. The findings did not support the hypothesis. The results showed that the high-literacy adults told significantly more high level items than did the low-literacy adults.

An analysis of the type of t-units recalled indicated an important difference in the quality of the recalls. Both the high and low-literacy adults recalled action and intentional t-units equally well, however, the high-literacy subjects recalled twice as many interpretive t-units as the low-literacy subjects (see Table 10). Although these results must be viewed with caution because of the low numbers of t-units involved, they suggest that the focus of the low-literacy adults' recalls was the action and intentions of the story, whereas the focus of the high-literacy adults included the interpretation of the actions and intentions.

One possible explanation for the unpredicted performance of the low-literacy group is that they lacked the type of story schema necessary for identifying and encoding the story's main points.

Interestingly, the low-literacy adults maintained a largely intentional mode of narrative, even when retelling a story. Although the mean length of the recall for for the high-literacy group (1391 words) was longer than that of the low-literacy group (992 words), there is considerable overlap between the two groups in recall length (see Figure 8). Furthermore, the length of the recalls of the low-literacy group was certainly sufficient to contain the (predicted) 12 level 1 t-units.

Hypothesis 4

The current study also hypothesised that the high-literacy group will recall more of the lower level t-units than the low-literacy group. As can be seen from Table 8, the findings supported this hypothesis.

Again, the difference in the type of t-units recalled suggests an explanation for the observed difference. Note that the high-literacy adults recalled almost twice as many interpretive units (see Table 13).

Applebee (1978), in his work on response to narrative, noted a developmental trend in narrative interpretation from being embedded in the given of a text to being able, by adolescence, to analyse stories and to generalise from the analyses. That is, for novices, response to the text and the text itself were inextricably linked, whereas more expert readers reflect on both the text and their reaction to it. This developmental progression appears to have a parallel in the recall of narrative. The current findings suggest that low-literacy adults typically recall items from the story that report

Figure 8 **Graph showning overlap between groups**

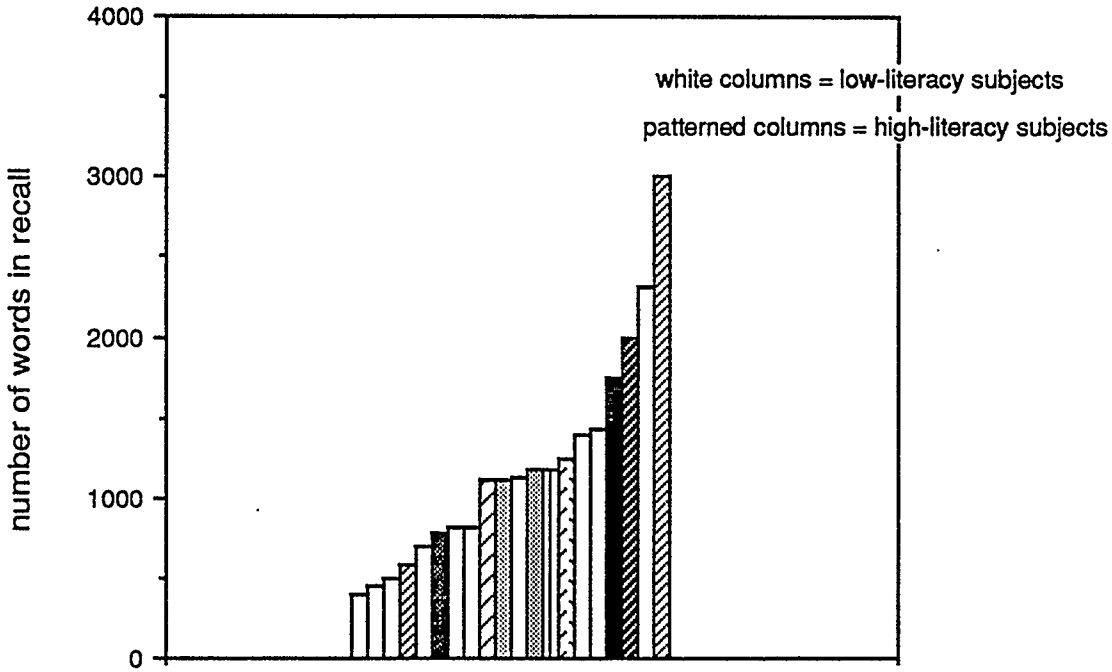


Table 13

Ratio of types of levels 2&3 T-Units ((high-literacy/low-literacy)	
Descriptive	1.45 / 1
Action	1.23 / 1
Intentional	1.57 / 1
Interpretive	2:66 / 1

characters' actions and the thoughts or wishes that motivate them. High-literacy adults recall the same items, however they also include information concerning why the characters have the motives they do. Thus, although the retellings do not differ in their accounts of the action and intentions of the characters, they do differ in what is explained. The low-literacy adults used the intentions to explain the actions, and the high literacy adults used the interpretations to explain both the actions and the intentions.

Summary

The recall of the action and intentional items from the story suggests that the low-literacy adults focused more on the given part of the text (i.e., what is assumed or taken for granted about peoples' actions in light of certain mental states) rather than on the interpretation of the text (i.e., why the characters feel or think as they do). It is important to note, however, that only 3 of the low-literacy adults did not recall at least 1 interpretive t-unit of some level in their retelling of the target story suggesting at least the rudiments of the more advanced structure.

Social Cognition Task

Social cognition refers to thinking about humans and human affairs (Flavell, 1985). Work with children and adolescents has demonstrated a progression from an egocentric and undifferentiated view of the social world in preschool children to a level of reasoning characterised by in-depth analysis and societal perspective taking

by adolescents (Selman, 1980). Other researchers have proposed that social cognition may continue to develop into adulthood and may culminate in the development of relativistic and dialectic thought that can incorporate multiple perspectives and changing cultural and historical contexts (Kramer, 1986).

It is generally assumed, although not tested, that both high- and low-literacy adults attain the same level of social cognition because both groups have a life-time's experience of social interaction to draw on. The current work tested this assumption.

Hypothesis 5

It was hypothesised that no significant difference exists between the high- and low- literacy adults in the level of understanding how character traits underlie social behaviour. This hypothesis was based on the assumption that, whereas the high- and low-literacy groups differed in terms of familiarity with literary form, they have had ample and largely equal opportunity to develop an expert-like social cognition. The findings did not support the hypothesis, showing instead that high-literacy adults perform at a significantly higher level. An examination of the responses provided by both groups demonstrated that, compared to the high-literacy group, the low-literacy group were less able to integrate character traits into their predictions of the how and why of human behavior. When the less stringent scoring criteria were used (i.e., assigning scores based on the highest level of reasoning exhibited) low-literacy adults were able to extract one character trait (e.g., assertiveness) and use it to predict future behaviour, thus

demonstrating interpretive thought. However, when the more stringent scoring criteria were used (i.e., assigning scores on the basis of performance on specific task levels) their performance fell back to an intentional level. This suggests that without the scaffolding offered by repeated exposure to the anecdotes resulting in an increased emphasis on character traits, the low-literacy adults reasoned intentionally not interpretively.

Although these findings were not predicted, they are in keeping with the results on the two types of narrative tasks revealing the same intentional action pattern in the low-literacy group and an interpretive pattern in the high-literacy group.

The findings, however, should not be construed as suggesting that low-literacy adults are less adept in "real world " processing. One possible explanation for the lower performance of the low-literacy group is that the two groups respond differently to the decontextualised nature of this task. Further analysis of the protocols reveals support for this explanation. At some point in the test, 6 of the 10 low-literacy adults attempted to contextualise the anecdote by relating it to their personal experience and answered the question "What would X do?" with " Well, I know what I would do in this situation" as a preface to their explanation or, in some cases, instead of an explanation of how the character would behave. Only one of the high-literacy adults used this construction in their answers suggesting that they have extracted generalisable schemata concerning how and why people act as they do.

Summary

The performance of the low-literacy adults on the social cognition task has interesting parallells with their performance on the narrative tasks and offers some insights into the relationship between the narrative domain and the domain of social understanding. These are discussed in the following section, Theoretical Implications.

Theoretical Implications

Case (in press) proposed that cognitive operations are organised into central conceptual structures which have a broad yet delimited range of application. Three have been identified, a) an intentional structure, b) a dimensional structure, and c) a spatial structure. The intentional structure, operative during the elementary school years, was described in some detail in Chapter III, as it served as the basis upon which the more advanced level of narrative composition and social cognition is thought to be based. As yet, however, only preliminary work has been done to test for the presence of the interpretive structure during the formal operational stage in the two domains. Moreover, prior to the current study, no attempt had been made to determine if the more advanced structure (i.e., the interpretive structure) was evident across task domains. The present study makes a preliminary attempt in both of these regards. First, the analysis of the high-literacy group's performance across the two narrative tasks, as well as the social cognition tasks, revealed that subjects consistently performed at an

interpretive level. Second, performance in narrative correlated with performance in the domain of social cognition, suggesting that performance on the two tasks is parallel.

The performance of the low-literacy group across the three tasks also offered support for the notion of parallel development, but at the intentional level. Table 12 reports a significant positive correlation among the three tasks. Hence, the results of the present study, taken together with data generated in previous work, can be viewed as lending support to the notion that a) a central interpretive structure exists during the formal operational stage, and b) subjects tend to perform consistently across tasks that differ in terms of surface features but that share a common conceptual underpinning at both the intentional and interpretive levels.

The current study also represents an initial attempt to investigate low-literacy adults' performance within a developmental perspective. The distinction made between intentional and interpretive structures offers a potentially fruitful way of describing how the thinking of high- and low-literacy groups differ. Specifically, the low-literacy group was shown to focus on the given of both text and social situations, whereas the high-literacy group was shown to focus on interpretation. Fingeret's (1983) observation that (...for low-literate adults) " Social action may be seen as available for interpretation and dissociation from the actors, in the same way as text is interpreted distinct from reference to the author's intentions " is not supported by the findings of this study. Olson (1988a) , maintained that having a written text allows a culture to make the distinction between what is a "given" and what

is "interpretation". This study suggests that the ability to make that distinction may only become available to the members of the culture with extensive experience with written text.

Of course, to draw strong conclusions or to articulate intervention programs based on this exploratory study would be premature. Nevertheless, the results offer a promising direction for future research.

Suggestions for Future Research

The unexpected results as well as the anticipated findings of this study need to be replicated before any substantial conclusions can be drawn. The following suggestions for further research would eliminate some of the limitations of the current study as well as extend the scope of any subsequent work:

1) Specify levels of complexity for the level 5 narratives to allow for more accurate evaluation of the interpretive compositions.

2) Use larger sample sizes. These would provide for an investigation of any gender and/or age differences as well as offering support for the the generalisability of the findings. In addition, using larger sample sizes would provide information on any subgroups that might exist within the low-literacy population. The wide variability of the scores for the low-literacy group on every measure would suggest that there may be identifiable subgroups within the population that have different instructional needs.

3) Recruit the high-literacy subjects from a non-student population. Recruit low-literacy subjects who hold full-time jobs.

This broader base would provide greater support for the generalisability of the findings.

4) Include low-literacy adults who are non-readers and low-literacy adults who read above a grade 3 level. This could provide information on the developmental path followed by low-literacy adults in understanding and composing narratives.

5) Include the low-literacy adults who would have been excluded from this study as a result of the WAIS-R scores. This group made up more than one-third of the potential subjects for this study. More information is needed on the ways this group does and does not differ from the "included" group.

6) Gather more information on the level of social cognition. Use an instrument normed on adults. Analyse the results to ascertain if there is any connection between scores on the test of social cognition and success in the program. Be alert for issues arising because of the decontextualised nature of the task.

In view of the exploratory nature of this research, exploratory not only is its theoretical basis but also in its methodology, the following suggestions for procedural changes are offered:

1) Plan for three sessions rather than two. Particularly for some of the low-literacy group, more time to work on and discuss the narrative composition task might have been helpful. A third session would have allowed for those adults who composed a non-story, or those adults who needed more encouragement, another opportunity to create a narrative.

2) Ask about the source of the story in the narrative composition task. Is it based on personal experience? Has it been

used as a classroom assignment? The ability to tell a story that is not strongly based on personal experience may represent an ability to work in a decontextualised world and may be an important developmental step.

3) Ask about the decision to revise the story or tell another. Eight of the ten low-literacy students chose to tell a second story rather than revise the first, whereas only four of the ten high-literacy adults made that choice. Are the reasons different for the two groups.

4) Do the story recall task in a separate session. This task is quite long and combining it with other tasks may result in a less than optimum performance.

5) Eliminate all dialogue from the recall task. It can lead to difficulty in scoring as some subjects retell the story in the first person and some from the perspective of a narrator. This can produce differences in the score that are an artifact of the mode of retelling and may camouflage similarities in the recalls.

Delimitations and Limitations of the Study

The primary delimitation of the study is the small sample sizes. Adults in literacy programmes are understandably reluctant to place themselves in situations where they are required to be tested in literacy related activities and therefore it was difficult to recruit large numbers of subjects. A second delimitation is the

amount of prior experience the subjects have had in hearing and retelling stories. A third delimitation concerns the amount of instruction and practice in story telling for each of the two groups. Knowledge of narrative conventions that aid in story telling may be more available to the probably longer educated high literacy subjects (Beach & Wendler, 1987). A fourth delimitation is the amount of effort that the subjects will invest in creating and recalling stories. As a result of the above mentioned delimitations, story telling and story recall may be more effortful for the low-literacy adults and it is difficult to know how this affected their performance.

The first limitation concerns subject selection. The high-literacy adults in the study may not be representative of high-literacy adults in general because they were selected from adults who are currently in some form of schooling. Similarly, the low-literacy group may not be representative because it did not contain any non-readers. All of the subjects were able to read at least the grade one level paragraph. A second limitation concerns the screening procedure. The Silvaroli Classroom Reading Inventory Form D cannot be assumed to give an exact assessment of the subject's literacy level. The test only goes up to independent reading level of grade 8 and so the actual reading level of the high-literacy adults can only be expressed as greater than grade 8. For the low-literacy adults, being tested in reading skills may be very stressful, and it is difficult to know how this affected their scores. A limitation of the experimental tasks concerns the Test of Social Cognition (Marini, 1984). This test may not be giving an accurate picture of the actual level of social reasoning of the subjects. The

anecdotes are presented in a decontextualised setting and how the subjects reason about characters in an anecdote may not be how they reason in actual situations in their own lives. A single measure may not accurately reflect optimum performance. Additionally, this test was not normed on adults as old as the subjects of this study. Finally, the researcher may not have used sufficient probes to elicit optimum performance on this test (personal communication, Marini, 1991). An important limitation is the generalisability of the findings to low literacy adults in general in view of the fact that fewer than 4% of low literacy adults attend literacy classes (Calami, 1987). Similarly, because of the method of selection for the high-literacy adults, there is limited generalisability of those findings.

Summary

The continuing rise in interest in adult literacy both is this country and world wide led to 1990 being declared "International Literacy Year". With this increased interest in literacy have come calls for more programs to help adults learn to read. A survey of ERIC from 1976 to the present shows more than 50 different manuals and handbooks as well as hundreds of articles have been produced on how to teach adults to read better. In spite of all this work, there are still calls in the literature for further research in the field of adult literacy (Burghardt, 1987; Chall, Heron & Halferty, 1987; Diekhoff, 1988). This study was one answer to those calls. By using a cognitive and developmentally based approach for the analysis of narratives composed and narratives recalled, and by

investigating the links between the knowledge of how people behave and narrative, it was hoped that a first step would be taken in clarifying the cognitive processes low-literacy adults use in understanding narrative. The results of this study support the calls for continuing research in this field but suggest that working within a cognitive developmental framework may provide new information and insights that haven't been offered by the more traditional research approaches.

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APPENDIX A

Letter to Literacy Program Coordinators

I have been a volunteer tutor in a literacy program for five years, and my work with adult beginning readers was, in part, the impetus for my going back to university to study learning and cognition. I am now a graduate student at the University of Calgary working on a Masters of Education. For my thesis, I wish to investigate how low-literacy adults conceptualize narratives. To this end, I am soliciting subjects from Adult Basic Education classes who read at or below a grade three level and who speak English as a first language. It is my hope that by having low-literacy adults tell and recall stories, that a better understanding of how the students organize stories in their own minds will emerge. With this information, teachers may be able to help adult beginning readers to mentally structure stories in the ways that more experienced readers do.

A proposal about this research has been submitted to the University of Calgary's Department of Education Psychology Ethics Review Board, and has received approval. I have included for your information a copy of that proposal to clarify the methods and materials that will be used in this study.

I am writing at this time in order to acquaint you with my study, and to request a meeting with you to discuss whether or not I may be allowed to solicit subjects from among your students next fall. I would very much appreciate hearing from you either by phone or letter. My home number is 282-5658, and my work number is 220-7076.

Thank you very much.

Yours sincerely,

Lorraine Templeton.

Letter to Solicit High-literacy Subjects

I am a graduate student at the University of Calgary working on a Masters of Education in cognition and learning. For my thesis, I wish to investigate how low-literacy adults and high literacy adults conceptualize narratives. To this end, I am soliciting subjects from Adult Basic Education classes as low-literacy subjects and I would like to solicit high literacy subjects from your student population. It is my hope that by having adults tell and recall stories, that a better understanding of how they organize stories in their own minds will emerge. With this information, teachers may be able to help adult beginning readers to mentally structure stories in the ways that more experienced readers do.

A proposal about this research has been submitted to the University of Calgary's Department of Education Psychology Ethics Review Board, and has received approval. I have included for your information a copy of that proposal to clarify the methods and materials that will be used in this study.

I am writing at this time in order to acquaint you with my study, and to request a meeting with you to discuss whether or not I may be allowed to solicit subjects from among your students next fall. I would very much appreciate hearing from you either by phone or letter. My home number is 282-5658, and my work number is 220-7076.

Thank you very much.

Yours sincerely,

Lorraine Templeton.

Letter to potential low-literacy subjects

I am a graduate student at the University of Calgary. I am doing research for a Master's degree in Education. This study will help me understand how adults tell and remember stories.

In this study, I will ask you to do some reading, and then we will talk about stories. I will tape record our talks. The work you will do is not a part of your school work. You may stop at any time and say you don't want to be a part of the study.

I may meet with you two times. You will be given $10.00 each time we meet to pay for your travel costs. You may keep the money even if you decide to not be a part of the study after we start a session. You may stop at anytime without penalty.

Please sign the next page if you would like to be part of this study.

If you would like more information, please call me at home at 282-5658.

Thank you.

Yours sincerely,

Lorraine Templeton

Letter to potential high-literacy subjects

I am a graduate student as the University of Calgary. I am doing research for a Master's Degree in Education. This study will investigate how adults tell and remember stories.

In this study, I will ask you to do some reading and then we will talk about stories. I will tape record our talks. This work you will do is not part of your course work.

I will meet with you on one or two occasions. You will be given $10.00 each time we meet to pay for your travel costs. You may withdraw from the study at any point without penalty, and you will still be paid the $10.00 for your expenses for each session that we begin.

If you would like to be a part of this study please sign the attached consent form, and return it to me in the enclosed self-addressed envelope. If you would like more information, please call me at home at 282-5658.

Thank you.

Yours sincerely,

Lorraine Templeton

Consent form

I agree to take part in the study on adults and stories.

I understand that I can stop at any time and I will still be paid for the session that we have begun.

I understand that the researcher can stop at any time and I will still be paid for the session that we have begun.

I understand that my name will not be used in the report of this study.

I understand that the tape recording made of my session(s) may be used in presentations about adult literacy after this study is over (a subject may delete this condition if he/she wishes)

Name_____

Address_____

City_____Postal Code_____

Phone_____

Signed_____

Date_____

APPENDIX B

Revenge

It really was a mistake with Ferdinand. I would never, never have thought I would have done anything like what I did. I was never "that kind of girl" you know, the sort that would do anything daring or exciting that would get written up in the papers. I was a rather meek personality, up until now. I showed it in little ways-- never complained about a thing like bad service in restaurants, or someone breaking in ahead of me in a line. But even though I didn't show it on the outside, I felt it on the inside-maybe even more for having held it in. I remember all my years at school when the other kids would tease me. Not in a good-natured sort of way--they were really mean. And every time they did, I only ignored them. That's what the teachers all said to do, just ignore them and they'll stop bothering you when they see it doesn't affect you. But it did affect me. Every time they taunted, and teased and swore it made me angrier and angrier and feel more and more alone until I couldn't bear it anymore. The anger swelled and rose inside me like a great red wave, but I held it in and remained silent. I never once struck back, never once stood up to them, and they never stopped tormenting me. My release only came when I went away to University. There I made a few friends. It was on my way back from visiting those friends when the whole incident with Ferdinand started..

It seemed that there was not a single car on the road that afternoon other than my own. In the last half hour I had neither passed a car nor met one coming from the other direction. The road stretched away before me and behind me completely devoid of traffic . Even the small towns that I had passed through seemed asleep and no traffic had joined me at any of them. Crossroad after crossroad I had stopped at stop signs to let nothing go by. The sky was grey, dull, heavy, and the clouds hung low over the land. I could see the faint white shape of the sun through the clouds, and it was trying its best to burn away the layer of mist, but it

was too thick and sullen. Everything was ready for the snow to come, and a waiting had settled over the land-- a hush uninterrupted by bird call or small animal rustlings- an anticipatory and somehow uncomfortable silence.

Glancing down at my fuel gauge, I realized that I probably should have stopped at the last town and tried to get some gas, even though that village had looked so abandoned. The needle was nearly on empty, and I had now idea how far away the next town was. It was the first time I had taken that route. My friends had told me it was the fastest way back to London. I kept checking the fuel gauge, at first every few minutes and then more frequently until I was looking more at the gauge than at the road. Every time I came over a hill, I anxiously scanned the new landscape for the sight of a town. I was climbing a steep hill when the car finally began its terminal jerking and sputtering. Just as I lurched over the crest of the hill, the engine quit, so I threw it the car into neutral and let it coast as far as it would go down the other side. As I slowed, I steered over to one side of the read, leaving the tires on one side still on the road and the tires on the other side embedded in the fine gravel that made up the shoulder. I sat there watching the tops of the tall brown weeds and grasses that rose to window height on one side of the car wave graciously back and forth in the sight wind, and wondered what to do. I could walk along the road to the next town and try to get some gas-but I had no idea how far it would be. It could be one mile or fifteen. I could walk back to the last village I had passed but I knew that was at least an eight mile hike. I could sit in the car and wait for someone to come along and give me a lift. That didn't seem reasonable considering the fact that I hadn't seen a single car for nearly and hour. It was getting dark. I didn't have a flashlight and I didn't much like the idea of walking down an unfamiliar deserted country road without one. I was hungry and getting cold and the more I thought about my situation, the more frustrated I became. Then it hit me that there was probably a farmhouse nearby that I could go to for help. I had seen several set well back from the road as I had driven along. I had nearly decided to set out

and look for one when I heard a sound. The sound of a car engine.

It was very faint, but it gradually became louder and unmistakable. My heart quickened and I smiled in relief when I saw a black van coming over the hill behind me. I leapt out of my car and stood right in the middle of the road, waving my arms and yelling 'stop!' and 'help!' . The driver waved back to me and pulled over to the side of the road behind my car. I could see through the windshield that the driver was a man, and I warned myself inwardly to be careful.

I have never liked men. Back in school it was always the boys who were the worst. They were so vulgar and cutting. I hated those little glances of appraisal they gave me that were followed by a sneer, or a laugh or some snide comment. At times like that the anger really rose up inside of me, and I wanted revenge. At first it was just a few that I hated, but as my hatred intensified it grew to include all males. I wanted to hurt them so badly....perhaps that's why I did what I did.

Anyway, I moved over to the side of the road and waited for him to get out. Before he did, he leaned over and seemed to push something under the seat. When everything was in order, he got out. Before he could say anything I blurted out the story of my plight and how glad I was that he had come along and I asked him if he could give me a lift to the next town. I put on my best smile when I finished talking. I thought my chances of getting help were better if I put on the weak helpless girl act. There was an awkward pause. He was looking me straight in the eye, but I got the impression that he hadn't really been listening to what I had been saying. He seemed preoccupied. Suddenly he sort of snapped back to attention.

"Uh, yes, yes I see. I don't have any extra gas with me, but I can certainly take you into the next town it's about five miles from here.

I went back to lock up my car and and get my purse, then I waited for him to move toward the van. He just stood there though, staring into space- lost in thought.

Finally, I said "Perhaps we'd best be going. I'd like to make it back to London before too late. I've got to be in class tomorrow morning.'

Again, the jerk back to reality. 'So it is. Jump in.'

We were soon chugging along the road to the next town, but even then he kept giving me these curious little sidelong glances, which I occasionally returned. I didn't want to tell a stranger about myself so I told him I was a nursing student and he asked me a few questions about it-the usual sort of things like did I enjoy it and what year was I in. Other than very brief replies, I stayed quiet. I don't like telling strangers, particularly male ones, about myself. For the record, I'm really am a university student, if a somewhat indifferent one. I'm in commerce third year. Or rather, I was.

While we drove along, I had a better look at him. He was older than me but not old,thirty-five at the most. An ordinary looking man with dark hair, very plain clothes. The only peculiar thing was his eyes. They were cold and dull. They made me nervous.

I began to wonder when we would reach the town. We had been travelling at a fair clip for some time now, at least fifteen minutes. I had estimated that we would have been there about five minutes ago.

'We should be getting close to the town fairly soon, shouldn't we?, I asked.

'Fairly soon. I'm just making a little side trip-you don't mind do you? I've got a few things in the back that I borrowed from a friend a week ago, and I told him I would return them this afternoon.'

'What kind of things?' I'm not sure what make me ask that, but it was out of my mouth before I could consider it. At any rate it had an interesting effect on my driver. A flash of fear washed over his face for a second and he looked....trapped. Then is was gone and he answered calmly 'Butterfly things. For collecting.'

How beastly, I thought to myself. Any sort of collecting or trophy hunting disgusts me. Killing something is no way to express that you think it's beautiful. For me, no beauty remains in dead animals that have been stuffed, dried, posed and positioned just so. To me the beauty is in their movement, and in their freedom.

My driver slowed down and turned off the main road onto a gravel one. We followed it for about a mile and then turned again onto a rough

dirt track that led up to an old house. As we got closer I could see that it was really more of cottage and over the door was written the year, 1821. It had been carved in stone. He stopped the van in front, told me he would be back in a minute, and got out. I watched him walk up to the cottage and disappear around the back. No lights were on-maybe his friend wasn't home. I shifted in the seat and wrapped my jacket more tightly around me. It was getting colder now that the sun was going down. I moved my feet in closer to the seat, and heard something crunch gently. I could feel the thin edge of something against the back of my ankles. I recalled the driver sticking something underneath the seat when he had picked me up. Curious, I reached down and pulled at the edge, and it came loose quite easily.

It was a pad of paper. Art paper. Suitable for pencil, charcoal, or ink, it proudly proclaimed on the cover. It wasn't dusty so it hadn't been under the seat for long. I flipped open the cover and found not drawings but words.

'October 14? It's the seventh night I think. I must escape.'

I continued reading quickly because the light was fading with every passing minute. As I read my interest turned to suspicion then outrage then a tiny cold feeling of panic began to flutter within me. Was my driver the imprisoner this writer spoke of? As I read on I came to a part that described an old house with a date over the door. This must be the place and he must be the man I thought to myself incredulously. What could he be doing here, who was the writer, and was he or she still his prisoner? What should I do? I decided to try and get away before he came back. I had to let someone know about this, and if I didn't make a break for it now I might never escape. There must be farmhouse nearby, across the fields or up the road, I thought. It was dusk, there would be lights to guide me. The thundering of my heart filled my ears, my head, my entire body.

I looked over to the house-no lights, no one in the windows, no one coming back yet. I gently opened the door with trembling hands and waited, listening. No footsteps and only the sound of a distant

dog barking came through the evening calm. I slid out of the van and paused to plan for a few seconds. Should I run as hard as I could right away and try to get a head start, or should I sneak away quietly? If I ran he might hear me on the thin sprinkling of gravel that was spread before the house. If I tried to go silently, he might suddenly appear around the corner of the house and I wouldn't have the head start that I so desperately needed.

Just then I heard the muted sound of a door clapping shut behind the house and the decision was made. I bolted away with a wild scraping of gravel across the yard and over the small fence encircling the property. I ran blindly, hysterically, not caring or thinking where I was gong, but only knowing that I had to get away. I didn't think of what was behind me or in front of me-- the universe consisted of running, my heart pumping and my lungs straining. A wall loomed up, an old stone one, too high to jump and on the other side the yard light of a farm. I nearly collided with the wall and tried to scramble over it, but it was old and decrepit and great pieces of stone tore away in my hands and fell down, hitting my legs. Then there was breathing right in my ear, a heavy ragged gasping that was not my own. Clawing hands seized my shoulders and dragged me down into the dirt of the empty winter field. The last thing I felt before the cloth went over my mouth and I passed out were the fragments of the rock from the wall sticking into my back.

I awoke and it was dark and hot and sticky. I tried to move my arms, but I couldn't. At first I thought they were tied and then I realized I was lying on them. I rolled over and off an edge to what I supposed was the floor. It was absolutely black, as black as the deepest shaft of a coal mine. I pushed myself up into a sitting position and immediately felt sick so I lay back down again until the sensation passed. I got back up on all fours and began to crawl weakly across the floor, searching for a wall. Almost instantly I banged the top of my head into something smooth and hard and very

solid. The pain seared through my head briefly and was gone. Tentatively I reached out to touch the wall and ran my hand up it, following its even surface with my fingers, trying to read it. Metal, I thought. It was too cool to be anything else. I moved my hands up and to the left, and felt something else. It was smooth too, but not as cold. Small and rectangular. Hmmmm... A light switch? I swept my hand over it and was momentarily blinded in the blaze of light.

I was in a medium sized room with no windows. The wall had been whitewashed, and the floor was covered with a brilliant orange carpet. On top of that a few other smaller rugs were scattered here and there. There was a bed that I had been lying on in one corner, and a sink and a toilet with a screen beside it in the other corner. There were a few shelves on one wall loaded with art books and some novels. I twisted around to see what I was leaning against. It was apparently the door, although it had no handle or keyhole or anything. It was completely smooth. Memories of what had happened started to come back. Alone, helpless, confused and frightened, I made no effort to stop the tears that splashed down my face and trickled off the end of my nose. My head had started to hurt again, and I rested it down on my arms as I lay on the floor sobbing in despair.

When I looked up again, the first thing I saw was a pair of plain but well worn leather shoes. I rolled over and to my horror realized it was my driver. I leapt up and ran to the bed in the corner of the room. I cowered on it, staring at him.

'Good afternoon', he said. I was too terrified to answer. He tried again. 'Are you hungry?'. He started to say something else, but stopped abruptly when I broke in.

'Why are you keeping me here?'

'You understand, I have to. You've seen the journal."

'What journal? What journal are you talking about?' I shrieked.

He gave me a sly and knowing look. 'Don't try to fool me. I

know that you read it.' His voice changed, softened. 'Don't be frightened. It can be quite pleasant for you here. I will not kill you. I'm not some kind of psycho. Now are you hungry?'

'Let me go. I don't know anything. If you keep me longer I will know.'

'You know enough. Besides, I like having guests.'

'I'm not your guest.' I could feel the hysteria rising in me. 'You're holding me here against my will. Let me go. No one will have missed me yet. I can just say I got lost and spent the night at an inn in some town. I won't tell anyone."

'No'.

'Let me go!', I screamed it as hard as I could, and he jumped.

He changed his tone a bit, more beseeching. 'Be reasonable. We both know you'll just turn me over to the police the minute you get out of here.'

'Please, please let me go.' I was close to tears again.

'I can't. You know that. Now do you want something to ....?"

'No!', I screamed it again. He left, closing the door quietly behind him.

After he went, I tried to collect myself and my thoughts. I couldn't just sit there and cry. I had to do something. He was not going to let me go. That was established. I stared at the walls of my room, and I got angry. He had no right to do this, to hold me here in this place. I was a free human being. I had my life to go on with. No one has the right to control another's life-to make it unbearable-not those terrible boys from school and not this stranger now. My anger began to rise. A powerful, powerful anger that I was not going to hold back this time. I had to get out of here. I would probably have to kill him to do it. A weapon-what would I use? I ransacked the room for something sharp or loose and heavy , but he had been very clever and there was nothing that could be used as a weapon. I got even more angry and frustrated. I flopped on the bed and tried to think. There was nothing, no way out, and I

couldn't physically overpower him.I gazed idly around the room, and stopped at the bookcase. Something loose and heavy. Some of those art books were very big. Could I use one of them? I jumped up and took one off the shelf, weighing it in my hands. It was heavy, all right, but it had too much give to it. it wasn't hard enough to knock him out. I looked at the rest of the books, but none was hard enough. My eye ran along the shelf itself. Something loose and heavy. I knelt down and removed all the books off a shelf that contained only paperbacks. I tried to move the shelf up and down or in and out, but it was nailed securely into the case. I started ripping books off the other shelves and dumping them on the floor. I tried all the shelves but they were all nailed in tightly. He hadn't missed a thing. There was only one more shelf- the top shelf that the art books were on. I began removing them. They were the expensive kind, huge and heavy. At last they were all on the floor, and I started to work on the shelf. It was bowed in the middle and creaked encouragingly as I moved it around. The weight of the books had put a strain on the nails, and the was a chance I could work the shelf loose. As I worked I began to realize that even if I got the shelf free, that I would have to have a plan. I would only have one chance to use the shelf. If it didn't work, he might get violent. He might get violent anyway. I had little to lose. If I didn't try I would be stuck here until I died. If it worked, I'd be free.

For more than a week, I worked on the board at night and watched my warden's movements during the day. I grew familiar with his habits and I studied them for opportunities. Three times a day he came down with a tray carrying my meals. He unlocked the door from the outside then set the tray down and locked the door open with two chains and padlocks, presumably so I couldn't run past him, get out, and lock him inside. He watched me every minute, and the only times when his attention was even slightly diverted was when he was bringing the tray in, when he was collecting up

the dinner things and taking them out, and when he was locking and unlocking the padlocks

After much thought, I came up with a plan. I would pretend to be busy at the sink and when he turned to padlock the door, I would creep up and hit him from behind. For it to work it was going to take a good solid hit. Everything rode on whether I could knock him out quickly. It was my only chance. It had to work.

Meanwhile, I was very civil and quite friendly with Ferdinand. I did eventually find out his name. I made a habit of walking forward to meet him at the door, so he would be expecting me to be coming toward him as he locked the doors. During all this time, my anger for him never abated. If anything it became stronger. All the while I was working on the board at night, I coached myself, rehearsing the blow a hundred times. I imagined where the board would hit him, and I imagined him collapsing in a heap, a rivulet of bright blood tracing down the nape of his neck. I would smile at the thought.

At last the night came when the board came loose. I decided to escape the next morning. The shelf was out and the books were on the floor. If I didn't act right away he would surely notice the disarray. I sat down on the bed with the board beside me. I looked down at it happily. It had taken nine nights of constant work wrestle the board free. I went over my plan again and refused to think of the consequences if I didn't pull it off.

I hardly slept at all during what remained of the night. I was dressed and organized, board by the door when he knocked to wake me up. He waited outside for his customary ten minutes, and knocked again. I was already positioned by the sink when I called, 'Come in."

I heard the lock click open. The door swung wide, he nodded to me and set the tray down by the door.

'Good morning.'

'Good morning,' I answered and turned back to the sink as he

turned to the door. My heart was pounding as hard as it was the night he had captured me. I crept softly up to the door and took my board, gripping it as firmly as I could in my sweaty hands. I rose it in a mighty arc when he stooped to fix the lower padlock.

'You wouldn't believe what a beautiful morning it is,' he said and glanced up at me smiling.

I swung the board down as hard as I could. Again and again and again, taking my revenge not only against Ferdinand but also against all those cruel, hateful boys of my school days. His face and head were terribly bloody when exhaustion forced me stop. He was absolutely motionless as I dragged him further into the room. The keys lay on the floor where he had dropped them. Taking one last look at him I unlocked the padlocks, slipped out through the door and locked him inside. As I leaned on the door gasping for breath, I wondered if he was dead.

I found my way up the back steps into the kitchen . I had done it! It had actually worked. I was free.

Trembling with exhaustion and shock, I make my way up the back steps and into the kitchen. As I stepped into the sunshine for the first time in over a week, a wild exhilaration overcame me. I had done it! I was free. I had defeated him and through him all those horrible hateful boys of my childhood. I laughed and cried at the same time. Oh, it felt so good to be the winner, the powerful one. No one would ever put me down again. No one. I felt such a sense of triumph, I wanted to shout it from the roof top.

After awhile, I calmed down a little. I knew I should call the police. I looked around the cottage but there was no phone. I decided to drive to the nearest town. As I searched the cottage for his van keys, I came upon a drawer that was full of documents,bank statements, and other important papers. To my surprise, Ferdinand was quite a wealthy man. Somehow, knowing he had money, and a growing reluctance to try to explain all this started me on a train of ideas that seemed almost mad and yet as I thought it through, it

all seemed so right somehow. It seemed the more I thought about trying to explain everything to all those male policemen, and male lawyers, and male judges, the more I felt my new found sense of power fading. I saw myself again as the mousy, meek person I had come to despise. I could not go back to my old life-my old ways.. I felt I was a trapped in that life as I had been by Ferdinand. The thought of him brought me back to reality. Was he dead? I had to know. I returned to the cellar, unlocked the door but left the chain padlocked on. As I peeked inside I could hear him moaning. I opened the door wider and saw him lying where I had dragged him, the blood clotting on his face. It came to me then in a moment of almost madness-I could have it all. The ultimate revenge. I would turn the tables on him, and I would be the captor. I seized the chain from the door, slipped inside the cell and chained him by the ankle to a strong pipe.

It's strange how one's life can change so quickly. It was all very easy really. I went into London for a day and arranged to take my classes by correspondence. I also bought a revolver. It was a bother to have to get all the proper documents but it's very useful for keeping Ferdinand under control. I invested a large portion of his money and that little enterprise is going well too..... Pays the bills I always say.

adapted from a story by Jennifer Duczek

APPENDIX C

REVISED TEST OF SOCIAL COGNITION

Level 1A

The class was coming to an end and Bill was still trying to finish his painting. As the bell rang, the art teacher asked the students to take their art supplies back to the cupboard. Since Bill had not finished his painting, he decided to work on it after lunch. When Bill went back to the art room, he found an older man using his art supplies without permission.

What do you think Bill did?
Why?

Level 1B

One morning as Mary was waiting for the bus, another person tried to get ahead of her. Mary told the person that she did not like people getting in the line ahead of her and asked the person to move.

What type of person is Mary?
Why?

Level 1C

Jack needed a new book for class, so he went into the store and joined the line to pick one up. There was only one book left for each person in the line. While he was counting his money someone grabbed the last book that should have gone to him. As the other person went to pay for the book, Jack left the store.

What type of person is Jack?
Why?

Level 2A

One evening as Jane was waiting to buy tickets for the show, another person tried to get ahead of her. Jane told the person that she did not like people getting in the line ahead of her and asked the person to move. The next day when Jane arrived at work, she went to her desk. When she arrived, she found that a co-worker had his papers all spread out and was working there.

What do you think Jane did?
Why?

Level 2B

Lisa wanted a new dress for a dance. She heard about a half-price sale at a local store, so she decided to go. At the sale, Lisa found a nice dress and joined the line of people waiting to be served by the cashier. Lisa laid the dress on the counter and while she was counting her money another customer grabbed the dress. As the other person was checking the dress, Lisa left the store. That afternoon when she arrived home, Lisa found that a neighbour had taken her gardening tools and was using them.

What do you think Lisa did?
Why?

Level 3A

When Robert was visiting the computer fair, he became very interested in one of the latest models. While waiting to get information on the display model, Robert noticed that several people had been served before him.. He told the salesman that he had been waiting for sometime, and would like to be served. Later that afternoon, as Robert was entering the school, he saw a student carrying a large cardboard box having problems opening the door. Robert offered his assistance by opening the door so that the student could get in. He then went to his class and found that an older student was sitting in the one left-handed desk that he always used.

What do you think Robert did?
Why?

Level 3B

Scott read an advertisement in the paper about a sale on bicycle parts. He needed a new set of tires for his bicycle, so he went into the store to buy them. While he was counting his money to see if he had enough, someone grabbed the last pair of tires that he had intended to buy. As the other person went to pay for the tires, Scott left the store. On his way to work that afternoon, Scott saw a person having problems starting his car. He offered to help and the person accepted. When Scott arrived at work, he found that another person had taken some of his tools and was using them.

What do you think Scott did?
Why?

Level 4A

Cathy was waiting in line to get her scissors and knives sharpened and just as her turn came up they announce that the shop was closing. Cathy told the people at the shop that she had been waiting a long time and she wanted her scissors and knives sharpened before they closed the shop. After shopping, she went over to see her friends. Late in the afternoon, she remembered that she had to be home because relatives were coming, so she excused herself and started to leave when her friend asked for her help in planning the menu for a party. Cathy helped her friend with the menu plan and then left for home. On her way home she slipped and ruined her favourite pants. When she got off the bus, a person approached her asking for directions.

What do you think Cathy did?

Why?

Level 4B

Dennis wanted to get information on a new stereo system, so he went to the store to see what he could find. At the store he waited at the counter to be served by the salesman was serving other people, even those who came after him. Dennis left the store without getting his information. On his way to work that afternoon, he remembered that he had to bring an important report that he'd been working on, so he went back home to get it. When he arrived at home, his brother asked for his help in fixing the car. Dennis helped him fix the car and left for work. Since he was rushing to get to work on time, he started to run fast. Just before he got to work, he tripped and his

papers fell from his hands and several blew away. This ruined the report that had taken him many hours of work to finish. When he arrived at work he found that a co-worker who did not have enough money to buy the special drafting supplies Dennis used, was using his material without asking for permission.

What do you think Dennis did?

Why?

APPENDIX D

An example of an action-intentional story

Bill and Bob were having problems with chest pains and Bill decided to go to the doctor's and get it checked out because it was always hurting and he had a big mark on his chest like a hard ball. I kept going in and out. So he went to the doctor's one day and the doctor turned around and he said you got cancer. So Bill went home and told Bob because he had the same problem. So Bill said he was going for the operation. So Bill went in, had the operation done and the doctor told Bob he should have it done. Bill died on the table, soon as they cut him open. And Bob turned around and he said, 'He'd stay alive because he didn't want it to be done.' The doctor turned around and said 'Six months at the most'. So, Bob turned around and he said.'I'll take my chances with the six months'. He's been going, oh, about 16 years now or more. And he's still got his family and kids and he's happy, and he says he's not going to pay the doctor until he dies.

(190 words)

APPENDIX E

An example of an interpretive story

James was a good looking chap. Not a model by any means but certainly pleasant to the eye. He was well groomed and his attire was impeccable. Now you wouldn't think James would have trouble with women, but he does. You see, he is shy. James is shy around a woman that he is attracted to. Not the 'sweaty palms' shy, but the 'I don't know what to say, goose pimple' shy. There might even be an occasional blush on his face.

Amongst James' circle of friends, more that two thirds are females. He never distinguished between the sexes as far as his friends were concerned. They were just his friends. They enjoyed each others' company immensely and at social gatherings you would never think of James as shy. It seemed that he was anything but shy. Mr. Personality takes a limelight while Mr. Shy goes into hiding. James is just having fun with his friends. At social gatherings and work gatherings, anytime that there's a woman that catches James' attention, shy comes back out and personality goes back into hiding. Now this does not seem as bad as it sounds. James has his manners, he can still talk. He does not sit around saying things like 'Gee, your dress is ugly'. No, none of those faux paux as far as social etiquette is concerned. But he is just not himself. James just has a hard time talking to someone he is attracted to especially in a one to one situation.

Melinda is such a woman that James feels an attraction towards. She is attractive, bright, and generally very pleasant. Bingo, I would like to get to know Melinda better thinks James. He's met Melinda at social gatherings and has gained acquaintance that way. Well, at least he doesn't have to go out and meet this woman, but he does have to be able to strike up a conversation with her. This might be a

problem and this is where shy is a part of the that problem.

For a period of time, James was overwrought with not knowing what to say to Melinda, or even how to start a conversation with her. He thought about it over and over and could not reach a satisfactory solution. Conversation amongst James, Melinda and other friends is not the problem as he seems to know what to say at these times. But when James and Melinda are alone, Mr. Shy is more prevalent in influencing his conversation than Mr. Personality. James is at a loss, and is almost resigned to the fact of knowing Melinda as a friend as opposed to as a significant other.

One weekend Robert hosted a party with many people in attendance. James knew a considerable portion of the guests, and he knew Melinda was there. As he glanced across the room, he saw that Melinda looked exceptionally attractive tonight.

Eye contact was not made with Melinda but everything around her seem oblivious. Then suddenly James received a bit of a start as he saw Kathy walking straight towards him, her eyes piercing his. Kathy is another woman that James has a certain feeling for. As she got closed, James could feel his heart beating faster and the goose pimples started to pop up. Oh, oh, he thought. What am I going to do? Kathy greeted James and said that she would be back to talk to him as she passed by. With s sigh of relief, James turned his head to follow Kathy, and he almost ran into Melinda. They both apologised for the near collision, and Melinda said, James, I came over to talk to you. I feel like I don't even know you despite the fact that we've known each other for months. James felt very happy at this time, as a smile was now on his face. He thought to himself Mr. Shy just stepped out for awhile and probably won't be back.

659 words

APPENDIX F

Scored Recalls

Bold type = level 1
Italic type = level 2
Underline = level 3
(brackets around extraneous information)
plain type = repeated information

That woman was visiting her friends someplace. (It sounds like it was in Ontario, if London is to be, London has to be in Ontario, because it can't be London England because they don't give revolvers out in London England. So, I imagine it's London Ont.)

(Anyway she was visiting friends in Ontario. I don't know if it was to a boyfriend or studies or what.) In University,(she didn't say what University she was going to). But on her way home **she** took a short cut under her friends advice and **ran out of gas. It happened to be deserted,** (more or less anyway.) **This guy Ferdinand came along** *in his truck* **and offered to give her a ride to the next town,** which he said was five miles away.

Then, when they hadn't reached to town in a reasonable amount of time, *the girl questioned Ferdinand* and *he said he was just dropping off something that he had borrowed from some friends. They drove up to a little old house with an inscribed date on top of it*-(forget what it was.) Anyway, while she was sitting in the truck waiting for Ferdinand, *she inadvertently moved her legs back toward the seat and felt this piece of something that she pulled up. It was what you call an art pad* (I guess.) She opened it to have a look at it and found it had writing in it instead of drawings. **The writing was about,** seemingly anyway, *somebody's enforced .. imprisonment you might*

say.

She began to panic and *decided that she was going to get out of there and* maybe get over to the next farm house or whatever and get the police on to this guy. (Only thing was, she was a little bit slow because by the time she was out of the truck, the back door of the house had opened and Ferdinand of course was coming out again.) *She decided to make a run for it. She ran into a big brick wall, a stone wall. She tried to climb it but all she did was pull chunks of stone out and the next thing she knows hearing breathing behind her and* **she was dragged to the ground.** (And I guess from the description), *gagged.* Probably taken back to the house again *where she was imprisoned* in the basement. At least *the room had no walls and the door had no door handle.* Of course when *she woke up* she discovered this.

(Ferdinand was there when she awoke and the first thing he asked her was if she was hungry.) Of course, she now in a state of panic at being in prison now, *trying to deny the fact that she knew anything about this situation.* Didn't help anything. She refused to eat. (I don't whether it was days weeks or months that went by) before **she elaborated a plan to do away with Ferdinand.** (Whether to just knock him unconscious or if you hit somebody with a board hard enough you could kill him.) *She hunted around the room for some loose object to disable Ferdinand with* so that **she could escape.** It took her some time and *she managed to get the top shelf of the book shelves out.* Plan to clobber Ferdinand when he was locking up or unlocking the door, one or the other. The plan worked quite well, except her motivation took over from what was necessary and **took revenge on Ferdinand for every guy that had ever done anything to her in her life by the look of it.** *Anyway he was beaten quite badly. She felt quite victorious about the whole situation.* **Locking Ferdinand** in <u>his room and going upstairs.</u>

While *she was looking for the keys* to get out of the place in his truck, she found a whole pile of papers and *it seemed like Ferdinand*

was quite well off. She decided, **well, in this male dominated society where she would have to explain to a whole pile of males what may seem to be an incredulous story, and elevate herself again and again and again, she felt that well, why bother.** She could have it all. She had Ferdinand locked up downstairs, the fact that he had all this money here and took it upon herself to look out for herself for the rest of her life. Went downstairs, chained Ferdinand up. Went into London, took care of some business of hers, like **investing some of his funds** and making sure she could take her University courses by correspondence and *buying a revolver for keeping Ferdinand in line.* Decided that she was quite ahead of the situation.

Describe her as a person

She seemed to be a very repressed person. Even in restaurants in her early description of herself, she felt that rather than saying anything about her dissatisfaction with life or situations. The example given in a restaurant, she wouldn't say anything even though she received bad service or whatever. Furthermore **at school, even though people jeered and took the mickey out of her,** she decided, no,no, I'll bear down and even though it hurts inside, she won't let them know it hurts because that's the way she was told to be. She seems to be an extremely repressed person. It wasn't until her University years, and her late teens early twenties, that she actually made some friends.

Looking at the evidence of her self description, she must have been a very lonely person. Like I say, she didn't make friends until University. Very independent. She'd have to be. She seemed to be a bit of a plotting person, a conniving person rather than a straight forward person. Not from self description but from the evidence that ... she plotted against Ferdinand. That's the most obvious of course, but also .....To be repressed I think you have to hold a lot of things

back until appropriate times, and that requires a bit of forethought.

The critical stuff was that she was alone in a deserted road in the middle of nowhere. She was very independent. She had a lot of repression and due to the situation that arose with Ferdinand, she was able to get rid of some of that, how would you say, some of those repression that was built up in her from her childhood and early development. She used Ferdinand as, well he tried to use her, but she used Ferdinand as a channel for of that, not just against Ferdinand but against all men period. And put herself in a position of power and, how would you say, according to her, well being. (1108 words)

	des	act	int	intpr
Level 1	**1**	**7**	**2**	**2**
Level 2	*4*	*15*	*4*	*0*
Level 3	1	2	1	0

Sweet Revenge

When I was a child **everybody used to pick on me** so I grew up hating a lot of people. I was going to drive to England, was going down the highway and **I couldn't see any cars** stopping at every sign and that. Finally I looked at my gas gauge and seen I was getting low on gas, and so I figured I should've stopped at the last town and got gas but I changed my mind and kept on going because the town sort of looked dead and not many people looked alive around there. Small town. So kept on going and then eventually I started looking at my gas gauge every so often and then eventually **it hit empty** so I kept looking down and up and when I got to the last hill, it started sputting, spitting and sputtering so I turned around, put it it neutral and let it coast down the other side, and pulled alongside the road and parked there. The wind was breezy and tall grass was slapping

against the passenger's side, the window. Nice breeze. *It was starting to get dark* and there was no place to go because *I figured if I walked on further it might be about eight miles or more- maybe a mile or more. I knew if I went back the other way, it would be at least five miles so I figured the best thing to do is sit in the car and wait until somebody comes along. And it was getting dark, and I hadn't seen a car for over and hour so I figured the best chance was just to wait.*

Finally, when it was really dark out, *I heard an engine coming.* As I looked up, I could hear it getting louder so *I opened the car, jumped out, and to the middle of the road and yelled 'stop, stop, help, help. Waved* and this van pulled up behind my car and we started talking and that and he looked kind of weird. *He weird eyes on him and that.* He looked around 35 but *he stuffed something under the seat of his car like in his van, under the seat.* I asked him if he could take me to the service station, and **he said 'yeah'.** Finally, we got into the van, and we were driving down the road. (We were doing a good speed) and about 15 minutes and I looked and I said to him,' *Shouldn't we be coming to a town soon?"* And he says. '*Shortly, but I had to make a side trip to drop off some stuff that I borrowed from a friend.'* He says,"You don't mind do you?" I asked him what kind of stuff, and he said butterfly collection stuff and I thought to myself it was kind of gross. Anybody got to collect animals or anything like that to kill them. I didn't like it, eh. So I turned around and I said 'No, I don't mind.' *So he drove up to the cottage* and *I looked at a sign that said, 1821 over the door* of the cabin. *He went around back, so I figured, I felt this thing poking at my leg when I moved my leg so I pulled it out from under the seat and it was poetry written on stuff that was made for paints or drawing pencil or ink, eh.* (It was a lot of poetry)and **I read a bit of it** and I didn't like it. *It said something about escaping and that. I figured I better get out of here before he come back so* I ended up getting out of the van and closing the door. I looked to see if there was anybody coming and I heard the back door

close *so I started running over the field and I hit this stone wall and I was trying to get over it and the wall, the rocks were crumbling down and hitting me on the shoulder and that.* Next thing I knew **this hand grabbed me like a vise grip.** When I turned around I passed out and *when I woke up I was in this room. Dark room, couldn't see a thing. My hands seemed like they were tied.* Finally, I rolled over and I realized that I was laying on my hands. When I started moving around I felt sort of weak and that. I finally got up and I turned on the light switch, I found the light switch and turned it on and I seen this shelves with a lot of books on it and that. Looked around and there was a sink and a few other things but nothing you could tear apart. **I was trying to figure out a way to get out.** Everyday he would come down and bring me my meals- three times a day. *I was trying to figure out how to get out of there and what to do. Then I thought of the shelves and I took the books off the shelves and tried to lift them.* They were nailed down shut. *I kept taking all them off.* They were solid and I looked at the last shelf, I turned around, I was hoping it would give but I had my doubts. So, finally, I lifted all the books off and I started wiggling. It seemed to be giving in the middle. *I worked on that for quite awhile* and I thought of ways of trying to get him distracted for I could hit him and get out of there. So, I watched him because he came down three times a day for my meals and pick up the dishes and that. So I kept watching to see every little detail of what he would do, what kind of mistakes he would make. It seemed like when he come in, he set the tray on the floor and when he did he would turn his back and padlock the door for I wouldn't be able to get out. I seen that he was distracted then so I figured that would be the best way- to sneak over to him and hit him over the head. *After nine days, I finally got the shelf off.* I hardly slept that night at all because I was trying to think and that. Then when he rang to come in, he rang it as usual, 10 minutes, I got up and went to the sink and told him to come in. He came in and he put the padlock on the top and when he bent down to put the other one, I

rushed from the sink over, and *when he looked up I hit him over the head with the board, quite a few times. He was bleeding pretty good.* I dragged him away from the door, unlocked the door, ran up to the house.

I knew I should have called the cops right away but *there was no phone.* I started looking through a lot of papers and *I found out the guy was a very rich man.* (I figured, if I'm going to get revenge, I might as well go all the way and I decided to go downstairs, unlock the door.) **I got a chain and I locked his leg against a steel pipe.** Then I drove into town and did my tests that I had to do for my school. **I invested some of his money** and it paid out pretty good.

Describe the character

Very scared and lived a sheltered life. *Very hidden, kept herself very hidden, away from people. A very nervous type person. Very scared.* It seemed like everybody wanted to taunt her and she didn't know how to deal with it. The teachers give her the wrong idea of dealing with it, so she didn't really know how to deal with it, so she seemed to get more scared every time and fear was building up in her more than she realized. She just couldn't control it after awhile. There was no control for her, so *when she did do what she wanted to do, she was happy* and (she figured she might as well go all the way. If she got nailed, she didn't care. She was to a point of no return of caring.) (She'd been pushed?) Pushed too much. Like they say, when you corner them that's it. (So you saw her as a cornered person?) Yeah, very cornered.

(1424 words)

	des	**act**	**int**	**intpr**
Level 1	**1**	**8**	**2**	**0**
Level 2	*7*	*15*	*7*	*0*
Level 3	4	10	2	0