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ATTRIBUTIONAL AND INFERENTIAL STRATEGIES IN
THE INTERPRETATION OF VISUAL COMMUNICATIONS:
A DEVELOPMENTAL STUDY

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Lamm Gross

Supervisor of Dissertation

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CHAPTER ONE: THE PROBLEM

This study explores the development of communicational competence in interpretation among children of three different age groups. Communicational competence in interpretation is here defined as the ability to recognize communicational events, distinguish them from other events, and apply the most appropriate interpretive strategy. In order to detect and measure such competence the study gathered data on children's recognition, assessment and interpretation of a potentially communicative event, namely their responses to photographic images arranged in a sequence which the investigator has described as narrative.

In general terms, the objective of the study is to explore the development of children's interpretations of visual communications. The stimulus material, interview procedure and method of analysis were all designed with a view toward collecting data for comparative analysis that would allow the detection of any systematic differences or similarities across categories of respondents at different levels of cognitive-social development. The use of photographs was intended to present the child with an ambiguous situation - i.e. one which is not necessarily communicative in all aspects - and so evoke assessment and interpretive processes which would be revealed through interviews.

A specific objective of this study is to examine children's interpretations of a visual narrative from the perspective of two different types of interpretive strategies drawn from the recent work of Worth and Gross (1973). The terms assessment and interpretive strategy refer to assumptions made by an observer about the status of sign events

(events which may be either natural or symbolic, but which always have the property of being used in the interpretation of meaning) and to corresponding rules for determining the significance or meaning of these events.

Worth and Gross postulate a distinction between two types of interpretive strategies, called attribution and communicational inference. Although in its full development this distinction has relatively high generality (i.e. it is applicable to interpretive behavior in a wide variety of communicational and non-communicational situations) use of the model in this study is limited to the case of visually mediated signs as they are typically involved in still pictures, film or television. A detailed description of the model and a discussion of its relationship to the present study are given in the first half of Chapter Two.

In this study children were shown, individually, a short narrative episode on color slides which show a doctor at work in a hospital, walking by and ignoring the victim of an automobile accident, and continuing home. Each child was interviewed about his interpretation of the story. The children were asked about what they saw - about the doctor and the accident, and about the other persons and events shown. Most importantly, they were also asked, at several points in the interview, for the evidence they would use to justify their answers and interpretations, i.e. "How do you know that?"

The main thrust of the analysis is to compare qualitatively the responses of children at three different grade levels (2nd, 5th, and 8th

grades) from the point of view of the distinction between types of interpretive strategies mentioned above. In particular, the study attempts to discover whether or not children of these ages treat the pictures as a fabricated construction, and if so, whether or not this factor influences their perception of the purpose or meaning of the story. It is the growth of this type of awareness that is referred to as increasing interpretive competence.

The study is essentially exploratory - little previous research has been conducted on the substantive issues dealt with here or on the appropriate methodology for gathering data on interpretive competence as it is defined in this study. Although a small number of previous studies have examined children's interpretations of pictures and children's learning of film and television content, no research has focused specific attention on the evidential bases of children's interpretations of visual communications. Through the use of individual interviews which include repeated requests for the child's evidence or reasons for his answer to a particular question, the present investigation attempts to elucidate this facet of the nature and development of communicative competence in interpretation.

Chapters are organized in the following way: The basic distinction between interpretive strategies proposed by Worth and Gross is described in Chapter 2, along with related research on cognitive development and children's interpretations of visual communications. In Chapter 3 a more detailed statement of the objectives of the study and the method and procedure used to generate data are described. In Chapter 4 the

major dimensions of the data analysis, which is largely qualitative in nature, are presented, and the findings are given in Chapter 5 and discussed in Chapter 6.

CHAPTER TWO: BACKGROUND AND PREVIOUS RESEARCH

This chapter presents the major theoretical background for the present study and reviews other research relevant to its design and execution. The presentation is organized into three sections: (1) attribution - communicational inference theory, (2) cognitive development and perceptual theory, and (3) empirical studies of children's perceptions of visual communications.

Attribution - Communicational Inference Theory: The concepts, definitions and theoretical framework presented here draw upon a recent unpublished paper of Worth and Gross (1973). (Repetitious citation of their paper will be avoided for stylistic reasons.)

Worth and Gross propose a distinction between two different types of interpretive strategies, the first called "attribution" and the second, "communicational inference", as follows:

The meaning of a natural event is embodied in its existence. The assumption of existence is the basis upon which we verify our interpretation of a natural event. The meaning of a symbolic event, on the other hand, is embodied in our recognition of an intention to communicate via a conventional code, and the contextual and internal evidence for that assumption forms the basis upon which we justify our interpretation of a symbolic event. It is the assessment of an intention to communicate and the use by the communicator of a conventional code that allow us to distinguish between natural and symbolic events. This assessment will determine whether we invoke an interpretive strategy which we call attribution or invoke an interpretive strategy which we call communicational inference.

Figure 1 below illustrates schematically each of the definitions and distinctions involved here. Events are classed as either sign events or non-sign events. This distinction separates events which are used evidentially as the basis for some interpretive or decoding behavior by an observer, regardless of the conscious or unconscious intentions of their creator, from those events which are not so used. Worth and Gross stress that the distinction between sign and non-sign events lies in the observer and not in the observed event.

The next distinction, which is based on the result of an assessment made by the observer, separates sign events into natural sign events and symbolic sign events. The criterion for this distinction is the judgment made by the observer as to whether the sign event is to be seen as the product of some intentionally communicative behavior on the part of some individual or group of individuals, or not. In the positive case, it is said that the observer makes an assessment of intention (i.e. the observer concludes that someone intended this sign event to be communicative in some specified fashion. In the negative case, it is said that the observer makes merely an assumption of the existence of the sign event (thus circumventing various epistemological issues) and while he may use the event as a basis for interpretations, the sign event is not seen as a message. For example, a tree bending in the wind may be seen as a sign of an impending storm, but it is not seen as a message. In this model of communication, Worth and Gross have selected the cognitive decision-making and judgments (assessment) of the observer as the key to a system of theoretically inter-related terms and processes.

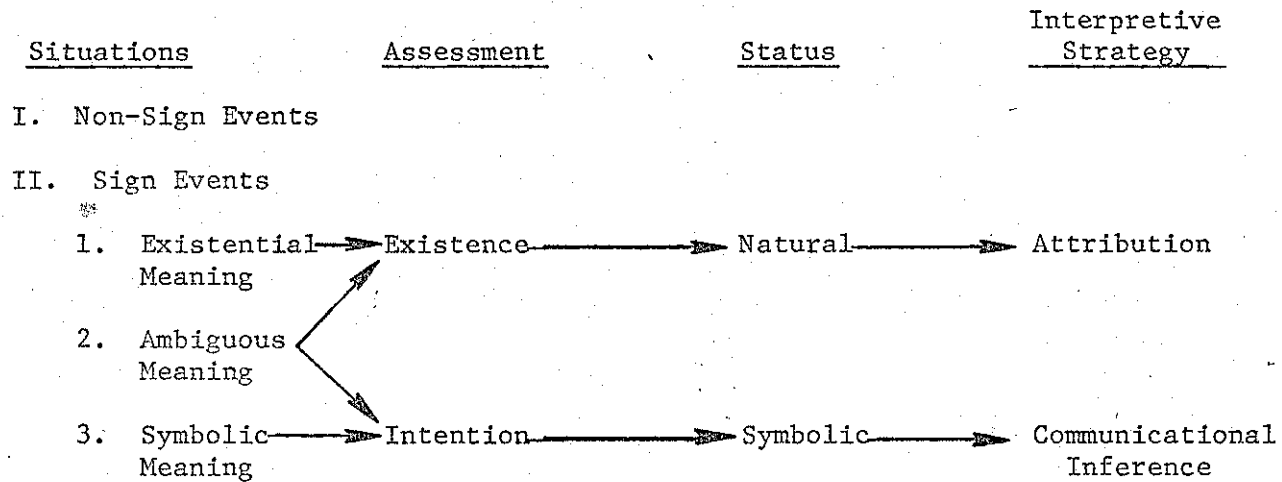


Figure 1: Attributional Interpretive Strategy
 Contrasted to Communicational Inference
 (adapted from Worth and Gross, 1973)

Worth and Gross also include in Figure 1, by use of the term "ambiguous meaning", sign events whose status (natural vs. symbolic) is not clear to the observer. A common example could be the eye and facial movements which an observer senses might be either an unintentional facial twitch (natural event) or a wink of the eye (symbolic event). The arrows indicating existence and intention signify the alternatives from which the observer may choose in his assessment.

The last distinction in Figure 1 is between the type of interpretive strategy that will be used by an observer according to his assessment of the natural vs. symbolic status of any given sign event. Natural sign events lead to an interpretive strategy referred to as attribution, while symbolic sign events lead to an interpretive strategy referred to as communicational inference.

The most important differences between the interpretive strategies of attribution and communicational inference are that in the latter case (1) the observer is aware of (i.e. he has assumed) an intention to communicate some meaning according to a conventional code, and (2) he is familiar with the conventions or code in which that particular sign event has been expressed.

Figure 2 below brings out some of the special features of the kind of communication situation used in the present investigation (i.e. a story told in pictures). Here a distinction has been made between direct and mediated situations. Use of the term "direct" is meant to refer to perceptual situations that do not involve the imposition of some technical communication medium (such as pictures or film) between the

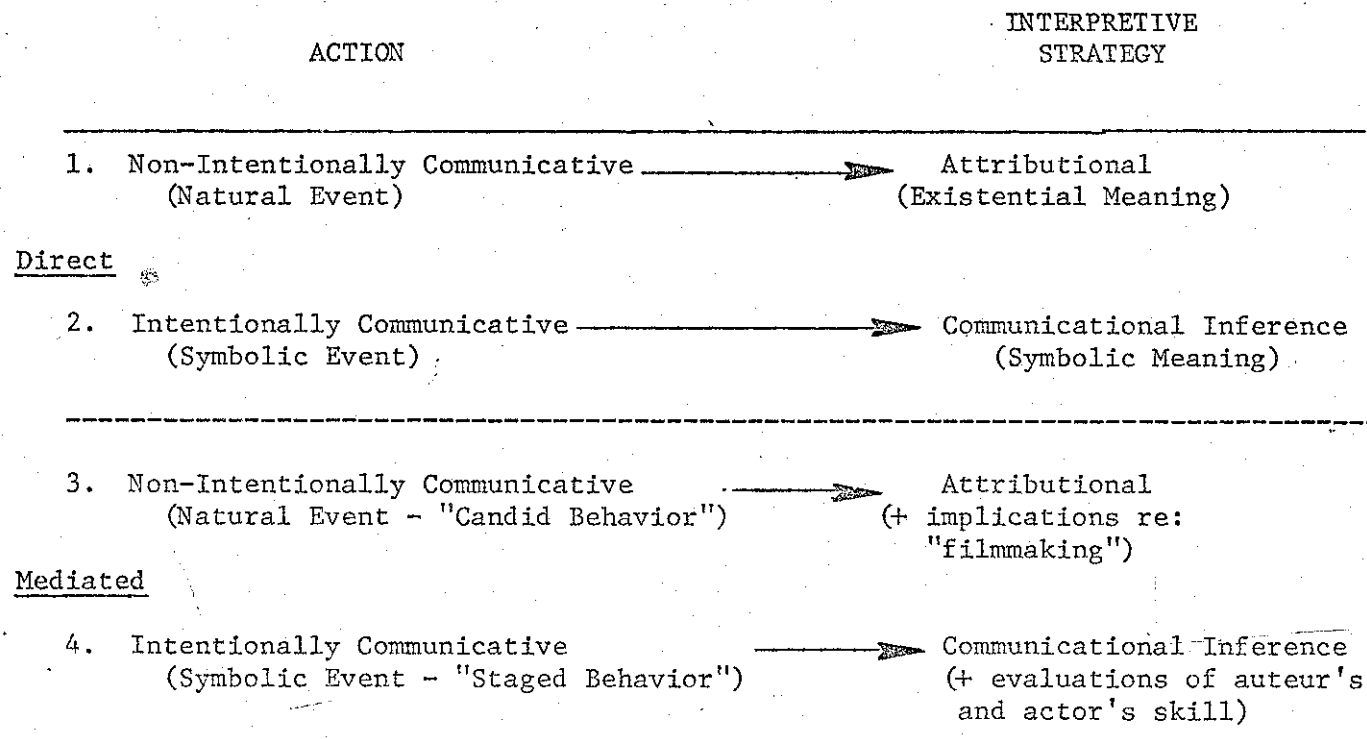


Figure 2: Attributional and Communicational Inference
Interpretive Strategies in Direct and
Visually Mediated Situations (Gross, personal
communication)

actor (or source) and the observer (or receiver). In other words, in the direct situation actor and observer exist within a single time-space frame.

The mediated situation, on the other hand, may be taken as referring, for the purposes of this exposition, to a situation in which the behavior of some actor is observable through a medium such as motion picture film or pictures. With this distinction between direct and mediated situations in mind, additional definitions and relationships can be shown to be implicit in the total set of terms discussed so far.

First, the non-intentionally communicative event in the mediated situation refers to an event (visually mediated) which is nevertheless assumed to be the equivalent of the non-intentionally communicative event in the direct situation, with one difference. An example is the "candid camera" situation which is identical to the direct situation in that the actor's behavior is treated as a natural event (and thus an attributional interpretive strategy is involved) but the mediated communication event differs from the direct experience since the film (or pictures) implies (or may imply) the active involvement of a third person, the filmmaker.

Second, the intentionally communicative event in the mediated situation refers to an event (visually mediated) which is assumed to be similar to the intentionally communicative event in the direct situation, but with several important differences. An example here is a commercial motion picture film. Here the observer assumes that central events are symbolic events - i.e. they are intended to be communicative in a

certain way. The difference between this situation and that of the intentionally communicative event in the direct situation lies in the assumptions about the motivations, source, and control of the actor's communicative behavior made by the observer. Simply stated, in the present situation (intentionally communicative, mediated, "staged" behavior) the actor is an actor in the everyday, theatrical sense of the term. The interpretive strategy used, therefore, is that of communicational inference with the additional evaluations of the actor's (qua actor) and filmmaker's (auteur's) skill included.

This last situation (intentionally communicative, "staged" behavior) is especially relevant to the present study. The stimulus material used - a story about a man told in pictures - can be regarded as an intentionally communicative mediated event: The action is clearly removed in time and space from the subject's observation, color photographic slides are used, there is no confusion between the experimenter and anyone in the story, etc. In other words, it may be treated as an intentionally communicative photographic narrative - a structured, scripted and acted-out dramatic episode - or it may be treated as something less than or other than this. The question of what assumptions children at different ages make about the communicative status of this stimulus material, and how this assumption influences the interpretive strategy used (as inferred from their answers to the interview questions) is the central theoretical problem dealt with in this study.

Figure 3 below, adapted from Worth and Gross, summarizes the hierarchy of levels of recognition that can be produced by this kind of

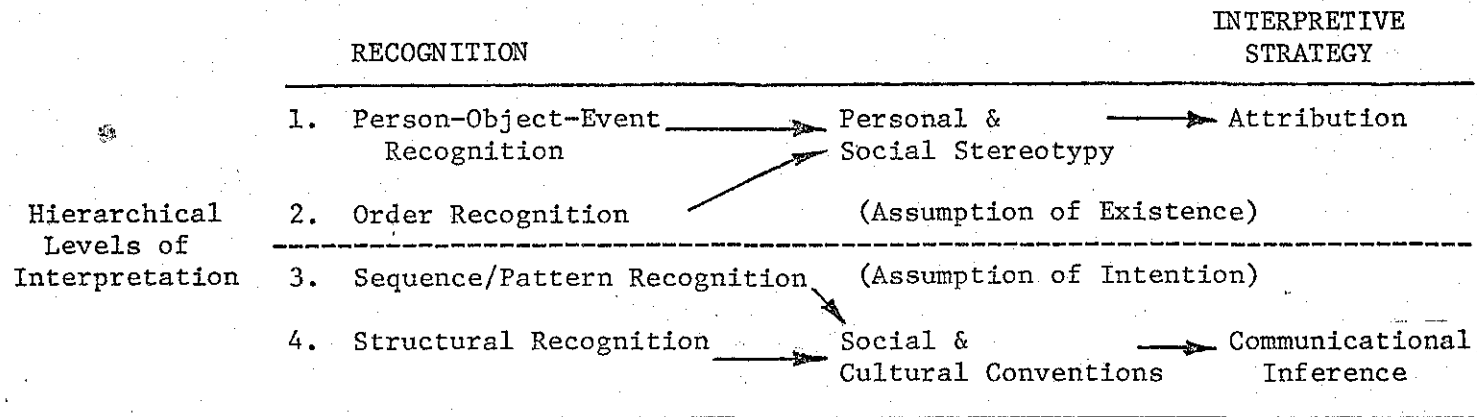


Figure 3: The Relationship Between Recognition of Stimulus Characteristics and Interpretive Strategies (adapted from Worth and Gross, 1973)

stimulus material, and it suggests for each type of recognition, which type of interpretive strategy will be used by an adult observer.

The model suggests possible relationships between cognitive-developmental stages and types of interpretive behavior or reactions to the stimulus material, which will be explored in this study.

The model specifies the levels of interpretive abilities and indicates a series of recognition stages which can be applied to sign events. These stages or levels are seen as both developmental and hierarchical. They are developmental in that Worth and Gross hypothesize that they are acquired according to the specific order implied by the numbering (1-2-3-4). They are also hierarchical - the order is one of increasing interpretive competence.

In this model, the assignment of meaning to a sign event will depend on the interpretive strategy called into play, and the choice of an interpretive strategy will depend on the way the event is recognized and assessed.

What is implied by performance at each level may be summarized as follows. (These descriptions all refer to types of interpretive behavior observed in situations in which material such as that used in this study are stimuli):

Person-Object-Event Recognition: Here the observer is capable of identifying and labelling persons (as to sex, social role, etc.) and objects (identifiable as representative of the classes of objects encountered in everyday life) and events (also as equivalents - e.g. a handshake, or a secretary typing a letter). To the extent that this

type of recognition, and it alone, is present in the response to the visually mediated situation, the interpretive strategy invoked is said to be that of attribution - the social schemata, stereotypes and cognitive structures suitable for everyday life will be the frameworks within which the stimulus material is interpreted.

An individual at this level of recognition will give existential import to the persons, objects and events he observes according to the knowledge he has acquired about these things through his previous experiences. This is the essence of the attributional strategy: An observer places onto a possible sign event meaning or significance derived from knowledge outside that sign event. If a child sees a picture of a person he recognizes as "father," his meaning (i.e. the child's meaning) will not be the meaning within the picture so much as the meaning within the child (observer) about the father based upon what the child knows about "fathers", "his father", etc.

Order Recognition: Worth and Gross deal next with the recognition of relationships between a number of sign events. The capacity to recognize such relationships is seen as the second major stage in the development of interpretive competence.

Recognition of order involves the recognition of contiguity and/or similarity over time, space or position. In the case of a series of pictures or extended action as in motion picture film, the observer at this level is able to detect continuity in the identity and actions of the persons and/or events and actions shown. An actor's behavior, for instance, has an obvious continuity - events do not take place in random

order. The recognition of order, however, is still essentially no more than an elaboration of the existential person-object-event recognition. What is perceived is seen simply as "there" and the interpretive strategy used is still that of attribution.

Sequence-Pattern Recognition: The recognition of sequence involves the perception of a deliberately employed series of sign events (e.g. visual images) for the purpose of conveying meaning through the sequence itself as well as through the elements in the sequence. It is with the recognition of sequence (pattern in the case of spatial arrangements) that the observer will be able to deal with a sign event as communicational rather than as merely informative. That is, the recognition of sequence implies a parallel recognition of an intention to convey some meaning through the choice and arrangement of symbolic events according to established conventions or rules which the observer associates with the particular type of symbolic events involved and the particular type of sequence into which they have been placed. The appropriate interpretive strategy in this case is communicational inference.

Structural Recognition: Structure and structural recognition are essentially extensions of sequence-pattern and sequence-pattern recognition respectively. Structural recognition enables an observer to deal with the relations between non-contiguous elements such as the beginnings and ends of stories, variations on a theme, and the like. Worth and Gross suggest that structure may be thought of as starting with sequence and being the formal device which links all the elements of a communicative event.

Development of Inferential Competence: Work by the British psychologist Donaldson (1971) on children's ability to reason inferentially lends support to the developmental aspect of the distinction between attributional and communicational inference interpretive strategies. In her paper, "Preconditions of Inference", Donaldson first considers the roles of alethic and epistemic concepts in children's reasoning. Alethic concepts are those which are "concerned with what is, or may be, true" (p. 86). Epistemic concepts, on the other hand, are "concerned with issues of what is or is not known to be true" (p. 86). The child's ability to reason deductively, Donaldson argues, seems to be related to his ability to make this differentiation between alethic and epistemic concepts, because in a deductive reasoning problem it is only those facts whose accuracy is given in the problem that can be used as the bases for deductive inferences. In other words, Donaldson is concerned with a child's ability to restrict himself to what is given in the problem, and to this alone, in drawing conclusions. Younger children, she notes, are unable to make this restriction and this inability manifests itself in their reasoning behavior.

Up to the point where he first encounters a (prescribed deductive reasoning) situation of this kind, he has been free, in his ordinary dealings with the world, to make use of any knowledge he possesses, no matter how he came by it. Then suddenly he finds himself in a situation (where) a "correct" response requires that he stop operating in terms of what he already knows to be the case . . . He now finds himself presented with a limited amount of information and he is asked

to use it to determine whether something is or is not so, suspending for the time being whatever else he already knows about the kind of situation that is in question (Donaldson, 1971, p. 86-87).

Donaldson discusses studies in which errors of reasoning are attributed to this over-reliance by the child on his own prior knowledge. Her studies showed this kind of error to be common among children as old as 12 to 14 years.

Sometimes the subjects in this study appeared to be constrained, if not by the problem, at least by their prior knowledge of what was "true" in the situations of real life (p. 87).

One study conducted by le Bonniec (1970) is discussed in detail as an example of this kind of reasoning. Children were shown two dolls, one dressed as a boy and one, as a girl.

Each doll is provided with a box of plastic pieces which fit together. The boy's box contains only straight pieces, the girl's, only round ones. The subject is shown a straight stick and a bracelet both made of the plastic segments, and his task is to infer who made the bracelet, the boy or the girl. The children commonly attribute the bracelet to the girl, which is of course correct; but they tend to do so "because girls like bracelets". On the other hand, one little boy claimed that the boy made the bracelet, "because Mummies have bracelets", and le Bonniec suggests that he had in mind the idea of the bracelet as a present. Another boy will not

accept that the girl made the bracelet
 "because my little sister doesn't know how
 to do it". These are instances of arbitrary
 error that involve appeal to real life
 experience. (p. 88)

Donaldson's theoretical development of these issues thus closely parallels a central distinction made by Worth and Gross in their discussion of human interpretive strategies. Interpretive strategies which rely on the rules for understanding or decoding real world, natural events are called attributional and would correspond to Donaldson's over-reliance by the child on his prior knowledge. Interpretive strategies in which it is necessary for the observer to subordinate the natural or existential meaning or significance of signs to a meaning derived from their intentional placement in some obviously structured communicational event or message are called communicational inference. That is, a communicational inference interpretive strategy is an interpretation of symbolic events which are seen as structured according to rules of a socially shared communicational code in which an intention on the part of the sender to communicate some meaning is assumed by the viewer. Therefore, the attainment of this type of interpretive communicational competence by the child could correspond to Donaldson's observations about the ability to restrict oneself to a primary, given context or set of inferential rules in a problem-solving task. Finally, Donaldson's data and analysis suggest that a developmental sequence in which attributional interpretive strategies appear before communicational inference should be present.

Cognitive Development and Perceptual Theory: The cognitive developmental theory of Jean Piaget and the theoretical writings of Jerome S. Bruner on the relationship between cognition and perception are both related to the issue of children's interpretations of a visual narrative.

Piaget: Piaget's theory of the growth of the child's intelligence (e.g. Piaget, 1970) postulates a progression through three main stages of mental development. These stages, the sensorimotor, concrete operational, and formal operational follow one another in a predetermined order - all children pass through each stage on their way to the next. Although the sequence of stages is always the same, Piaget states that the precise ages at which children will move to higher stages will vary with the child's experience with the physical and social environment.

One of the most prominent features of the qualitative changes in the thought and language of the child, as he moves through Piaget's stages, is the progressive lessening of their essentially ego-centric characteristics.

The basic characteristics of ego-centric thought may be summarized as follows: (1) There is little or no distinction between subjective and objective aspects of experience - as seen, for instance, in the determination of responses by memory and internal schemata, as opposed to objective environmental information ("... memories of earlier reasoning ... control the present course of reasoning without openly manifesting their influence" - Piaget, 1955, p. 66). (2) There is little

or no ability to view objects and events from the perspectives of other persons.

Piaget's theory of the development of intelligence (cognitive structures) is inter-actional in that it states that knowledge evolves as the result of the organism acting upon objects. The mental action which constitutes knowledge is called an "operation" which is defined as:

. . . interiorised action which modifies the object of knowledge. For instance, an operation would consist of joining objects in a class, to construct a classification. Or an operation would consist of ordering, or putting things in a series . . . In other words, it is a set of actions modifying the object, and enabling the knower to get at the structure of the transformation (1955, p. 8).

In Piaget's theory the process of modifying sensory input in order to make it correspond to existing mental schemes is called assimilation. The process of accommodation on the other hand, consists of the modification and elaboration of internal schemes as a result of new experiences with the external environment.* Thus the basic mechanism of cognitive

* "When we say an organism or a subject is sensitized to a stimulus and able to make a response to it, we imply it already possesses a scheme or a structure to which this stimulus is assimilated. . . This scheme consists primarily of a capacity to respond. . . We shall call accommodation any modification of an assimilatory scheme or structure by the element it assimilates" (1970, p. 707-708).

development in Piaget's system is the repetition of alternated processes of assimilation and accomodation which lead to the progressive development of more and more complex mental structures and schemes.

Perception and Cognition: Jerome S. Bruner (1957) has stated that cognitive factors such as the existence of appropriate categories or cognitive schemes are an important component of perceptual processes, and that in general there are many similarities between perceptual and cognitive processes:

Perception involves an act of categorization . . . the nature of the inference from cue to identity in perception is . . . in no sense different from other kinds of categorical inferences based on defining attributes. . . there is no reason to assume that the laws governing inferences . . . are discontinuous as one moves from perceptual to more conceptual activities. (1957, p. 123)

According to Bruner, veridical perception is a joint function of redundancy in the stimulus and accessibility of the appropriate categorizing system in the individual:

Where accessibility of categories reflects environmental probabilities, the organism is in the position of requiring less stimulus input, less redundancy of cues for the appropriate categorization of objects . . . the more inappropriate the readiness, the greater the input or redundancy of cues required for appropriate categorization to occur. (1957, p. 133)

The importance of previous experience for the perceptual behavior of children, which is implicit in the position of Bruner, has also been emphasized by M.D. Vernon who states that "perception of everyday life situations is to a considerable extent a function of cognitive inferences from schematized knowledge about the nature of the situation perceived" (1966, p. 391). Vernon also states that

perceptions and memories of perceptions and of reactions to them become coordinated in "schemes" with which similar memories are organized, together with the relevant knowledge which has been acquired in relation to these percepts. Whenever a perceptual situation is encountered, especially one difficult to perceive or understand, it will be referred to the relevant scheme. Thus the perceiver is enabled to elucidate the situation, recognize its significant features, and react appropriately. In general, the more frequently a particular situation has been encountered, the greater the expectation of its recurrence, and the easier and more rapid the operation of the appropriate scheme and the recognition and subsequent reaction. (1966, p. 391-392)

Vernon states that the perceptions of children typically demonstrate two features: (1) They are vague and diffuse, lacking in accurate observation of detail and selection of what to adults seem to be the significant aspects of the situation; and (2) they are not followed by inferences made from immediate sensory perceptions to the nature of objects and of the environment - the child lacks the knowledge needed to guide him in these inferences. These points may be added to those of Wohlwill (1962) who claims that with increasing development there is a

lessening of the dependence of behavior on information in the immediate stimulus field, and that there is also an increasing stability of concepts in face of irrelevant changes in the stimulus field (p. 73).

These points are to some extent illustrated in Vernon's comments about early studies on children's responses to pictures (Vernon, 1940; Amen, 1941) in which it was found that youngest children (age 2 - 4) tend to enumerate the people and objects depicted in a complex picture, slightly older children to describe their overt activities. Still later, some interpretation is given of the meanings of the activities, and last of all the feelings and intentions of the people in the pictures are mentioned. However, in this paper Vernon does not discuss children's recognition of pictures qua pictures, or their perception of the role of the picture-maker.

Children's Perceptions of Visual Communications: The number of empirical developmental studies of children's interpretations of stories told with pictures is relatively small. Only two studies which use visual stimulus material more elaborate than a single picture or drawing and contain a cognitive-social developmental variable are known to the author. One of these is a study done by Gollin (1958) using a film technique that was originally developed for studies of impression formation among adults. The second is a study by Collins (1970) which used a film from a situation comedy series made for television.

The literature review attempted to locate studies which are relevant to the concept of interpretive competence as it has been defined here.*

Gollin's earlier research involved the use of a film which showed a heroine in four separate scenes, two which depicted negative, presumably "immoral" behavior, and two which depicted positive, "kind" and virtuous acts. In that study, and in the pretests of the developmental study, subjects' impressions of the "star" were examined for evidence of what Gollin calls "concept" and "inference" behavior.**

Respondents utilized inferences in two distinct manners. Some Ss used inferences to account for one or other of the behavioral themes separately while other Ss employed inferences to account for diversity of behavior. The former local accounting will be referred to henceforth as "inference" and the latter general accounting will be referred to as "concept" (p. 145).

In the developmental study a boy was presented in a silent film containing four scenes in which two major behavioral themes were portrayed. The first theme connoted "good" behavior, and the second theme connoted "bad" behavior. Subjects in the pilot study were boys between

* One class of studies not included deal with the perception and interpretation of visual stimuli used for projective or diagnostic purposes, such as the TAT. These studies are not relevant because they focus on individual differences and clinical or diagnostic objectives, rather than on general patterns of interpretive ability among children.

** Not to be confused with Worth and Gross' use of the term "communicational inference" discussed above.

the ages of 8 and 18. Interestingly, subjects below age ten were not used in the main experiment because the rate of confusion of younger subjects (age 8-9) of the star with other characters in the film was extremely high (40%). Boys and girls aged 11, 14 and 17 were used in the main study. The results are summarized in Figure 4 below.

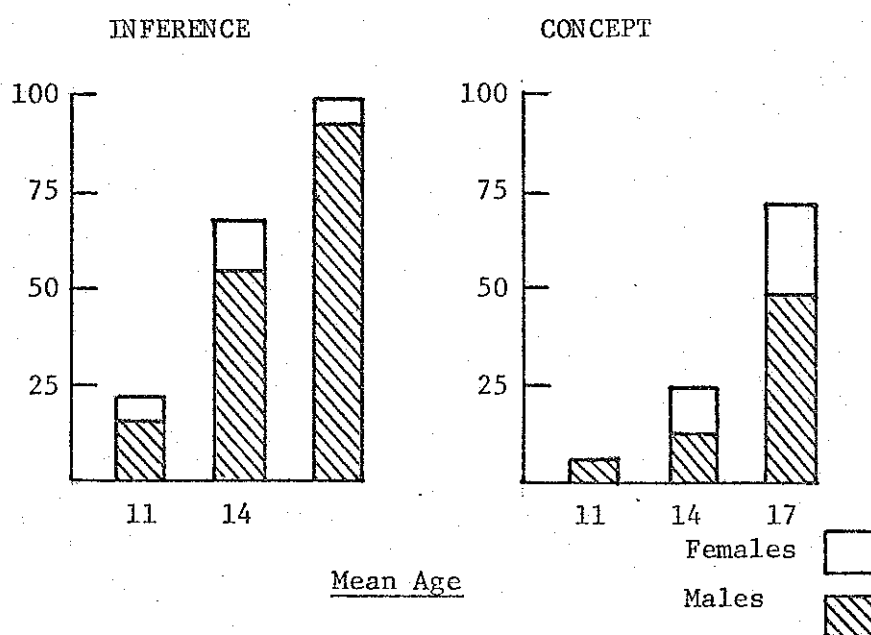


Figure 4: Percentage of Subjects Whose Written Judgments Contain Inference and Concept Statements (from Gollin, 1958)

These data indicate that the use of inference in general (i.e. "inference" and "concept") is a relatively late phenomenon, and that the local use of inference occurs earlier than the general use of inference. This finding suggests that the ability to reconcile seemingly discrepant pieces of social information about an actor is a relatively late development.

A more recent experiment done by Collins (1970) focused on the learning of "relevant" and "irrelevant" media content as a function of cognitive development. Subjects in this study (ages 8 - 14) were shown a 25 minute film from a television situation comedy series. A number of questions about the story were developed and divided into the categories of "central" and "peripheral" according to the criterion of defining central items as "essential to the narrative sense of the presentation" (p. 1136). Only items on which four of five adult judges were in agreement were used in the study. Results of the study indicated that learning of central content increased as a linear function of age, while non-essential content was a curvilinear function (logarithmic) of age. This finding is shown in the two curves of Figure 5, adapted from Collins. Collins' findings support the hypothesis that with age children learn to focus more on central or essential features of a story or dramatic episode, and simultaneously learn to ignore marginal or irrelevant aspects of the presentation.

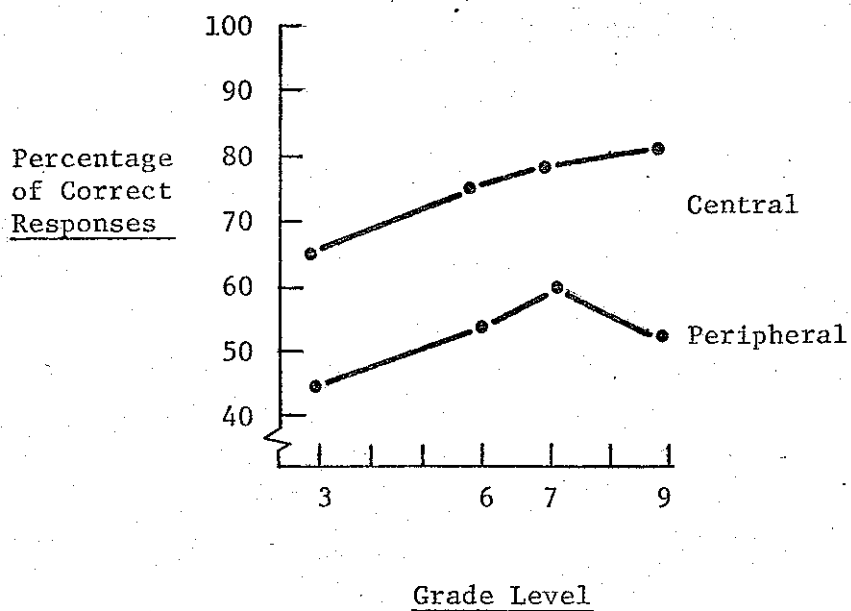


Figure 5: Mean Central and Peripheral Media Content Learning Scores for 4 Grade Levels, As a Percentage of Possible Scores (from Collins, 1970)

CHAPTER THREE: OBJECTIVES, DESIGN AND PROCEDURE

Objectives of the Study: Several of the objectives of this study have been referred to in the introductory chapter and in the preceding chapter on background and previous research. The purpose of this section is to summarize these objectives before a detailed description of the actual study is given.

Chapter 2 described Worth and Gross' model of two types of interpretive strategies and stated that the primary objective of this study was to examine the extent to which children at various grade levels use either or both of these interpretive strategies when dealing with the photographic narrative used as stimulus material in this study.

The pictures used in this research constitute a photographic narrative which the investigator feels conforms to what are, at least for adults, widely known and commonly used conventions of Western representational techniques. (The content of the pictures is described in detail below; prints appear in Appendix A). The "story" begins by introducing a protagonist (the doctor) and then moves through several dramatic events and terminates with a shot of the protagonist "at home". The identity of the protagonist is clear throughout the story; the sequence of events is non-random and implies continuous action (e.g. the doctor is shown in the hospital, then putting his coat on, and then leaving the hospital). The shots of the protagonist in action imply that he was faced with certain decisions or alternatives and the actions shown in subsequent

shots imply the particular way in which he reacted to these alternatives. For example, he is shown early in the sequence in the process of leaving the hospital - subsequent shots showed that the method of transportation he chose for reaching his destination was walking; in the middle of the sequence he was shown confronted with an unexpected car accident - subsequent shots showed what his reaction to the accident was.

This study examines the extent to which children at various grade levels are aware of this selection and placement of visual signs by the filmmaker in his construction of the story and his attempt to convey the meanings implicit in it. By asking about the people and events of the story, and by asking about the pictures (how were they obtained, what do they mean? etc.) the degree to which a child is able to see that the story is constructed along the lines of the conventions discussed above (actor identity, continuity of action, "plot" development, etc.) can be ascertained, and the degree to which the child sees that it (the story) represents the outcome of an intentionally communicative process, can also be ascertained.

Several factors affected the choice of the actual content of the story told in the slides. Foremost among these was the desire to create an episode that would contain relatively clear and strong information along the lines of the variables used in recent person perception and attribution theory research (e.g. Jones, et al., 1972; Kelley, 1967). These variables include personality, situational

factors, and outcomes.^{*} An additional relevant variable is social role (Turner, 1956; Brim, 1960). It was decided to create an episode which would resemble the kind of mixture of values of these variables that most subjects would deem at least moderately unlikely, thus forcing some type of cognitive integration or resolution of the various facets of the episode. The basic implausibility of the central event of the story (the doctor ignoring the accident) was supported by a previous experiment with the stimulus material used here in which college students (among other tasks) were asked to estimate the likelihood that a doctor would in fact ignore the victim of an automobile accident. These data revealed a strong expectation on the part of college students that a doctor would help (Murphy, 1971). Support for the presence of this expectation is also found in the interviews done with control subjects in the present study, the procedure and results of which are discussed below and in the chapter on findings.

* The term "attribution theory", used in social psychology to refer to a loosely constructed theory of the factors influencing the ways in which individuals assign stable properties to objects in their physical and social environments, should not be confused with the term "attributional interpretive strategy" as used by Worth and Gross. The empirical domains of both terms have a great deal in common. However, Worth and Gross use the term attribution (in contradistinction to other interpretive strategies) as part of a theory of communicative performance and interpretation, while social psychologists use it in a more general way to refer to the process of labelling people, objects or events in an individual's environment.

The choice of a doctor for the protagonist in this story exploited the clarity of role information available to the observer. That is, the doctor role has high recognizability, and it aroused strong positive affect. (These generalizations are based on earlier studies and the pretesting done with the stimulus material used in this study).

A variation in the picture story was introduced in order to present two different images of the personality of the protagonist. To accomplish this, two pairs of slides for a single scene were used. These pictures showed the doctor in a scene with a secretary before leaving the hospital. The doctor was talking with the secretary, apparently about some letters or papers he was holding in his hand. In one set of pictures the doctor was smiling and the interchange appeared to be pleasant and friendly. In the second set the doctor was scowling at the secretary (first shot) and he next was shown in the act of throwing down to the floor a crumpled piece of paper. These two conditions will be referred to as the "Nice" and "Nasty" conditions respectively.

The Nice-Nasty variation was included in the stimulus material in order to examine the extent to which specific types of "personality" information (or "prior event information") would be used in explaining the doctor's behavior at the scene of the accident, and to allow a comparison across age groups of the use of this information in the explanation of the doctor's behavior.

It was also thought that the use of the Nasty version might add to the likelihood that the pictures would be seen as an intentionally communicative message. The doctor's behavior with the secretary could be interpreted as having been intended by the filmmaker to be seen as a "cause" of the doctor's later behavior at the accident scene, or as additional evidence confirming an unfavorable impression of him.

In addition to its substantive goals, this study sought to develop a method of data collection on communicative competence in interpretation as it has been defined here. The discussion below describes the development of the interviewing technique used in this study. (A copy of the actual interview schedule is included as Appendix B).

The interview and the technique used in its administration evolved over a period of approximately six months of pretesting with the stimulus material used in the study. The overall objective was to produce an interviewing technique which would be standardized (or structured) enough to generate data for comparative analysis on many different aspects of the story, and yet at the same time would not fully predetermine the way in which the child discussed the events of the story, and would allow the evidential bases of the child's reasoning to become apparent to the investigator.

Great attention was given to questions about the child's evidence for his judgments, because the distinction between attributional and

communicational inference interpretive strategies is based on the observer's assessment of the status of the sign events (assumption of existence → natural events; assumption of intention → symbolic events). It was necessary to learn whether a child was treating the events of the story as natural or "real" events (assuming their existence) or as intentionally communicative, symbolic events (assuming an intention to convey some meaning on the part of the person who took the pictures). Therefore, it was necessary to ask children for the reasons which they felt justified or supported their interpretations in order to make those otherwise tacit assumptions explicit.

The questions on the interview schedule fall into two general categories: Some deal with the child's perception of the events, people and relationships in the story itself, while others deal with the child's perception of the story qua story, i.e. they ask about the origin of the pictures, the esthetic quality of the story, its purpose and meaning, and so on. Generally speaking, the first class of questions may be said to examine the perceptions of the doctor - his personality and motivations, and the second class of questions is designed to explore the child's reaction to the story as an intentionally communicative symbolic event.

The interview schedule given in Appendix B was strictly adhered to only in the sense that an attempt was made to ask all the questions contained. In some cases variations from the exact

sequences given were made. In most cases, digressions were made from the schedule in order to allow an exploration of the perceptions or reasoning that lay behind a given response. Many of the completed interview transcripts contain examples of these digressions. Two sample interviews for each grade level are included as Appendix D.

Design and Procedure: The following sections describe the design and procedure of the study.

a. stimulus material: The stimulus material consisted of 21 color 35 mm slides which were intended to show the following:

A man (easily recognized as a doctor because of his white coat, stethoscope, etc.) is doing various tasks in what appears to be a hospital. He takes off his white coat, puts on an overcoat, leaves the hospital, and walks down the street. The next slide shows the doctor in the background, and in the foreground an obviously damaged automobile from which a man's head and arm are visible hanging part way out of the door. It is quite clear that the man may be (or is) injured. The next slide shows the doctor in the foreground and the car and injured man in the background, the doctor having ignored the accident entirely. The doctor continues his walk for what appears to be several blocks. He next enters an apartment house, opens a door, and is finally shown relaxed having a drink and smiling at a woman approximately his age sitting next to him.

The content of each individual picture is summarized in Figure 6 below. Black and white prints of the slides used are contained in Appendix A. In each individual administration either of two sets of slides nos. 6 and 7, which represent "Nice" and "Nasty" versions of the protagonist's personality, were used as discussed above.

<u>Slide(s)</u>	<u>Content</u>
1&2	Doctor in hospital with medicine
3&4	Doctor talking with nurse
5	Doctor walking in corridor
6&7	Doctor talking with secretary
8	Doctor walking through office
9&10	Doctor exits hospital
11	Doctor walking on city street (sidewalk)
12	Doctor approaches automobile accident
13&14	Doctor looks and looks closer
15,16&17	Doctor walks past accident and down street
18	Doctor enters apartment building
19&20	Doctor walks down corridor and enters apartment
21	Doctor smiling and talking with wife

Figure 6: Visual Content of Slides

b. pretesting: Extensive pretesting with the stimulus material was conducted by the author in order to discover the range of ages for which the present approach would be appropriate, and to develop and refine the interview schedule. Both of these points have been discussed separately above.

Pretesting was done at a local private school, and at an "after school" program at a downtown YWCA, with children between five and fourteen years old. The interviews were taped and in some cases were transcribed. Where appropriate, references will be made to these interviews, as well as those of the main study, in the sections on results and discussion.

c. subjects: Data on the number, age and grades of the subjects used in this study are summarized in Table 1 below. Detailed data on the age, sex, race and experimental conditions of subjects are in Appendix C.

Table 1: Age and Grade of Subjects

	Experimental Conditions				Control Conditions		Total
	Boys		Girls				
	N	CA*	N	CA	N	CA	
Grade 2	6	7:10	6	7:8	3	8:1	15
Grade 5	6	10:9	6	10:10	3	11:1	15
Grade 8	6	14:0	6	13:9	2	14:7	14

* Mean chronological age (years:months)

The following factors influenced the decision to use subjects in the 2nd, 5th and 8th grades:

Pretesting with the stimulus material, using an individually administered interview, showed that relatively rich protocols could be obtained from young children with a semi-structured interview technique. Approximately 24 children were involved in pretesting at this stage. At this point it was also discovered that children younger than approximately 7-8 years were not able to perceive the story as an integrated, whole episode. This finding was consistent with that of Amen (1941). From this it was concluded that the second grade level (age 7-8) should be the lower limit for the experimental groups.

Three age groups were then selected as representative of a span from this lower limit up to early adolescence. These levels are also representative of the critical transition from Piaget's concrete operational stage to the (highest) stage of formal operations. The 2nd and 4th grade children are approximately at the beginning and end points of the concrete operational stage, while the 8th grade children (mean age = 14 years) are well beyond the beginning of the formal operations stage, which begins at approximately 11 - 12 years.

Subjects were obtained from two schools in a Northeastern suburban school district - a neighborhood elementary school (grades 2 and 5) and a district-wide junior high school (grade 8).^{*} Both

* The superintendent's request that the names of the school district and the children involved in the study not be used will be followed throughout this dissertation.

schools serve middle class communities. Only three non-whites were included in the sample (two orientals and one black).

Children in each grade were randomly selected by the school's principal, who had been informed of the general nature of the study. Sampling was stratified by sex only. Data on IQ and other psychological tests were not collected in this study.

Subjects included in the sample were told of their selection in advance and a clearance letter was sent to their parents by the assistant superintendent.

d. procedure: Subjects were sent to the experimental room by their classroom teacher. There the author introduced himself to each as "Mr. Murphy . . . I'm doing a project in your school." Each child was asked if he had heard of the project and if he knew, in general, what was involved. All said they did. Subjects were seated in a straight chair across the table from the experimenter (E). Children in the 2nd and 5th grades were asked, "Have you ever seen 'slides' before?" All subjects answered affirmatively.

E then introduced the pictures in the following way: "I want to show you some pictures and then ask you some questions about what you saw. This is not a test - there aren't any right or wrong answers. OK?"

E next asked: "Do you mind if I turn off the lights so that we can see better?" No subjects objected. E then set the slide projector to automatic advance for the 21 slides (see Figure 6 above).

Each slide was projected for 15 seconds. Just before the last slide was completed, E switched on the tape recorder which had been set up on the table. No reference was made to the tape recorder by the E unless the student asked about it or stared at it. In those cases, E stated that he wanted to: "Use this recorder so that I won't have to take notes, and so that I will be able to remember what each person said." E next began the interview schedule.

The presentation of the stimulus material and the interview together took approximately 20 minutes. At the end of the session E asked each subject if he would "Promise not to tell anyone else about the story for at least a few days, because we want to get each person's own views on the man and the story." No one objected. There was no evidence in any interviews that subjects had discussed any of the details of the story or task.

Subjects were thanked for their participation in the project and sent back to their classroom.

e. control subjects: Control subjects in this study were not exposed to the color slides. Instead they were told by the experimenter that "He would like to describe a series of events to them - something that might happen - and ask a few questions about them." There were a total of eight control interviews in the study, three each at grades 2 and 5 and two at the 8th grade level.

Control interviews were necessary in the present study because

of the assumption, discussed earlier, that the central event of the story (the doctor ignoring the accident victim) was counter-normative. Although pretesting with college age subjects indicated that the perceived likelihood of a doctor ignoring a car accident was quite small, there was no evidence that these same expectations would be found among children as much as ten years younger. Also, use of the control interviews tests out the possibility that the generalized expectation ("Doctors help") was not merely (or only) a function of the specific set of pictures - e.g. the specific doctor and setting used - but rather is truly a general cultural norm or belief.

A sample control interview is presented in Chapter 5. In general, control subjects were asked by the experimenter to imagine a situation identical to that shown at the accident scene in the slides, i.e. a car that had been in a wreck with an (apparently) injured or unconscious man hanging out of the front door. They then were asked what they thought a person who was walking down the street and came upon this would do. Next they were asked what they thought a doctor in that situation would do. Questions on evidential bases ("How do you know?") were also included. Analyses of these interviews is included in a section of the chapter on findings.

f. taping and transcription: All experimental and control interviews were tape-recorded. The tape recorder and microphone were placed on the table next to the slide projector and no attempt was made to conceal the taping in any way.

Typed transcriptions of all interviews were made by the author and these transcripts constitute the data which are analyzed in Chapter 5. Two sample interview transcripts from each grade are included in Appendix D. Some editing was done during the transcribing. This primarily involved the deletion of non-lexical utterances, grammatical errors, and "false start" sentences where these appeared not to reveal any significant aspects of the subject's perceptions or interpretation of the story. Where possible, sentences were formed from the phrases and grammatically incomplete utterances of natural speech. Pronoun antecedents, which were clear from the verbal recording, but which would be ambiguous in a literal transcription, were provided. In general, everything possible was done to preserve the semantic content (and such factors as degree of hesitation and repetition) while still giving the interviews a readable, coherent quality.

CHAPTER FOUR: ANALYTIC SCHEME

This chapter outlines the major dimensions of the data analysis that will be presented in Chapter 5, and provides a theoretical justification for this analytic scheme. It also contains a brief discussion of the analytic scheme - i.e. the "questions" that will be asked of the data, and of the form of the data analysis.

1. Analytic Scheme: An outline of the analytic scheme that will be explained below is presented in Figure 7. This outline contains six questions which have been selected as the basic, or most central, dimensions of the children's responses to the pictures for the purposes of this investigation. The data analysis

- A. What was the child's overall interpretation of the story?
- B. What was the child's affective response to the protagonist?
- C. What parts of the story were seen as most important?
- D. What are the rules used for interpreting social relationships in the story?
- E. What criteria are used in order to judge whether or not the story "really happened"?
- F. What criteria are used in evaluating the story and judging its meaning or purpose?

Figure 7: Outline of Analytic Scheme

will deal with the child's interpretations of the story dimensions listed in Figure 7 from the point of view of the actual content of his answers and, even more importantly, from the point of view of the evidence rules used to justify the answers.

The actual interview schedule used in this study is included as Appendix B and has been discussed in Chapter 3. The reader may wish to consult this schedule in reviewing the analytic scheme developed here since the primary dimensions of the data analysis are, of course, derived from the answers to those questions.

A. What was the child's overall interpretation of the story?

This question builds on the first question in the interview schedule, "What was the story told in the pictures?" However, as expected, it was often the case that important clues to a child's overall interpretation of the story came out of other, later questions.

The central issue here deals with the child's recognition of the man, of the accident, and of the relationship between the man and the accident. A variety of sub-issues are involved with each of these points. For example, with respect to the recognition of the man, it is important to ascertain whether the child recognized that he was a doctor, whether it was in fact one man throughout the story, etc. A number of similar points can be raised about the accident, and the man's relation to the accident. Patterns and trends in the responses of children in different experimental conditions and at different age levels will be discussed in detail in the chapter on findings.

B. What was the child's affective response to the protagonist?

This question is based on the question, "Did you like the man in the story?" and on evidence from other questions about the respondent's affective response to the main character. Also of central importance will be the reasons given by the subject as justification for the expressed feelings.

Numerous factors indicate that the data should be examined for the subject's affective response to the protagonist. First, the inclusion of the Nice - Nasty variable means that systematic differences in the "personality information" made available to the viewer are present. Additionally, the strongly counter-normative central event of the story provides the basis for moral judgments about the protagonist which can be compared across age groups (i.e. "Why did you (not) like him?"; "What should he have done?"; "Why?" etc.). Finally, the data on affective response to the doctor and the justifications for these judgments may provide a view of the child's role-taking ability (i.e. his perception of the doctor's perception of the situation, and his perception of alternative courses of action). These data will be subjected to cross-age comparisons.

C. What parts of the story were seen as most important? This question is based on the parts of the interview schedule which asked, "What was the most important thing in the story?"; "Why?"; and

"What else was important in the story?" As with A and B above, the reasons given by the child to support or justify (or explain) his answer to this question will be an important source of data for comparisons across variables.

The analysis will focus on whether a respondent chooses some part of the story as important because of its purely intrinsic significance, or because of his perception of it as an important part of the story structure within which it is found.

The concept of a structured photographic narrative and the conventions associated with this kind of communicational event, as discussed in Chapter 3, would suggest that certain parts of the story would be seen as more or less important than others. This notion, indeed, is quite similar to Collins' (1970) separation of central and peripheral story content. Therefore, answers to the questions that relate more to the doctor's coming across the accident and his reaction to the accident would be central in Collins' sense, while comments about doctors and hospitals in general (simply because a doctor and a hospital were shown) or about walking (because the story included several shots of the doctor walking home) would be more peripheral.

D. What are the rules used for interpreting social relationships shown in the story? Many aspects of the stimulus material used in this study could serve as the basis for specific questions about social relationships. Examples would include questions about the

occupational and/or personal relationship between the doctor and the nurse, and between the doctor and the secretary. Other questions could deal with his relationship to the accident victim or to the woman at the end of the story.

The bulk of the analysis presented in this report, however, will deal with the child's perception of the doctor's relationship to the woman at the end of the story. It is felt that answers to questions about her identity and their relationship will be particularly interesting because this is in fact a highly ambiguous situation - i.e. it lacks the strong visual cues about occupational/work status that are provided by a nurse's uniform, or by a seat at an office desk with a typewriter. On the other hand, the slide showing the doctor sitting with the woman at the end of the story definitely suggests a close personal relationship - yet one whose exact nature is not clearly specified.

The idea of competence in a "social-gestural" communication mode has been proposed by Gross (1973). This competence refers to the ability of a fully socialized member of a culture to produce valid interpretations of the gestural and proxemic behavior of his fellows. These interpretations are based on a familiarity with the full range of symbolic significance of a variety of the elements of that culture - such as clothing and uniforms, jewelry, signs, noises, insignia and the like.

Data in the present study will be examined for regularities in the kinds of evidence adduced in support of the interpretation

of the relationship between the doctor and the woman at the end of the story provided by the subject.

E. What criteria are used to judge whether or not the story "really happened"? The data relevant to this question are drawn largely from responses to the interview question, "What about these pictures, do you think they are real?" The main objective of the analysis of this material will not be simply to tabulate or compare the relative frequency of "Yes" or "No" answers to this question across age groups or experimental conditions, but instead to go beyond these answers to examine the kinds of criteria or factors which the child uses as justification for his answer, to the extent that these are apparent from his answers to the actual question and subsequent probes in the interview.

At this point the distinction between natural vs. symbolic assessment of sign events is useful. On the one hand, there are a variety of responses to this question which use as a basis for the answer a recognition of the events as "real" (i.e. as natural events). On the other hand, a recognition of the events as intentionally communicative would be based on the assessment that the story events were symbolic events.

One example of the category of attributional criteria would be a response to the question which describes the "natural order" or continuity of the pictures and states that this is evidence for the

realness of the events (i.e. the story). This would correspond to Worth and Gross' "order recognition". Another type of attributional response is one in which a judgment is based on the simple plausibility of the events and persons depicted in the story. Here one would find answers stating that the pictures were real because "That man really looked like a doctor" or "That was a real nurse and a real hospital". Finally, the representational fidelity of the pictures themselves could be used as a criterion - as in the assertion that "That was a real man", or a "Real car", in contrast to drawings, cartoons, or some other non-photographic representation.

Answers reflecting a recognition of symbolic status would include those which implicitly or explicitly reveal an awareness of the circumstances under which the pictures were obtained, and thus an awareness of their fabrication. A typical example of a response falling into this category would be one in which the respondent states that the pictures (story) are not real because the people taking the pictures - if they had actually seen such an accident - would have intervened themselves and helped the victim, instead of merely photographing the incident. Another similar response is one which states that of all possible circumstances in which a doctor might not help an accident victim, the least likely would be that in which he himself was being observed (by the person taking the pictures), the implication being that he would then be held accountable for failure to assist an injured person.

There are admittedly difficulties in achieving highly reliable classification of the answers to the evidence questions. Nevertheless, the crucial aspect of the distinction between natural and symbolic assessments hinges on the question of whether or not the respondent incorporates an awareness of the intentionally communicative (or messageful) nature of the events through, for instance, references to the scripting, staging and photographing (i.e. fabrication) of the story events, in his determination of the realness of the pictures (story).

F. What criteria are used in evaluating the story and judging its meaning or purpose? The data relevant to this question are drawn largely from responses to the interview questions, "Do you think that the person who took these pictures was a good storyteller?" and "What is a good (bad) story like?"; also, "What was the meaning of the story?"; "What was the man who took these pictures trying to make you think?" and other related probes.

Evaluations may be based upon factors that are largely internal to the picture (story) events themselves as in a response that claims that the story was a good one because the pictures (events) followed one another in a "good way". Other relatively simple criteria include equating the evaluation of the pictures (story) with an evaluation of the behavior (acts) depicted in the pictures.

More sophisticated responses could discuss the goodness or

badness of the story by regarding the pictures as the final outcome of a series of production activities and decisions carried out by the producer of the story (the storyteller). Thus, for example, references to the intentional use of cues to aid the viewer in "getting the meaning" of or understanding the story is evidence for recognition of the picture events as symbolic. Additionally, explicit references to other message characteristics possible for a story of this type - references which emphasize the fabricatedness of the story - may also reflect a recognition of the intentionally communicative nature of the sign events. Examples here would include comments about the possibility of a sound track, different ways of taking the pictures, etc.

2. Data Analysis: The section above has presented the major dimensions of the data analysis in terms of specific content areas. Several questions related to the method of data analysis will now be dealt with.

quantitative vs. qualitative analysis: Two points should be noted here: (a) By far the greater part of the data analysis will be qualitative in nature. This has been done for several reasons: (i) The use of a semi-structured interview schedule reduced the comparability of responses across subjects - thus placing some constraints on the amount of reliable categorization and quantification that would be possible; (ii) Extensive pretesting with the stimulus material and earlier versions of the interview schedule indicated that richer

data (i.e. lengthier, more detailed and fully specified answers) could be obtained with a more open-ended, probing interview approach; finally, (iii) Pretesting also indicated that the level of complexity and detail of children's responses to the type of visual stimuli used in this study was so high that each individual interview transcript merited a thorough analysis.

(b) Nevertheless, some questions in the interview schedule produced responses that could be fairly reliably coded, so that quantitative comparisons could be made. This was most often the case for questions for which the answers could be reduced to a simple dichotomy (e.g. yes - no, favorable - unfavorable) and in these cases a comparison across one of the independent variables was made. These data are presented in Chapter 5 at the appropriate places, usually in the form of chi-square tables.

The possibility of more elaborate or multivariate coding, content analysis and statistical analysis of the data collected in this study has been limited by the relatively small number of experimental interviews (36) obtained.

CHAPTER FIVE: FINDINGS

This chapter contains an analysis of the 36 experimental and 8 control interviews conducted by the author. The format used for the discussion of these findings is that of the analytic scheme outlined in Chapter 4. In addition to those dimensions, this chapter contains a discussion of the control interviews and of age-related differences in the types of assessments made of the pictures.

1. Control Subjects: Children's generalized expectations about the behavior of a doctor in the kind of accident situation depicted in the pictures were explored through control interviews. The need for these interviews with respondents who did not see the pictures was explained in Chapter 3 (p. 39 - 40). Information on these respondents was summarized in Table 1 (p. 36). An example of the control interviews is presented below. This interview was done with a second grade student, and is typical of all eight control interviews both in terms of the interviewer's description of the scenario, and in terms of the interviewee's predictions about the most likely behavior of a passerby who was either a lay person or a doctor.

Q: I want to describe an imaginary situation to you and then ask some questions about it. There are no right or wrong answers to the questions; this is not a test. I want you, for a minute, to imagine a situation which I'm going to describe now.

A person is walking down the street. It's daylight outside. The street is empty and there aren't any people, or cars around. The person sees in front of him, up ahead, a car up on the side of the road. The car looks like it had been in an accident. The doors are open, the fenders are dented. The person comes up to the car a little closer and sees that in fact there has been an accident, and that the driver of the car, who is a man, is laying on the seat and the floor and looks to be unconscious. Nobody has seen him yet.

What would a normal person do if he came upon a situation like that, with a man unconscious in an accident?

A: What would I do?

Q: What would you think a regular, everyday person would do?

A: Probably go to get a policeman and say that somebody is unconscious.

Q: How would you know that a normal person would do that?

A: Because they wouldn't just let him lay there for a long time.

Q: What would you do?

A: I would probably call the police.

Q: Is there anything else you could do?

A: Tell somebody.

Q: Now, what do you think a doctor would do if he was walking down that street?

A: He would probably get the ambulance and bring him to the hospital.

Q: How do you know that a doctor would do that?

A: Because the doctor wouldn't just let him lay there.

Q: Why not, what is it about doctors?

A: Doctors know how to do people like that, they know how to make them better and they wouldn't just let them stay there and die.

Q: What are doctors like themselves?

A: Nice and helpful.

Q: They are? What would you think of a doctor who saw the accident and who did help the person?

A: He's a nice person.

Q: What would you think of a doctor who saw the accident and didn't help?

A: He's a mean doctor and shouldn't be a doctor.

Q: What would you think of a regular person who saw the accident and didn't help?

A: He would be mean and wouldn't help anybody.

(14)*

Assignment of individuals to the control condition was done by a random procedure. In general, no significant differences in expectations were found across the variables of age (school grade) or sex. The principal conclusions to be drawn from the control interviews is that they strongly support the assumption that the normal expectation (in the population examined in the study) about a doctor's behavior at the kind of accident used in the stimulus pictures was that he would help.

* Numbers in parentheses are subject numbers. See Appendix C for the age, sex and experimental condition of each subject.

2. Children's Overall Interpretation of the Story: Virtually all of the children who were shown the picture story recognized that the protagonist was a doctor, although 3 of the 12 eighth grade students said they thought he was probably a medical student. These data are summarized in Table 2 below.

Table 2. Role Recognition by Grade and Experimental Condition

		Experimental Condition			
		"Nice"		"Nasty"	
		Doctor	Other	Doctor	Other
	2	5	1 ¹	6	0
Grade	5	6 ²	0	6	0
	8	6 ³	0	6 ³	0

1. Said protagonist was either a doctor or a scientist.
2. One student said protagonist was probably a medical student.
3. 3 of 12 eighth grade students said protagonist was probably a medical student.

The single most important aspect of the child's overall interpretation of the story is his perception of the doctor's reaction to the accident scene and to the accident victim. Very striking differences in perception occurred between respondents at different

grade levels.

Table 3 summarizes, for each grade, the perceptions of the doctor's reaction to the accident victim, as expressed in the answers to the questions, "What was the story told in the pictures?" and "Why do you think the man in the story acted the way he did (at the accident)?"

Younger children were clearly less likely than older ones to state that the doctor had ignored the accident victim. (By "ignored" is meant that the doctor recognized the victim's need but did not help.)

Table 3. Interpretation of the Doctor's Reaction to the Accident Victim by Grade.

		Did the doctor ignore the accident victim?	
		YES	NO
<u>Grade</u>	2	4	8
	5	8	4
	8	11	1

$$\begin{aligned} \chi^2 &= 8.91 \\ df &= 2 \\ p &< .02 \end{aligned}$$

Instead of saying that the doctor ignored the accident victim, the majority of the second grade subjects gave alternative interpretations of his actions; some of these alternatives involve relatively complex inferential processes.* Many of these responses (8 of 12) appear to create a consistency between a generalized positive image of a doctor and the behavior of the doctor in this story. (This pattern is also present in the data on affective response to the doctor which is discussed in Section 3 of this chapter.) These eight cases are summarized in Table 4 below.

The following passages illustrate the kind of interpretations of the event typical of these second grade respondents:

Q: How did the doctor in that story help that woman?

A: He brought her out of the car and maybe went back to the medical center and put her in one of the beds.

Q: How could you tell that?

A: When I saw the picture, her . . . when it was smashed and he was walking by . . . her hand was out, and when I looked in the second picture her hand wasn't sticking out the bottom door.

Q: So that tells you that he had done that?

A: Yes. (3)

* Standard usages of the term "inference" ("inferential" etc.) in this discussion should not be confused with the term "communicational inference" discussed in Chapter 2.

Table 4. Interpretations of Second Grade
Subjects Consistent with the
Positive Image of a Doctor.

Subject	Interpretation
1	Respondent can not remember what the doctor did when he (doctor) saw accident.
2	No help was needed because the doctor saw that the man was repairing his car - there had not been an accident.
3	Doctor took the victim back to the hospital in between shots.
4	The doctor went home to the nurse to tell her about the accident so that help could be called.
5	The doctor was blind and therefore he couldn't see the victim.
9	The doctor's help was not needed because an ambulance had already been called.
10	The story was about two men who looked alike (first man was a doctor, second was not). Existence of second man postulated because the respondent could not believe that a doctor would ignore an accident victim as shown.
12	The doctor saw that the man was only taking a rest.

Q: Going back to the car, why do you think the doctor acted the way he did?

A: I don't know. Maybe because the ambulance could have been called already.

Q: How could you tell that that's . . . ?

A: Or he could have called the ambulance when he got home.

Q: What do you think he did?

A: I think maybe an ambulance was probably called already.

Q: Is there any way that you could tell that one had been called already?

A: Because he just looked at it, and he didn't stop to really take a good look at it. (9)

* * * * *

Q: Did anything happen to the man on his way home?

A: He saw this man . . . his head and his hand was out of the car, and the door was opened.

Q: What do you suppose had happened?

A: Could it have crashed?

Q: Do you think so?

A: Maybe something was wrong and he was fixing something maybe.

Q: Why do you think the man in the story - the doctor - acted the way he did?

A: . . . (pause) . . . Because that's how doctors always act.

Q: But when he saw that person in the car, why do you think he acted the way he did then?

A: Because he was probably . . .

Q: Probably what?

A: He didn't know what was wrong, and then he saw what the man was doing, I guess.

Q: What do you think the man was doing?

A: Fixing something? (2)

The interpretations given by the four second grade students who did report the doctor as ignoring the accident victim were varied, although none of them contains an explicitly negative conclusion about the doctor's personality. They said that: He wanted to get home and be with his wife; he was tired from his work day; he wanted to get home fast - and was not in a "mood" to help (not said sarcastically); and, he didn't have time to help.

The responses of the fifth grade subjects contained many of the elements found in the younger children's responses discussed above, although they appeared in smaller proportions. Four of the 12 fifth graders felt that the doctor did not ignore the accident victim, and some of these interpretations of the event involved inferences similar to those of the second graders. The quote below is an example:

Q: What about on the way home, as he was walking - did you notice anything there?

A: While he was walking down the road he saw this guy in the car - I didn't know really what he was doing. The guy was laying in his car with the door open, and the trunk was open.

Q: What could possibly be going on - or what could have been going on - in that situation?

A: Well, that guy in the car - he could have had to stop to do something in his engine or something, and then he walked up there and he opened the hood to do something, and he needed a screwdriver, and he went back in his car and he was getting it - and he was real tired and he fell asleep in the seat.

Q: Any other possible explanations as to what would be going on there?

A: Well, like he could have been doing something - like laying over on the seat and doing something down on the floor underneath it.

Q: Is it possible that it could have been an accident?

A: It could have been but there wasn't anybody else around there. Like maybe his car just went crazy up the road there. (23)

Other fifth grade children who interpreted the scene and the doctor's behavior in ways consistent with a positive image of a doctor stated that he called an ambulance*, that he thought the car had been abandoned (there was no victim) and that the doctor ascertained that

* Q: What was the most important thing in the story?

A: When he called the ambulance about the killed man.

Q: . . . What did you see that showed you that he called the ambulance when he came to the accident?

A: Well, after one picture the man was not in the car anymore. He must have been in the hospital. (27)

the accident was not authentic - it had been staged by a car manufacturer and the "victim" was actually a dummy used for simulation purposes - hence no medical action was required.

Fifth grade respondents who did report that the doctor left the accident victim without aiding were nevertheless ambivalent in their interpretations of his acts and the reasons behind them. Typical responses were that he did not want to get involved because he was afraid he would get into trouble, the doctor thought the man was dead already and thus he could be of no real help, and the doctor was mad about the incident at the office (Nasty condition) and just wanted to get home.

In contrast to the second and fifth grade students, all the eighth graders, with one exception, reported that the doctor ignored the accident victim. The sole exception was a female respondent who felt that the doctor probably ascertained that the man was alright, although she thought it unusual that the doctor did not do anything more.

The eighth grade responses are homogeneous in a number of ways and demonstrate an apparently more sophisticated interpretation of the factors which probably caused the doctor to ignore the victim. Nine of these eleven respondents explicitly stated that they felt the doctor "did not want to get involved" in the situation. The other two respondents said essentially the same thing without using that particular phrasing. Further, five of these children said that

the doctor probably feared legal responsibility or a suit as a consequence of intervention. The following passage typifies this interpretation:

Q: Going back to the accident, why do you think the man acted the way he did?

A: Scared he would be sued. It's happened before, like when a couple of years ago we were talking about this in sixth grade - some guy was beat up and thrown down the stairs and was killed. People just walked right by him - didn't care. Maybe (if) somebody would've helped him and they did something wrong - like put a tourniquet on his arm - and he could have to have it amputated, he could sue the person.* (43)

Nice vs. Nasty Conditions: As discussed in Chapter 3, it was expected that the differences in the "personality information" variable (Nice vs. Nasty conditions) would lead to different types of interpretations of the doctor's behavior. This expectation was based on two different possibilities. First, since the scene with the secretary immediately precedes the doctor's leaving the hospital and encountering the accident, it is possible that his anger at the

* The question of the popular image of "Good Samaritanism" deserves attention in light of recent findings highly inconsistent with the image of well-intentioned doctors being sued for aiding accident victims. A survey conducted by Emergency Medicine magazine (reported in Newsweek, October 9, 1972) offered \$100 to the first of its 106,000 readers who could document a case of a malpractice suit following an act of "Good Samaritanism". No cases were discovered. These results suggest that factors other than actual real life events may be responsible for this pervasive (at least among 8th grade children) image.

secretary could be seen as carrying over into the next scene - i.e. because of his being upset shortly earlier, the doctor failed to aid the victim. On the other hand, it is also possible that both events (his anger at the secretary and his failure to aid the victim) could be seen as manifestations of the same relatively permanent underlying personality disposition or trait.

The following quote illustrates the first possibility - that of a transient state of anger which prevents the doctor from helping:

Q: What do you know about the man?

A: Well, that he's interested in his job, and he's trying to find out what's right and what's wrong. And that he - because he was angry - that's why he just left the man there. Because he was mad . . . but he probably would have helped the man otherwise, if he hadn't been angry. (28)

The second possibility - that of a consistently unpleasant or unkind personality - is suggested by the following:

Q: What else do you know about the man in the story?

A: He's not very considerate. He doesn't care much, and he doesn't control his temper. Not a man too many people would want to know. We could do without him. (32)

Contrary to expectations, the interview data yielded no particularly strong or interesting differences that can be attributed to this "personality information" variable. It produced virtually no differences in respondents' overall interpretations of the doctor's reaction to the accident. Only one respondent in the fifth grade and one in the eighth said that the doctor in the Nasty condition may not have helped because of anger carried over from the scene with the secretary or because of a consistently unkind or negative personality.

The data on affective response to the doctor (discussed below in Section 3) show a slight but consistent trend for the Nice-Nasty variable in the expected direction - i.e. a mixed or negative reaction to the doctor is more frequent in the Nasty than in the Nice condition.

Other Explanations: The perception of the doctor as eager to get home to his wife (or to his "date" - see Section 5 below) was cited on several occasions by respondents at all three grade levels as at least a contributing factor in his decision not to aid the accident victim. Examples include:

Q: Why do you think the man in the story acted the way he did at the accident?

A: (Second grade) Maybe he wanted to get home real fast and he didn't want to help the man - he wanted to get home real fast and meet his mother or his girlfriend. (7)

* * * * *

Q: Was there anything that might indicate that she was his girlfriend?

A: (Fifth grade) If it was his girlfriend - like, if she was his wife, he might not have gone right home - he might have had a date with his girlfriend and that's why he left the man there. He might have thought his girlfriend was more important. (22)

The following excerpt from an eighth grade student demonstrates the weighing of the three separate explanations considered so far (fear of involvement, angry from office scene, and eager to get home):

Q: Going back to the accident, why do you think the man acted the way he did?

A: Well . . . now that I think of it . . . well, it seemed a little unreal . . . If that was his friend, I guess he didn't want to miss his date or something like that . . . but I don't know why he would . . .

Q: Well, can you think of any other reasons?

A: He may have been upset from at the office, but I still . . . I can't imagine anybody just leaving a person there - I mean not even telling anybody. You know, the car . . . looked like it was in a pretty unused area . . . he could have been lying there for days.

Q: Are there any other reasons why he may not have helped?

A: Well, other than maybe he was in a hurry to get home, I guess he was upset. I can't think of too much more. Except maybe he was just that kind of person - doesn't want to get involved.

Q: What do you mean by not wanting to get involved?

A: Well, not go through all the trouble. I guess he'd

have to talk to police and things like that. Maybe he'd use up too much of his time - he'd have to get the person to a hospital. If the person were to die, he may be responsible for it.

Q: In what way could he be responsible?

A: Well, if he had moved the person, and the person died or something . . . even given first aid . . . I don't know too much about legal matters, I guess he could have been responsible.

Q: Do you think the doctor was probably thinking about this?

A: He might have been, but I didn't see too much change of expression on his face . . . I mean he just . . . well, I guess he went a little bit out of his way and walked towards it . . . I mean he didn't look like he was making any major decisions. It looked like he just ignored it and put it out of his mind. (49)

A review of the complete set of transcripts indicates that perception of the doctor as eager to get home (and thus not willing to aid the victim) is not systematically related to experimental condition (Nice vs. Nasty), subject age, or sex.

3. Affective Response to the Protagonist: Data on the respondents' general affective response to the doctor are summarized in Tables 5 and 6 below, based mainly on responses to the question, "Did you like the man in the story?"*

* Through an oversight, three of the 12 respondents in the fifth grade (23, 27, 29) were not asked this question. Affective response here was inferred from answers to other related questions about the story and the man (e.g. "What do you know about the man?").

Table 5. Affective Response to the Doctor by Grade

		Positive	Negative	$\chi^2 = 20.28$ $df = 2$ $p < .001$
<u>Grade</u>	2	12	0	
	5	6	6	
	8	1	11	

Table 6. Affective Response to the Doctor by Grade and Experimental Condition

		Positive	Mixed	Negative	
<u>Grade</u>	2	Nice Nasty	6 4	0 2	0 0
	5	Nice Nasty	3 1	1 2	2 3
	8	Nice Nasty	0 0	2 1	4 5

These figures present the same pattern of differences between age groups as was observed in the data on respondents' overall interpretation of the doctor's reaction to the accident (Table 3). The principal difference revealed between Tables 3 and 5 is that even the four second grade students who did report that the doctor ignored the accident victim still had a favorable reaction to him. One is tempted to interpret these responses as a "correct" perception of the depicted neglect on the doctor's part at the accident, followed by a "failure" to incorporate this information into the affective response to him. The assumption here, of course, is that a perception of neglect in general is enough to justify (in the sense of naive psychology) an unfavorable reaction to the actor. The responses of the fifth and eighth grade children (discussed below) support this assumption, although it is not clear what it would take to produce a negative response to the doctor from second grade students.

These data on affective response to the doctor are broken down into a finer analysis in Table 6 above. Here the simple Positive - Negative dichotomy has been replaced by a three-way classification to allow for basically mixed or ambivalent responses (in the two-way classification all responses were force-categorized as either positive or negative). This table also classifies respondents by the experimental variable (Nice vs. Nasty) to check for any systematic effect of this "personality information". These data show a slight tendency for mixed and negative reactions to occur more frequently

in the Nasty condition. For instance, among those 14 second and fifth graders who did have a positive reaction to the doctor, nearly two-thirds of them (9 of 14) saw the Nice version, thus indicating that the Nasty scene may have contributed to a negative reaction. However, these differences do not achieve statistical significance.

The affective responses of the four second grade children discussed above (those who recognized that he did not help, yet still liked him) stand out because they embody a relatively high degree of surface inconsistency - the presence of which can be taken as evidence for the strength of the initial stereotype. The following quotes are taken from these children:

Q: What was the most important thing in the story?

A: (pause) . . . That he should have helped the person in the car.

Q: Why would you say that?

A: Because the person could be almost dead.

. . . .

Q: Did you like the man in the story?

A: Yes.

Q: Why?

A: (pause) . . . Because he looked like a kind man.

Q: He did?

A: Yes.

Q: What made you think that he would be a kind person?

A: He just looked kind. (8)

* * * * *

Q: Do you like the man in the story?

A: Yes.

Q: Why?

A: Well, because he helps people in the hospital, but there was one part I didn't like about him.

Q: What was that?

A: When the man was injured in the car and he didn't go and help him. He should have went back and got an ambulance, and took him to the hospital and he should have operated on him - so he wouldn't have died.

Q: What are the other reasons that you like him?

A: Well, that he's nice to people. He doesn't hurt people. He's nice because he does nice things to people.

Q: Are there any other reasons that you dislike him?

A: I can't think of any. (7)

* * * * *

Q: Why (did you like the doctor)?

...

A: Because he was talking nice to that lady, and he wasn't being mean to her.

Q: Are doctors that way sometimes?

A: I don't know.

Q: Was there anything about the doctor that you didn't like?

A: No. (6)

The second grade interviews contain numerous examples of highly circular reasoning which shows the link between the child's perception of social-occupational status (i.e. the doctor) and affective response. For example:

Q: What else do you know about the man in the story?

A: That he was a good man.

Q: Why do you know that?

A: Cause doctors are good men.

Q: How could you tell that this one was a good man?

A: Because he was a doctor. (4)

As indicated by the data in Tables 5 and 6, the affective responses of fifth graders to the doctor were mixed. Included are children who (a) liked the doctor because of his actions (they thought that he helped); (b) some who liked him in spite of his failure to aid the victim; and (c) some who did not like him because of his failure to aid the victim.

The following passage exemplifies the second category - respondents who like the doctor in spite of his behavior at the accident:

* Q: What else was important in the story?

A: (pause) . . . That he saw the man. That he saw the smashed up car . . .

Q: Why was that important?

A: Because if he didn't take care of him, the man would just be lying there and soon he'd get real hurt, and grow cold and then he'd get sick and he'd die.

Q: What did the doctor do?

A: He didn't do anything. All he did was just stand there looking at it. Walked away from it.

.

Q: Do you like the doctor?

A: Yes.

Q: Why?

A: I think he's nice because - well, he looks it . . .

Q: He looks what?

A: Like a friendly man. (11)

In contrast to the fifth graders, eighth grade students were nearly unanimous in their dislike for the doctor (11 to 1 negative). These responses are highly similar in that all eleven refer to his failure to aid the victim as their reason for disliking him. These eighth grade responses, however, are more complex than those of the younger students in that several of them are qualified by the comment that the man was initially seen favorably (i.e. they reported that they liked him at first) but then their opinion changed after the accident scene.

Q: Did you like the man in the story?

A: Well, at first I thought I liked him, but

then when he lost his temper I had a little doubt about him. And when he started walking home, I thought he was a person who liked outdoors and have exercises and things, but then when he walked away from that person I was surprised at first and I guess I sort of resented it.

Q: Was there anything about him that you particularly liked?

A: Well, he was a doctor and - I thought he was going to help the person - I would have liked that. There wasn't anything exceptional about him . . . that I wouldn't like him over any other person.

Q: Was there anything about him - other than what you've mentioned - that you particularly disliked?

A: Well, I could understand his losing his temper - I lose my temper and I'm sure everyone else does - but the thing about him leaving the person there - I thought that was pretty bad. (49)

As shown in Table 6 and discussed above, the relationship between affective response to the doctor and the Nice vs. Nasty variable, while in the expected direction, was weak and did not approach statistical significance. Also, there was no interaction between this variable and age on affective response. The interviews were also checked for a possible relationship between sex of the viewer and affective response to the doctor. Again, no direct relationship or interactions were found.

Data on affective response to the doctor may be summarized as follows: Second grade children liked the doctor and offered detailed information about the positive attributes of doctors in general in

order to justify their response. This typically involved such attributions as, "Doctors help you," or "Doctors are important men to the city." Fifth grade children were essentially negative in their responses, although there were some qualifications and some of the "inconsistencies" seen in the second grade interviews. Finally, eighth graders were nearly unanimous in their dislike of the doctor, and this response was based on their perception of his behavior at the accident scene.

4. Relative Importance of Events: Data on judgments as to the most important thing in the story are summarized in Tables 7 and 8 below. These figures were obtained by an analysis of respondents' answers to the question, "What was the most important thing in the story?" and other related questions and probes.

Table 7. Relative Importance of Events
By Grade

		Accident	Other
<u>Grade</u>	2	4	8
	5	9	3
	8	10	2

$$\begin{aligned} X^2 &= 7.42 \\ df &= 2 \\ p &< .05 \end{aligned}$$

Table 8. Relative Importance of Several Content Dimensions by Grade

Grade		Doctor Not Helping	Doctor Does Help	Doctor- Hospital- Medicine	Other
	2	2	2	7	1
	5	8	1	3	0
	8	10	0	2	0

$$\chi^2 = 12.88$$

$$df = 6$$

$$p < .05$$

The data in Table 7 parallel the strong age differences that appeared in Table 3 (interpretation of the doctor's reaction) and Tables 5 and 6 (affective response to the doctor) discussed above. Interestingly, two of the four second grade subjects who did mention the accident as the most important thing in the story were referring to the doctor's assistance at the accident - thus they were not making the same kind of reference to the accident (i.e. a reference to not helping when help was needed) that 8 of the 9 fifth graders and all 10 eighth graders were making when they mentioned the accident as most important.

Table 8 gives a more precise account of responses than is provided in Table 7. These figures introduce some explanation for the strong effect observed in Table 7 by showing the large number

of younger children who selected the general Doctor-Hospital-Medicine theme as the most important part of the story.

By far, most second graders answered the question about the most important part of the story with some sort of generally favorable reference to doctors and the services they perform for society. The following quotes typify these responses:

Q: What was the most important thing in the story?

A: I think the most important thing was when the doctor was mixing the two things.

Q: Why was that important?

A: I think because he made medicine to cure something and that was the most important thing in the story, and there wasn't any other things in the story that were important like that was.

Q: There weren't any other important things in the story?

A: Well there were some important things but they weren't as important as, well, you need medicine to cure - to be cured if you are sick. (10)

* * * * *

Q: What was the most important thing in the story?

A: (pause) . . . I guess to make the medicine to make people well.

Q: Why would that be the most important thing in the story?

A: That more people would live.

Q: What else was important in the story?

A: I guess the nurse that showed him the paper to make more medicine.

Q: Why was that important?

A: To make more people well. (12)

* * * * *

Q: What was the most important thing in the story?

A: That he was a doctor.

Q: Why would you say that?

A: Because if people got sick, they wouldn't know how to get themselves better. (4)

As indicated in Table 7, most of the fifth and eighth graders reported that the accident was the most important thing in the story. Nearly all of these children referred to the doctor's leaving without aiding the victim as the aspect of the accident they felt most important (8 of 9 in the fifth grade, and 10 of 10 in the eighth grade). The following passages exemplify these interpretations:

Q: What was the most important thing in the story?

A: (Fifth grade) That he walked away from the man.

Q: Why would you say that?

A: Because I assumed from the picture that he was a doctor, and even if he wasn't, he should have done something to help a fellow human being.

Q: What else was important in the story?

A: That he didn't tell anybody about it. (32)

* * * * *

Q: What was the most important thing in the story?

A: (Eighth grade) I guess it was walking home.

Q: What would that be? I mean what happened?

A: He came across this guy in this car - the guy was just laying there.

Q: Why was that important?

A: Well, it showed that he didn't want to get involved.

Q: How do you know that he didn't want to get involved?

A: Because . . . he just walked off because he didn't want to get sued or . . .

Q: He didn't want what?

A: He didn't want to get sued. Like he may have fixed his arm, and then maybe the fix is broken and he couldn't use his arm . . .

Q: Well how do you know that he could have been sued, or that he was afraid he would be sued?

A: Well . . . I don't know - it's just the natural thing, I guess. (45)

Responses to the question, "What else was important in the story?"

(asked after an answer to the first question had been offered) produced in nearly all cases elaborations on the material offered as most important. An example, from a fifth grade student, is provided in

quotation above (32). The response, "That he didn't tell anybody about it" is closely tied to the actual accident. Similarly, many of the second grade students merely elaborated on the positive attributes of doctors and medicine in response to this question.

Interview protocols were examined for differences across the Nice vs. Nasty variable and no systematic effect was found, nor were there any interactions between this variable and subject age or sex.

5. Inferences about Social Relationships: This section will discuss children's judgments about the relationship between the doctor and the lady at the end of the story, and data on "social knowledge" related to the perception of the doctor, the lady, and their relationship. Figures summarizing respondents' judgments about the relationship are presented in Table 9 below. These data are based on the answers to the question, "Who was the lady at the end of the story?" and the discussion is based on those data, responses to "How do you know?" and other related questions.

Table 9 reveals at a glance that the majority of respondents (25 of 36, or 70%) across all three age groups felt that the woman was the doctor's wife. The most frequently cited justification for this conclusion is actually a rather elaborate attributional process based on the observation of the doctor's behavior at the door to the apartment. Essentially, the modal reasoning pattern (interpretation) was that the lady was the doctor's wife because she was present ("home") prior to his arrival and, additionally, because he let

Table 9. Identification of the Lady at the End of the Story by Grade

		Wife	Girlfriend	Other
	2	9	1	2*
Grade	5	7	4	1**
	8	9	3	0

$$\chi^2 = \text{n.s.}$$

* Two respondents said she was a nurse.

** No idea.

himself in the front door - i.e. he did not knock or ring the bell and wait to have the door opened for him. These events imply that his relationship to the apartment was proprietary, and the woman's prior presence implies that it was also her home. Thus by implication he and she are married.

Two second grade children felt that the lady at the end of the story was a nurse. This interpretation reveals the psychological strength of the earlier information presented in the pictures. The depiction of the doctor role and a nurse in uniform (who did not look extremely unlike the lady at the end of the story) seemed to establish a perceptual set that resulted in the misidentification of the "wife". Of the two second graders who offered this interpretation,

one had earlier stated that the doctor's reaction to the accident was to go to the house and tell the nurse so that additional doctors could be called to treat the victim:

Q: Who was the lady at the end of the story?

A: The nurse.

Q: How could you tell that she was a nurse?

A: Because doctors go to nurses when they see something bad.

Q: What do you suppose he was going there to do?

A: He must have gone there to talk to the nurse about the accident. (4)

Examples of the modal reasoning process about the identity of the lady are presented below:

Q: And who was the lady at the end of the story?

A: (Second grade) His wife.

Q: How could you tell that was his wife?

A: Because they were sitting together and he opened the door without - he just opened the door and came in and they sat down and they were relaxed and they were smiling at each other.

Q: Would it have been different if it had been someone other than his wife?

A: Yes.

Q: How would it have been different?

A: He wouldn't have just opened the door and - he just opened the door and walked in. (2)

* * * * *

Q: Who was the lady at the end of the story?

A: (Second grade) His wife.

Q: How would you be able to tell that was his wife?

A: Because she was in the house. (6)

* * * * *

Q: Who was the lady at the end of the story?

A: (Second grade) It looked like it was his wife.

Q: Why did it look like it? How could you tell?

A: Well, he went right in, and usually a father's wife goes right in unless the doors are locked. And they talked to each other, and the man just got on the couch and talked. And the lady didn't say "C'mon in" or anything like that.

Q: Who else could she possibly have been?

A: She could have been his girlfriend.

Q: Anybody else?

A: Or his grandma.

Q: What would it have been like if it was his girlfriend? How would it have been different?

A: Well, it would have been different - the man would have knocked first, and he would have put his bag somewhere, and then sit on the couch and talk about something. He wouldn't just go right in and say hello. (7)

* * * * *

Q: Who did you say was the lady at the end of the story?

A: (Fifth grade) I thought it was his wife.

Q: How could you tell that that was his wife?

A: Well, he walked in there - I think he just opened the door and if it wasn't he would have probably knocked.

Q: Is that what someone would normally do if it was their own family?

A: Yes. If the door's open they usually just walk in, and if it's not, they would get a key and stick it in the door.

Q: What if it wasn't his wife? How could you have been able to tell that it was not his wife?

A: Well, he would have knocked on the door, and if it wasn't his wife he would have probably been talking like maybe if something was wrong with her, but when he got home he just like sat down on the sofa and started talking to her. (31)

* * * * *

Q: Who was the lady at the end of the story?

A: (Eighth grade) Probably his wife.

Q: How could you tell that that was his wife?

A: Well, probably where he went, like that apartment . . . was probably his apartment.

Q: How could you tell that? What indicates that that was his apartment?

A: Well, he went into the room by himself.

Q: Is there any other way that you could know that that was probably his wife?

A: I don't think so.

Q: Well, who else could she have been, possibly?

A: Girlfriend, maybe.

Q: Would it have been different if she was his girlfriend?

A: I guess so.

Q: How do you think it would have been different?

A: He might have knocked on the door. (41)

Thus in the largest number of cases, for children at all three age levels, the kind of reasoning exemplified by the above passages accounts for the decision that the lady at the end of the story is the doctor's wife. As Table 9 shows, however, several (8 of 36) respondents felt that she was probably his girlfriend.

An examination of these protocols reveals that this different interpretation was arrived at not by processing the same social information or cues and arriving at a different conclusion, but rather by focusing on entirely different features of the stimulus material and drawing the (different) conclusion on the basis of that information.

Specifically, those children who judged that the lady was probably the doctor's girlfriend based their judgments on numerous aspects of the couple's behavior, their clothing and a tacit but confident knowledge of certain household routines and activities. Examples include the following:

Q: Who was the lady at the end of the story? I think you said that was his girlfriend.

A: (Second grade) Yes.

Q: How could you tell she was his girlfriend?

A: Well, she was like hugging him.

Q: She was?

A: Well, not really, but she might have.

Q: Do you think she wanted to?

A: Yes.

Q: Why would she want to hug him?

A: Maybe she loves him.

Q: How else could you tell that she was his girlfriend?

A: (Pause) . . . She was like holding his hand . . .

Q: Couldn't she be anybody else?

A: Maybe she could be his wife.

Q: What would it be like if that was his wife?

A: (Pause)

Q: Would it be the same or would it be a little different?

A: It would be a little different.

Q: How would it be a little different?

A: Maybe she would be wearing a ring . . .

Q: How else would it be a little different?

A: She might have kissed him.

Q: You mean his girlfriend wouldn't kiss him?

A: Yes, but not right then.

Q: Any other things would have been different if that was his wife?

A: She would be like ironing or something.

.

Q: What other reasons are there to suggest that that was his girlfriend?

A: I guess he knocked on the door first here?

Q: He would. Did he knock on the door first here?

A: No

Q: I don't remember. He didn't.

A: He was opening the door. Like one door was already open and he was opening the other door.

Q: So that would mean that it was probably his wife or his girlfriend?

A: His wife.

Q: What's your overall impression?

A: I guess it was his wife. (12)

This passage contains a number of the characteristics of the second grade interviews. The initial interpretation that the lady is a girlfriend appears to be based on the mutual attraction of the man and the lady (clearly implied by the picture) which led to the perception that "She was like hugging him" (not shown in the pictures). Thus an initial assessment of the relationship is made (romantic, not married) and, in terms of Piaget's theory, a number of related perceptions are assimilated to that cognitive structure, namely

- that she was hugging him (she was not)
- that she was not wearing a ring (she was)
- that he knocked on the door (he did not)

This assimilation of perceptual data, of course, is highly similar to the "distortions" of the second grade respondents related to the overall interpretation of the story events and to the doctor's reaction to the accident.

To return to the issue of the kinds of cues used by subjects to identify the lady not as the doctor's wife, but as his girlfriend, the following quotes illustrate typical fifth and eighth grade judgments:

- Q: Who did you say was the lady at the end of the story?
- A: (Fifth grade) Probably his wife or his girlfriend, or his friend.
- Q: Which one would you think it was if I asked you to choose between his wife and his girlfriend?
- A: I would probably have to say his girlfriend.
- Q: Why would you say that?
- A: Well, maybe they hadn't seen each other and they were talking . . . I don't know - I didn't get that part.
- Q: What was it about their talking that would indicate . . .
- A: Because it looked like they were having a good time talking together.
- Q: And that would make it look less like that was his wife?
- A: Maybe.

Q: What would it have been like if it was his wife?
What do you think the shot would have shown?

A: Well, she'd be washing dishes or doing some
housework. (21)

This passage contains, as does the second grade one immediately preceding it, evidence of the expectation that a wife would be shown doing housework of sorts (e.g. ironing, washing dishes) on her husband's arrival. In the absence of that information and perhaps because of the relaxed, somewhat festive atmosphere conveyed by the picture, several respondents chose a "romantic" or "boyfriend-girlfriend" category for interpreting the picture.

Q: Who was the lady at the end of the story? You mentioned her.

A: A girlfriend or something.

Q: How could you tell that she was a girlfriend?

A: Well, he was sitting with her a lot and talking . . .

Q: Well, what else did you see that would indicate that that was probably his girlfriend?

A: Well, they were sitting there and she was sort of dressed up. They looked like they were going to go out for a date together. (44)

An interesting aspect of the present data, aside from the specific rules or cues employed, is that overall processes of interpretation demonstrate a certain degree of similarity - i.e. an initial assessment of the situation is made, and then the perceptual data are assimilated to the primary structure - often leading to the

kinds of emphases and distortions brought out in the many excerpts cited in this chapter.

Affective response to the lady at the end of the story: In contrast to the strong similarities of interpretive processes related to the identity of the lady among all three age groups discussed above, interesting differences in affective response to the lady were observed across age levels. These data are summarized in Table 10 below.

Table 10. Affective Response to the Lady at the End of the Story by Grade (data for 30 subjects only)

<u>Grade</u>		Positive	Negative, Ambivalent (qualified answer)
	2	7	2
	5	6	4
	8	3	8

$$\chi^2 = 5.34$$

$$df = 2$$

$$p < .075$$

These differences reflect the fact that younger children were favorable in their response to the lady - citing her friendly and attractive appearance - while older viewers had negative or ambivalent reactions. Two factors may have influenced the judgments of the older students: First, six of the eighth grade viewers mentioned the fact

that they actually had very little information about the lady and therefore could not make highly confident judgments. Actually, the lady was included in only one picture. It is likely that the older eighth grade students, having seen what may have been positive initial impressions of the doctor disconfirmed by his later behavior, were wary of generalizing from a single, albeit favorable, picture of his "wife".

A second factor which influenced the judgments of the eighth graders about the lady involved a relatively complex cognitive integration of previous story events. Specifically, several of these respondents used their knowledge of the doctor's behavior at the accident scene in formulating their interpretation of the scene in the last picture. Thus, the doctor could have been seen as even more unkind than his failure to aid the victim would suggest if his laughter and drinking were seen as a "commentary" on his feelings about the accident. In some cases, respondents assumed that the doctor told the lady about the accident and that their joviality could be seen as a joint comment on the episode. Such an interpretation, of course, would lead to an unfavorable or ambivalent evaluation of the lady.

Q: Did you like her?

A: (Eighth grade) Well, I didn't see that much of her. I don't know - I liked him also at first . . . but he did the things he did, and I didn't like him too much after that.

Q: Was there anything about her that you particularly disliked?

A: No. Well, at first I thought . . . if she liked him, and he was such a cruel person, I thought that she might have the same qualities, but then I just realized that she may not even know that he left the person and has a quick temper. (49)

To this may be compared several of the simple, unidimensional responses of the youngest children:

Q: Did you like the lady?

A: (Second grade) Yes.

Q: Why?

A: She was pretty, and she was nice to the man?

Q: What did you like about her?

A: She was nice to the man. (6)

Data from the second graders, in addition to being nearly completely unidimensional (Like-Do Not Like, Pretty-Not Pretty, Nice-Mean) also show the intrusion of subjective criteria into the perception and evaluation of the lady:

Q: Did you like the lady?

A: Yes.

Q: Why?

A: Because she was cute, and she didn't yell at the doctor.

Q: Why would she yell at him?

A: I don't know. Maybe if the man did something wrong, she would have yelled, but I don't think she would.

Q: Well, what could he have done wrong? I don't understand.

A: . . . Maybe he could have knocked a plate and broke it and he could have just stepped right on it, without picking it up. And that's what he could have done wrong.

Q: But she wasn't angry at all?

A: She would have got a little angry, but she wouldn't have yelled and pushed him around like that. (7)

Some eighth grade respondents expressed their reaction to the lady in conditional terms. This generally could be traced to the ambiguity of the picture. For example, one child noticed the lady's wedding ring and concluded that she was married, but did not conclude that she was necessarily married to the doctor (who did not have a wedding ring on) as shown in the following:

Q: Is it possible that that could have been his wife?

A: Yes, maybe he doesn't wear a wedding ring. Some people don't do that.

Q: Is it possible that could have been his girlfriend?

A: Yes. If she's that kind of woman . . .

Q: Was she married?

A: Yes.

Q: Oh . . .

A: That's why I say, "If she's that kind of woman . . ."

Q: I see. Did you like her?

A: I don't know. It depends on the circumstances - if that was his friend or . . . (43)

Another basis for a conditional response to the lady was the question of whether or not she knew about the doctor's behavior at the accident:

Q: Did you like her?

A: Well, I didn't see that much of her. I don't know - I liked him also at first . . . but he did the things he did, and I didn't like him too much after that.

Q: Was there anything about her that you particularly disliked?

A: No. Well, at first I thought . . . if she liked this guy, and he was such a cruel person, I thought that she might have the same qualities, but then I just realized that she may not even know that he left the person and has a quick temper . . . (49)

No significant differences across the Nice vs. Nasty variable were found in the interviews for any age group, nor did this variable interact with sex of the respondent.

6. Reality Criteria: Interview data on the child's perception of the "reality" or "realness" of the pictures (story) reveal a number of age-related differences. This material was obtained largely from responses to the question, "What about these pictures, do you think they

are real?" and from other related follow-up questions and probes.

Before the analysis is presented, however, one point concerning what is to be understood by the use of the term "real" should be clarified. Specifically, no attempt was made to define or standardize the meaning of this term to the subject before eliciting his response to the questions. Had this been done, of course, the data for the various subject groups would be a great deal more comparable and a more precise type of analysis would be possible. Part of the objective of this investigation, however, was to learn what the subjective meaning of "real" would be for these children, given this type of question in this particular context. Therefore, the data and the analysis to follow contain a good deal more than a discussion of the perception of more or less "realness" or "realism" in the story. In fact, the analysis will deal with both the result of the question ("Is it real?") and with the criteria used to arrive at this result.

One clear difference across age groups is that younger children (second and fifth grades) were much more likely to respond that the pictures were real because they "looked realistic" than were the eighth graders. Seven second graders and eight fifth graders gave this answer, while only one of the eighth grade group did so. The elaborations and justifications for this question provide some hint as to why this particular dimension was so immediately salient for the younger respondents. Five respondents who stated that they looked "realistic" went on to add that they (the pictures) were not "cartoons"

or "props", implying the full dimensionality of the criterion being used - i.e. the degree of representational (here photographic) literalness of the stimulus material. As implicitly used, this dimension would have cartoon or stick type drawings at one end and a slightly falsified ("props") type of representation in between these two extremes. Interestingly, the only eighth grader to mention the pictures as "looking real" also referred to the props issue, supporting the hypothesis that the implicit comparison is between the reality of people, objects, etc. photographed "literally" and other, "less realistic" (drawn, sketched, theatrical) representations.

A second major distinction between the types of reality criteria used by subjects at different age levels is based on a judgment of the plausibility of the behavioral events of the story. Here "real" means "likely to occur". The age difference on this dimension was that youngest viewers (second grade) were much more likely to use this criterion than were the fifth or eighth grade students.

Two thirds (8 of 12) of the second graders used this criterion, compared to only 2 of 12 fifth, and 3 of 12 eighth graders. The following passages, both from second graders, illustrate this dimension:

Q: What about these pictures, do you think they are real?

A: No.

Q: How can you tell?

A: I can just look at it, and it doesn't really look real.

Q: What would it look like if it was real?

A: It would look a lot different. He probably wouldn't just walk away from the person there. (2)

* * * * *

Q: What about these pictures, do you think that they are real?

A: No.

Q: Pardon me?

A: It could be, but I don't think that they are.

Q: How can you tell?

A: Because he wouldn't just let a man lie there like that. (5)

It is important to note that in the application of this criterion, the actual answer (Yes-No) to the question is less interesting than the cognitive or information-processing principles embodied in the decision-making steps. Thus while some students may reason that the story is not real (because a doctor would not behave that way in real life) other components may be judged as real because they are equivalent to real world events, as in the following:

Q: Do you think the accident really happened?

A: (Second grade) Yes.

Q: Why would you say it really happened?

A: Because I saw a few accidents once when I was driving with my father - we were in Philadelphia. Saw some stuck cars. (11)

One way of thinking about the "realness" of the pictures and the events they depicted is to imagine the steps that necessarily took place in order for the pictures to have been made. This, obviously, requires some grasp of a scenario involving the people photographed and the photographer whose presence may be inferred from (a) the existence of the pictures, and (b) a knowledge of the technology required to produce them.

Not surprisingly, there were some differences observed in the interview protocols between the oldest (eighth grade) and the younger (second and fifth grades) children on reality judgments based on these factors. Specifically, 4 of the 12 eighth graders, compared to only 1 of 24 second and fifth graders, mentioned the reactivity of the accident situation as evidence that the pictures were not real. By reactivity is meant a perception (on the part of the viewer) that the presence of the cameras at an unstaged event would produce behavior different from that shown in the pictures - i.e. it couldn't have really happened that way and still have been photographed. The following passages provide examples of this type of reasoning:

Q: What about these pictures, do you think that they're real?

A: (Eighth grade) What do you mean real? Taken of an actual event, or set up?

Q: Well, let's take that. Do you think they were set up?

A: Yes.

Q: How can you tell?

A: Because if it was the real thing, then they wouldn't just leave the guy lying there. They wouldn't just take pictures of the man walking home - they'd go over and help the guy. (44)

* * * * *

Q: (Are there) any other indications that they were or were not real?

A: Well, a guy's going to think something's wrong when every minute a guy pops in front of him and takes a picture. Like he was never looking down when they took the pictures; he was always looking straight. (43)

These data on the perception of the pictures as staged also support the hypothesis that older viewers are more sensitive to the fabricatedness of the story. None of the 12 second graders described the pictures as staged or "posed" while 7 of 12 fifth graders, and 9 of 12 eighth graders either implicitly or explicitly did so.

In the discussion of reality criteria presented in the chapter on the analytic scheme (Chapter 4), a distinction between attributional and communicational inference reality criteria was proposed. It is felt that the data presented in this section support that distinction as a meaningful way of characterizing the differences in reality criteria used by children at different age levels: Younger respondents used attributional criteria (as defined in Chapter 4) much more than older respondents did. That is, younger children pointed to aspects of the story events and the representations of the people and events

as meaningful indicators of the realness of the story. Older children, on the other hand, used more inferential criteria - criteria closer to a recognition of the picture events as symbolic: They pointed to factors associated with the construction of the story - its staging, scripting, and photographing - in assessing its realness.

Further, there appeared to be differences between younger and older children in the extent to which responses implicitly referred to individual shots, as opposed to the entire sequence of slides. Younger children consistently pointed to the realness of the particular nurse, hospital, or street, for instance, without reflecting on the totality of sequentially and dramatically connected visual images. However, while references to the reality of the entire sequence were somewhat more common among older viewers (eighth grade) they still did not outnumber the other kinds of dimensions which have been discussed above (photographic literalness, reactivity, etc.).

As with other dimensions of the analytic scheme, data on reality criteria were examined for differences associated with the Nice-Nasty variable, and the subject sex variable. No systematic differences or interactions were found for either.

7. Evaluative Criteria: Data on the criteria used to evaluate the story by children at different grade levels are presented in Table 11 below. These data were obtained from an analysis of answers to the questions, "Do you think the person who took these pictures was

a good storyteller?", "What is a good (bad) story like?" and other related questions and probes.

Table 11. Evaluative Criteria by Grade

	Subject Matter; Value of What Was Shown	Event Documenta- tion; Comprehen- sibility	Dramatic Structure
2	6	6	0
<u>Grade</u> 5	4	7	1
8	2	5	5

$\chi^2 = 9.32$
 $df = 4$
 $p < .06$

The category "Subject matter; value of what was shown" refers to evaluations that are based on some intrinsic value or significance of the persons, roles, and events shown in the story, or the implications of these for a viewer.

"Event documentation; comprehensibility" includes references to the pictures as "good shots", presented "in a clear order" (sequence), "realistic" and so forth. The emphasis here is on the pictures (story) as technically clear and understandable from the point of view of the simple photographic representation or depiction of the main characters and events of the story.

"Dramatic structure" refers to evaluations that are explicitly based on aspects of the representation of character development and story action. This category includes entities such as personality, motives, outcomes and the like.

Table 11 shows that event documentation and comprehensibility criteria were quite common among all three age groups, although they were somewhat less common among the oldest (eighth grade) viewers. Examples include:

Q: Do you think that the man who took these pictures was a good storyteller?

A: (Second grade) Yes.

Q: Why?

A: Because he took good pictures of them.

Q: Well, what does it mean to be a good storyteller?

A: Like getting the right things - the good pictures.

Q: Well, what is a bad story like?

A: Something that really doesn't go together. (1)

* * * * *

Q: Would you say that the man who took these pictures was a good storyteller?

A: (Second grade) Yes.

Q: Why?

A: Because they looked so much like they were real and they looked just like they should have a sound to them, because they looked so real. (10)

* * * * *

Q: Would you say that the man who took these pictures was a good storyteller?

A: (Second grade) Yes.

Q: Why would you say that?

A: Because he took part by part.

Q: What does that mean?

A: When he was just going to step out the door, then he got to the next slide and I could see the sign that said Pennsylvania Medical Center, and the next slide showed he was walking farther . . . (and) the next slide saw that he saw the car.

Q: And that made it a good story, in that way? What would a bad story be like?

A: Like, he saw the lady in the car, then he just walked out of the medical center, and then he helped, the medicine, and then he just walked out of the medical center.

Q: Oh, they were out of order?

A: Yes. (3)

Several fifth grade evaluations were similar to these. The following quote is an example:

Q: Do you think the man who put these pictures together was a good storyteller? Or a bad storyteller?

A: A good storyteller.

Q: Why?

A: Well, he made it . . . like, come to life. Like it was really happening. (30)

Younger children (grades two and five) also tended to use as evaluative criteria aspects of the story events, as is indicated by Table 11. A typical interpretation here, especially for second grade viewers, is to equate directly the question of the quality of the story with the morality (goodness or badness) of the behavior shown (seen) in the pictures. Examples include:

Q: Was the man who took these pictures a good storyteller?

A: (Second grade) Yes.

Q: Why would you say so?

A: Because that story was good.

Q: It was a good story? What is a good story like?

A: (Pause) . . . A good story is like . . . like somebody did something good, not bad. (12)

* * * * *

Q: Would you say that the person who took these pictures was a good storyteller?

A: (Fifth grade) Yes.

Q: Why?

A: Because he just was trying to teach people lessons that you shouldn't do that, and a lot of people - they wouldn't think up such good things. (24)

In contrast to the younger children, 5 of 12 eighth graders used aspects of the dramatic structure of the story in their evaluation.

For example, the following selection demonstrates the retrospective evaluation of the final scene with the "wife". An evaluation of the story which is based on the success or failure of narrative or dramatic techniques such as this is defined as "dramatic structural".

Q: Would you say that the man who took these pictures was a good storyteller?

A: (Eighth grade) Yes.

Q: Why would you say that?

A: Well he took pictures of the important things, and didn't worry much about just plain walking home that much . . .

Q: What if it had been a bad story?

A: Well he might not have shown the man having a friendly evening . . . so you wouldn't know if he ignored it. . .

Q: Having what?

A: You wouldn't know if he'd ignored it like he did, or if he was still thinking about it. (44)

The use of dramatic structural criteria can also lead to completely opposite evaluations, as the following two passages demonstrate:

Q: Was the man who took these pictures a good storyteller?

A: (Eighth grade) No.

Q: Why would you say that?

A: Because that guy could have helped the man in the car and he didn't show it. To tell a life . . . a real day of a guy . . . you're going to need more than like 15 pictures to say . . . (43)

* * * * *

Q: Would you say that the person who took these pictures was a good storyteller?

A: (Eighth grade) Yes.

Q: Why would you say that?

A: Well, because they had the different things in it. Maybe if a bad photographer did it, he might have skipped the accident and just showed the guy walking away from the car, and not show you the guy hanging out of it. He might not have showed him talking to the nurse - or maybe he would have just shown him blowing his cool - and wouldn't show you the reason why, or something.
(52)

Criteria built upon "subject matter" aspects of the story are clearly attributional in the sense of Worth and Gross because they are rules for making judgments about events irrespective of their occurrence in real life, in a set of pictures, or in a movie, etc. While a response may implicitly contain a reference to the relationship between the pictures and a viewer ("if a child saw these") it is still the case that this kind of evaluation takes the picture events as a given, not as the outcome of a set of actions and decisions made by the "storyteller".

With "event documentation" criteria, the pictures are allowed to speak for themselves - are they in a clear, meaningful order? The level of recognition here would correspond to Worth and Gross' order recognition - the focus is on the question of whether something which is expected to be comprehensible (pictures of human behavior)

is comprehensible. At this level an observer recognizes that behavior is ordered and comprehensible and evaluates the pictures (story) on that basis. However, no references to an intentional selection and placement process (sequence-pattern recognition) used to convey some specific meaning were found in the answers coded as "event documentation".

Evaluations that explicitly incorporate aspects of the dramatic structure of the story can be thought of as structural in the sense of the definition of communicational inference discussed earlier. The most important thing about "dramatic structure" criteria is that they always imply a reference to, or an awareness of, the actual fabrication of the sign events involved - in this case, the staging and photographing of the story.

In sum, Table 11 indicates that attributional criteria (defined as subject matter and event documentation) were used almost exclusively by younger viewers (second and fifth grades) and by a majority of eighth graders (7 of 12). These findings will be further discussed in the next chapter.

Purpose-meaning of the story: Data on what children thought was the purpose or meaning of the story are summarized in Table 12 below. These data come from answers to the question, "What would you say was the meaning of this story?" and other follow-up questions and probes, including "What do you think the man who took these pictures was trying to make you think?" Answers were classified into either of two categories: "moralistic" or "other".

The category "moralistic", as used here, contains all answers that indicated that the purpose or meaning of the story was either of two types of moralism: (1) Simple moralism - e.g. "to show that you should help a victim," or (2) cynical moralism - e.g. "to show how bad things are these days".

Table 12. Purpose-Meaning of the Story by Grade

	Moralistic	Other	
<u>Grade</u>	2	4	8
	5	6	6
	8	12	0
			$\chi^2 = 12.12$ $df = 2$ $p < .01$

All of the four second grade responses categorized as moralistic were simple moralism, as were all six of the fifth grade responses of this general type. Examples include:

Q: What do you think the man who took these pictures was trying to make you think?

A: (Second grade) That you should help other people.

Q: And what would you say was the meaning of this story?

A: To help other people. (8)

* * * * *

Q: What would you say that the person who took these pictures and put them together was trying to make you think?

A: (Fifth grade) That the doctor wasn't too good of a doctor . . .

Q: What would you say was the meaning of this story?

A: The type of doctor he was. He might have been a good doctor, but he wasn't a kind one because he didn't help the other man. (22)

Two of the four moralistic second grade interpretations were based on the assumption that the doctor had aided the accident victim and that his behavior was exemplary.

In contrast, eight of the second grade children and six of the fifth graders did not give moralistic responses. There was a considerable amount of variety among these answers, and systematic classification was difficult. Table 13 below provides a summary of these interpretations, which were coded as "other" in Table 12.

Table 13. Frequency of Selected Categories of Non-Moralistic Story Meaning Interpretations For Second and Fifth Grade Viewers

Interpretation	Number	
	Second Grade	Fifth Grade
1. Show what a doctor does	4	3
2. Show how important doctors are	2	-
3. Use for this experiment	-	2
4. No idea	2	1

The eighth grade responses were highly consistent - all 12 were moralistic, and of these two thirds (8 of 12) were "cynical".

Examples are given below:

Q: What would you say was the meaning of the story?

A: I don't know . . . I guess to show how lousy
some doctor can be or something. (52)

* * * * *

Q: What would you say was the meaning of the story?

A: To show that an ordinary person would have done
these things - like just walk right by the car
. . . and look in and walk by. (45)

* * * * *

Q: What do you think the person who took these pictures
was trying to make you think?

A: I think he was trying to make you think that the
man was, you know, a doctor and he really didn't care
if he saw a man laying in a car like that - if he got
in an accident - and he wanted to go home with his
wife.

Q: What would you say was the meaning of the story?

A: The meaning was . . . typical man, doing everything
that they do, and, you know, just doing his job.
(46)

The interpretations of these and other eighth graders revealed a pessimistic resignation to the possibility of the kind of behavior shown in the story. That is, they found the story perfectly credible and understood its meaning to be a variation of the theme of "man's inhumanity to man".

The data on evaluative criteria and story meaning were also examined for differences across the Nice-Nasty variable, and for differences related to the viewer's sex. No systematic effects or interactions were found for either of these variables.

8. Other Dimensions: This section considers two analyses not directly included in the six dimensions of the analytic scheme described above: (1) age-related differences in the types of assessments made of the pictures, and (2) college students' interpretations of the pictures used in the present investigation, as reported by Pallenik (1973).

The Assessment Process - Differences in Assumptions about the Status of the Pictures: Section 6 of this chapter (reality criteria) presented an analysis of the answers to the question of whether or not the pictures were real. The approach used in that analysis was first to discover what the subjective meaning of the question (i.e. of the word "real") was for children in different grades, and then discuss the answers for each group in terms of the actual meaning or criteria being used.

The model of communication proposed by Worth and Gross states that the result of an assessment process will determine the type of interpretive strategy used by an observer in a given situation. It will be helpful, then, to review the interview data relevant to this assessment process.

Half of the second grade viewers in this study thought that the accident really happened, and that the pictures were the equivalent of photojournalism. The following quotes exemplify this type of assessment:

Q: How do you think they got these pictures?

A: It might have happened one time and somebody could have called the police and they could have got them (the pictures). (8)

* * * * *

Q: How do you think they got these pictures?

A: Maybe they could have took (pictures of) that man (the doctor) and . . . maybe on the way he saw a real man that was hurt . . . (7)

* * * * *

Q: Do you think the accident really happened?

A: Yes.

Q: Why would you say it really happened?

A: Because I saw a few accidents once when I was driving with my father - we were in Philadelphia - saw some stuck cars. (11)

* * * * *

Q: What about these pictures, do you think they're real?

A: I think so.

Q: You do? How could you tell?

A: If it wasn't real, why would they show it? (4)

* * * * *

Q: How do you think they got these pictures?

A: When a man was working, they put a movie camera where he was working.

Q: What about the accident, how do you think they got pictures of that?

A: A man . . . like on the sidewalk, was holding the movie camera and pointing it to the car.

Q: But how do you think they found the accident?

A: I guess a police car was riding around and told them . . . (12)

The remaining second graders either thought that the pictures were real (no recognition at all of the accident) and thus thought they were documentary in the sense discussed above, or thought that they were not real (i.e. they had been acted out) because a real doctor would not ignore the accident victim as shown in the pictures.

Fifth graders differed from the younger children in their assessments of the pictures in several respects. Only 2 of 12,

compared to 6 of 12 second graders, felt that the pictures were photojournalism - i.e. the accident really happened. Although a recognition that actors were used in the pictures (e.g. the doctor was probably an actor, not a real doctor) was quite common at this level (10 of 12 fifth graders) only a fraction of them (4) could think of any intended use or meaning the pictures might have. Further, the belief that a real doctor would not behave as shown here was still used by fifth graders as justification that the pictures were not real (3 viewers).

Eighth graders were nearly unanimous in their assessment of the pictures as staged. Interestingly, their justifications for this conclusion often cited the impossibility of the pictures being not staged - e.g. the reactivity of the situation, and the need for cooperation on the part of those involved (the actors). Another possible justification - that the pictures were intentionally staged in order to create a particular communication or message, to tell a story or inform someone - did not appear in the interviews at all at this point, although it did appear in some cases as a response to the later question on the purpose or meaning of the story.

Interviews with college subjects: Pallenik (1973) studied college students' interpretations of the pictures used in this investigation. Pallenik's subjects viewed photographic prints of the slides used in this study. The prints were mounted, one to a page, in a photo album, and viewers were told to go through the

sequence at their own pace. Pallenik used parts of the interview schedule developed for this study in his data collection.

Pallenik's data have been coded for (1) affective response to the doctor, (2) affective response to the lady at the end of the story, (3) most important thing in the story, and (4) overall interpretation - what did the doctor do at the accident scene?

In terms of these dimensions, the college data are quite similar to the eighth grade data collected in the present investigation. Comparisons for these four dimensions are given in Table 14 below.

Table 14. Comparison of Eighth Grade and College Students on Selected Story Dimensions

		Eighth Grade (n=12)	College (n=16)
Like Doctor?	Yes	8%	12
	No	92	88
Like Lady?	Yes	27	44
	No or Mixed	73	56
Most Important Thing in Story?	Accident	83	88
	Other	17	12
Did Doctor Ignore Accident Victim	Yes	92	94
	No	8	6

Pallenik's data also indicate that the interpretations of college students are much more likely to correspond to the characteristics of the communicational inference interpretive strategy described in Chapter 2 than are the eighth grade or younger students'. Specifically, these interpretations most often contained an awareness of the implicational conventions inherent in the structure of the picture-story:

Q: How do you know that he didn't go for help?

A: Well, I'm presuming that the pictures you showed me are a continuous story and that nothing important was left out. That would have been important, especially since they spent so much detail showing him walking home. (Pallenik, 1973)

This quote, which was typical of the interpretations of the college viewers, indicates an ability to treat the images (behavior) shown not as a representation of behavior alone, but rather as symbolic events consciously and intentionally designed to be communicative in this particular context.

CHAPTER SIX: DISCUSSION

This chapter considers the descriptive nature of the data; their implications for several of the theoretical questions outlined in Chapter 2 -- in particular, attribution - communicational inference theory, and cognitive-developmental theory; practical implications of the findings; and suggestions for further research.

1. Descriptive Nature of the Findings: This study employed an experimental situation to produce detailed examples of interpretations of communications by children at three different age levels. The stimulus material used - in terms of its structure and its use of conventional techniques of visual representation - is similar to many of the visually mediated communications that children and adults in this society encounter in daily life.

The importance of richly detailed, essentially exploratory, studies of the development of human abilities has been stressed by Flavell in a discussion of the position of the "developmental naturalist":

The strategy of the developmental naturalist is purposely to withhold questions of precise structural and, particularly, causal relationships until the developmental territory at large has been submitted to a searching, but nonetheless essentially descriptive, surveying-and-mapping operation. He prefers to defer a causal-analytic, antecedent-consequent as opposed to developmental-descriptive . . . attack on the problem until the dependent variable, the consequent itself, has been at least roughly differentiated into some of its constituent subskills and the gross ontogenetic profile for each subskill plotted. (Flavell, 1968, p.3)

It is in this spirit that an experimental framework has been utilized in the present study. It would be overly simplistic and misleading to claim, for example, that differences in the variable age "cause" the range of differences in interpretive behavior demonstrated in this study.* On the other hand, the claims that are made for these findings are (a) that they represent relatively detailed and rich descriptive data about children's interpretive behavior in a certain type of communicative situation; (b) these data possess a marked and highly consistent developmental gradient; (c) they suggest and support the kind of theoretical distinction embodied, for instance, in the definitions of attributional and communicational inference interpretive strategies; and lastly (d) they shed further light on previously existing sets of statements pointing in the direction of still incomplete theories of human perception and cognitive development.

2. Attribution - Communicational Inference Theory: In Chapter 2 the characteristics of two separate types of interpretive strategies were presented under the headings, "attribution" and "communicational inference". The distinction between these two interpretive strategies was derived from the assumptions made by the viewer about the status of the sign events being interpreted. In one case, an assumption of

* For example, attention should be given to factors other than (but generally associated with) age which may play a significant role in the development of interpretive competence. Amount and quality of classroom and other experiences with visual communications, including stories, might actually be the best explanatory variable.

existence only is made (the sign events are treated as natural events) and the appropriate interpretive strategy is called attribution. In the second case, an assumption of intention is made and the appropriate interpretive strategy is called communicational inference. Here the viewer perceives, in addition to the stimulus objects (signs) themselves, a structural organization which results from the operations of selection, transformation, and ordering of symbolic events or message components according to some socially shared code or convention, resulting in his recognition of an intentional, "meaningful" message.

The sections below consider the data collected in the present investigation from the perspectives of this general definitional distinction, developmental patterns of attributional behavior, implications for current attribution theory and the concept of interpretive competence.

Main Findings: The first and most significant observation to be made is that very few respondents, even at the eighth grade level, used primarily communicational inference interpretive strategies. Most children used interpretive strategies that correspond to the definition of attribution proposed by Worth and Gross.

A number of points support the view that the majority of the interpretations of this story (especially those of the second and fifth graders) are essentially attributional. First, many second and fifth graders either thought that the events shown actually happened, or decided that they did not happen because they felt that

a doctor would not behave that way. Other children in these two grades claimed that the story was real because the people and things shown "looked realistic".

Further, most of the interpretations of the younger subjects (second and fifth grades) call into play knowledge that comes from outside the set of pictures used. Thus, in spite of his negligence at the accident scene, the doctor was still liked by younger viewers because "Doctors are nice men," and "Doctors help you". At this level, the child's interpretation of the picture events is based on his assessment that the events seen are real, natural events, and must, therefore, have the same meaning that he has learned to assign to such events when they are experienced directly.

The interpretations produced by the oldest respondents (eighth grade) were different from those of the younger children in several ways. The former recognized that the pictures did not, in fact, represent a simple record of natural events, and they were aware of the improbability that such a complex sequence could be captured in pictures unless it had been staged. They also interpreted the doctor's behavior in ways that were taking many more factors into account.

Even these relatively complex interpretations, however, still fall short of communicational inference. Eighth grade subjects nearly always discussed the pictures from the point of view of the doctor's behavior, the accident scene and other events show - without referring to the filmmaker and his intentions, purpose or meaning in

creating the sequence. They concluded that the events shown were not real because of the impracticality or impossibility of getting pictures like this of a real event, instead of basing judgments on a recognition of the picture sequence as an intentionally fabricated message from which some meaning could be inferred. Finally, they did not discuss the role of the filmmaker, his intentions, and his selection and presentation of the pictures as did older college age students who were studied by another researcher.

This finding is similar to the hypothesized developmental sequence in deductive reasoning abilities discussed by Donaldson (see p. 16-18). Donaldson found that "pre-inferential" children failed to restrict themselves to the data or facts given in the problem itself, and instead felt free to draw on whatever different kinds of prior social knowledge they had in order to reach a solution or interpretation. Thus the child who was correct in associating the bracelet with the girl doll nevertheless did so "because girls like bracelets" and not because from the information given (the girl doll had round pieces, the boy, straight) that would be the correct deductive inference.

In the current investigation, the findings from fifth and especially second grade children that the doctor was liked because "Doctors are nice men," or because "He looked like my doctor" and the finding that the story was seen as real because "I have been in Philadelphia and seen that hospital" are quite similar to Donaldson's. That is, in this study nearly all of the younger children were unable to restrict themselves, or demonstrate that they were capable of

restricting themselves, to the events shown in the pictures - the story - and to the conventions and structural organizational principles implicitly contained in them, as older viewers could.

These findings also bear a similarity to those of Greenstein and Tarrow (1970) who used semi-projective tests to study political orientations of children. These researchers presented children with imaginary scenarios involving political figures and institutions, and asked a series of questions about them. One scenario involved telling British children that ". . . the Queen was driving by herself in a car . . . and the police stopped her for going too fast" and asking what the policeman involved would say to the Queen. Greenstein and Tarrow discuss, as typical of some younger children, an unwillingness to accept the information given and address themselves to the problem. This "resistance to conceiving (the) problem in the terms stated" is illustrated by the following exchange based on the Queen scenario:

Q: What do you suppose the policeman would say?

A: I think he would be astounded, because really the Queen, she doesn't drive the car on her own. And she knows Britain's speed limits, so she wouldn't have gone really fast. (p. 486)

The finding that younger viewers bring a qualitatively different response or interpretive set to the visually mediated communication situation is also quite consistent with results of some of the early Payne Fund studies, which used physiological response to movies as a

dependent variable and age as an independent variable. The kinds of differences which are suggested by the distinction between attributional and communicational inference interpretive strategies were seen as accounting for differences in reaction between adults and children, as follows:

The key to the small adult reaction is given in a comparative examination of the verbal reports. Adults are conscious of the artificiality of the film, the quality of the acting, or the probability of the development. Younger Os show a much greater tendency to assume the reality of the picture. This perceptual difference seems definitely related to the difference in emotional response. (Dysinger and Rucknick, 1933, p. 102-103).

Increasing Complexity of Attributions with Age: A number of differences across grade levels in the general pattern of attributions made by respondents have been presented in the preceding chapter on findings. This section will summarize them, and discuss their relationship to some concepts of attribution theory in social psychology.

As age increases, one's general complexity of attributions increases. This was shown most clearly in the data on affective response to the doctor and on the perception of his motives and personality characteristics. Youngest children were almost completely unidimensional in their responses - even in face of the strongly ambivalent or inconsistent evidence about the doctor's behavior. Older children showed considerably more complexity in their responses

to the doctor. For instance, they were much more likely to see his behavior as a complex function of dispositional and situational factors - e.g. his fear of personal loss from a law suit outweighed his commitment to humanity (role attribute) - therefore he was a hypocrite (personality disposition). While this particular line of reasoning is not necessarily typical of all older viewers in terms of content and specific conclusions, it does typify the more complex information-processing or decision-making steps that lead to a personal attribution.

The appearance of more complex attributions in the interviews with older children is also highly consistent with Gollin's (1958) data on the uses of "inference" and "concept" in person perception experiments using films. These films showed a single actor involved in dramatically opposite types of behavior (good vs. bad). The finding that second grade children in the present study were essentially unidimensional in their reaction to the doctor is paralleled by Gollin's report that subjects under age ten had to be dropped from the experiment because they consistently confused the identity of the protagonist (who behaved in inconsistent ways). For example, one second grader in the present study (see Table 4, p. 58) thought that the story was about two men who looked alike - a doctor and a second man. She "knew" that a second person was involved because of her belief that a doctor would not ignore an accident victim.

Gollin's finding that the use of "concept" (inferences accounting for the diversity of behavior shown) was a relatively late development not found in preadolescent children is matched by the

present data on relative lack of complexity of attributions made by younger respondents.

Implications for Attribution Theory: The theory of correspondent inferences proposed by Jones and Davis (1965) specifies four factors that influence the quality and intensity of inferences about personal dispositions. Two of these have a bearing on the present study, although limitations in the design of this study have precluded any valid test of the actual strength of these factors.

First, Jones and Davis argue that the "social desirability" of an act will influence attributions about the actor's personality (the lower the desirability, the stronger the attribution).

The central event of this story, of course, can be defined as low in social desirability - it produced among some fifth and nearly all eighth graders strongly negative reactions to the doctor; in addition, these viewers were highly confident in their opinions.

Secondly, Jones and Davis state that attributions will be strongly and more confidently held when the number of uncommon effects or outcomes is low (i.e. the number of apparent reasons for performing the act is equal to one, in the extreme case). Some support for this hypothesis can be found in the data indicating that viewers (usually older) who saw a number of factors as possibly influencing the doctor's decision not to aid the victim were less extreme in their dislike of him personally while, on the other hand, viewers who saw his behavior as manifesting only cruel inhumanity were more extreme in their dislike. Again, the present study did not collect data that

would be precise enough to test this prediction accurately, although many examples from the interview transcripts support this interpretation. In a previous experiment done by the author using the present stimulus material, high school and college age students disliked the doctor significantly less than did junior high school students, and there was a parallel difference in the number of factors seen as possibly influencing the doctor at the accident* (Murphy, 1971).

Communicative Competence in Interpretation: The data discussed in Chapter 5 showed a consistent age-related pattern on a number of the measures derived from the interview transcripts. Sections of several of these tables are summarized below in graph form.

* Data from descriptive scales show that younger viewers were considerably more negative in their evaluation of the actor than were older viewers. Analysis of variance on the main effect for age showed that younger children saw the man as:

More cruel	p < .02
More stupid	p < .001
More inconsiderate	p < .04
(More nervous	p < .09)

Evidence for the same kind of developmental trend was also apparent in the answers to open-ended questions. When asked, "What do you know about the man?" younger viewers responded with more extreme characterizations ("He's stupid," "Crazy," etc.) and with fewer qualifications of their judgments. Older viewers, on the other hand, produced less extreme characterizations and more reservation about making judgments and they also demonstrated a greater attempt to assume the role of the actor in offering explanations for his behavior. (p. 31-32)

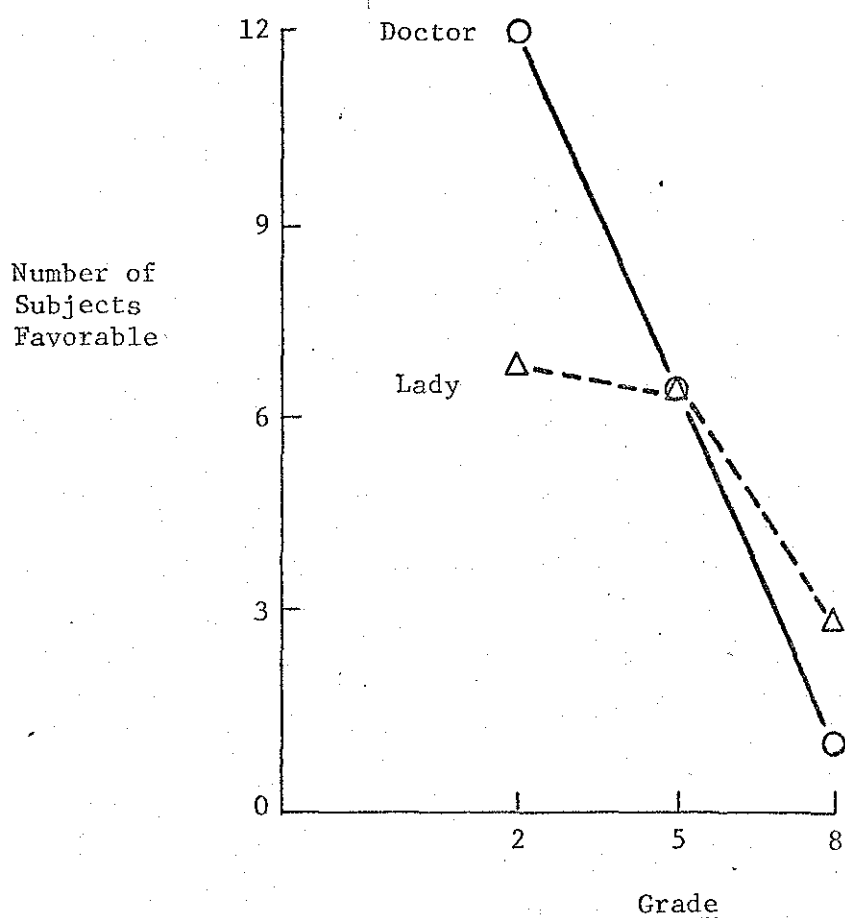


Figure 8. Positive Affective Responses to the Doctor and the Lady as a Function of Grade (data from Tables 5 and 10)

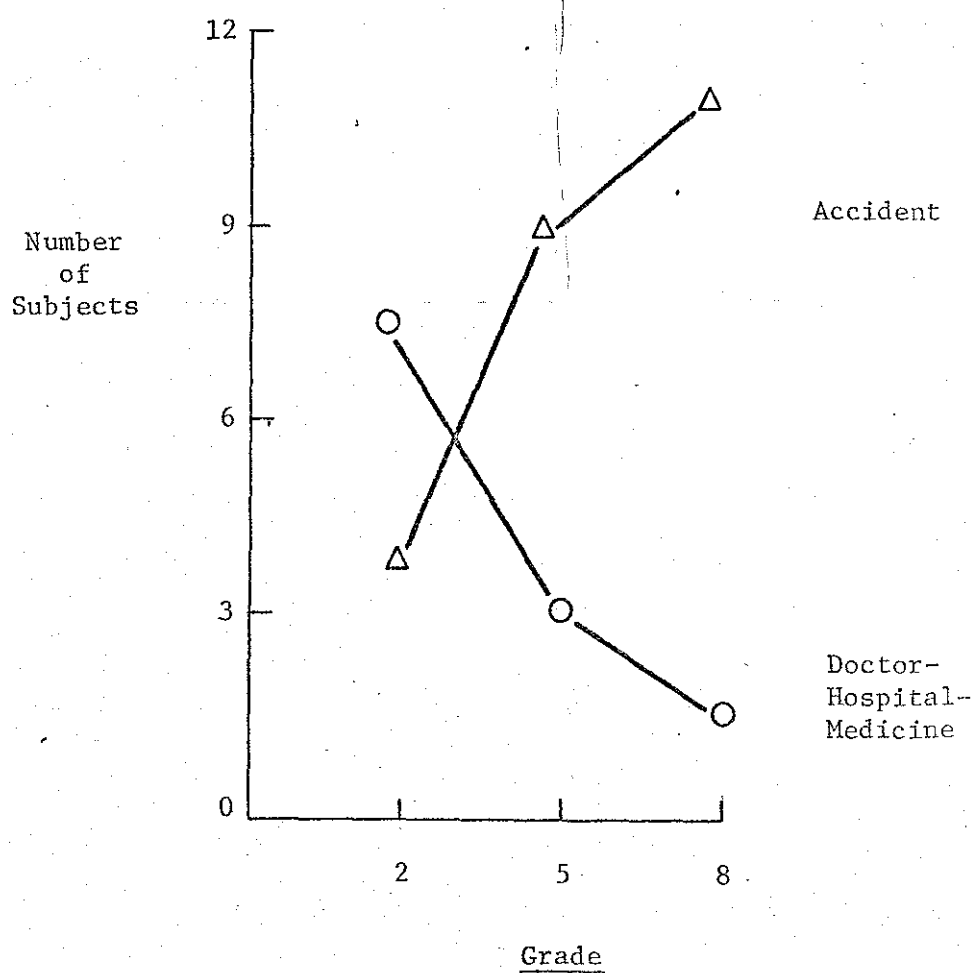


Figure 9. Relative Importance of Two Story Dimensions as a Function of Grade (data from Tables 7 and 8)

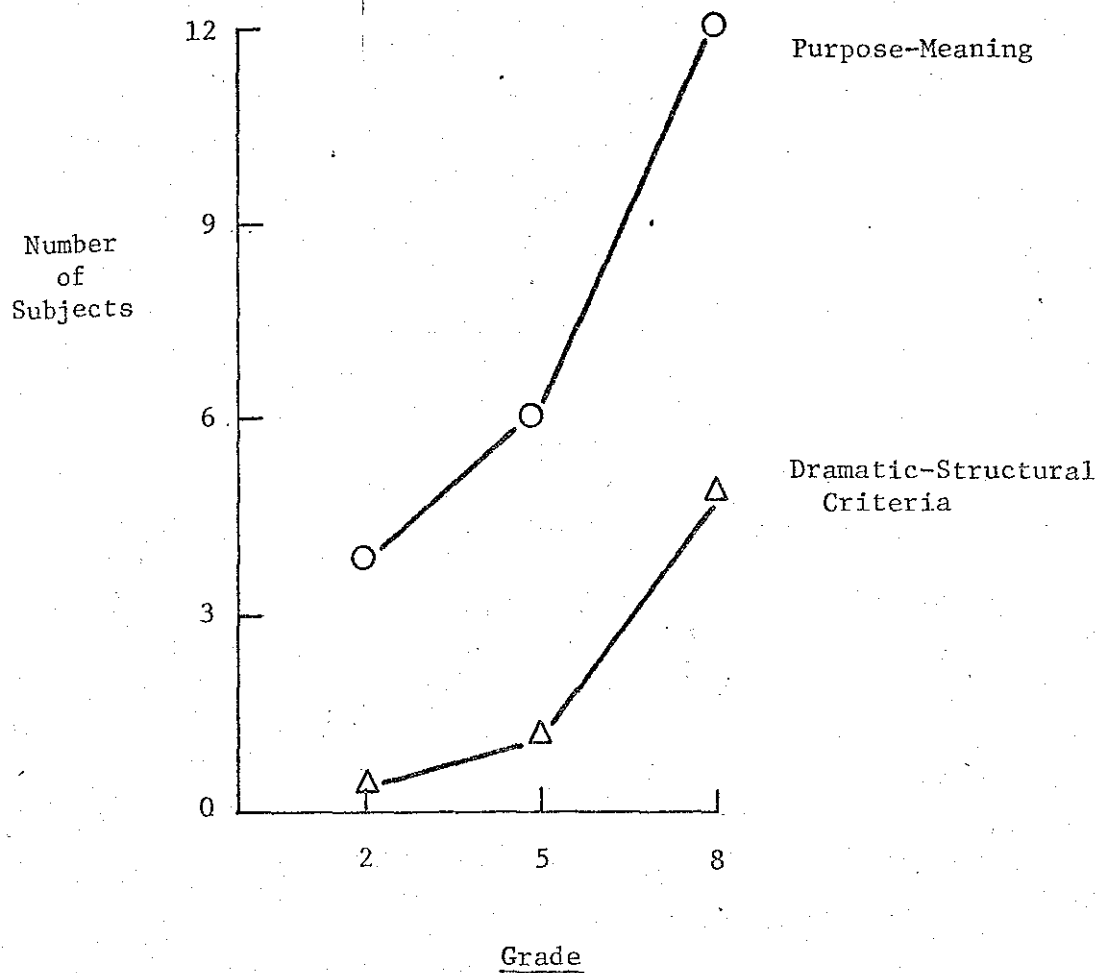


Figure 10. Use of Dramatic-Structural Evaluative Criteria and Perception of Story Purpose as Moralistic as Functions of Grade (data from Tables 11 and 12)

These graphs indicate that major critical and interpretive differences exist across the three grade levels used in this study. The argument that youngest viewers apply relatively simple, favorable stereotypes to two of the story's central characters (doctor and wife) and that this kind of response decreases with age is demonstrated by the curves in Figure 9.

Similarly, the differences in the relative importance of various story events and themes are shown by Figure 10. Examined this way, these data are very much like those of Collins (1970) on differential learning of central and peripheral media content as a function of age. The increasing salience of a central dramatic event is also quite consistent with development in the direction of the "structural recognition" Worth and Gross describe as characteristic of communicational inference interpretive strategies.

Figure 11 further suggests that as age increases so does the ability to apply more sophisticated evaluative criteria (dramatic-structural) and the ability to make, with a fair degree of certainty, an estimate as to the purpose or meaning of the story. Younger viewers (second and fifth grades) as indicated in Table 13, had very few alternative interpretations for the story's meaning or purpose, other than to say that it was designed to "tell what doctors are like".

In all, the data collected in this study point in the direction of a two-fold developmental progression with respect to interpretive competence and the question of attributional and communicational

inference interpretive strategies. On the one hand, increasingly sophisticated attributional skill was positively associated with age. In contrast, fully developed communicational inference interpretations were not observed among any respondents, although several of the prerequisites for this kind of interpretation were found among the oldest respondents. The implication, therefore, is that the development of the communicational inference strategy is a considerably later phenomenon for which the data in this study provide only a highly sketchy and indirect forecast.

3. Cognitive Development: The most dramatic aspect of the interview data collected in this investigation is the difference in overall interpretation ("What did the doctor do at the accident?") and in affective response to the doctor, between younger children (second grade) and the older ones (eighth grade). (As the data in Tables 3 and 5 indicate, fifth graders were roughly split on these questions).

The discussion below speculates on the types of psychological mechanisms that could account for these rather striking differences.

General Cognitive Development: Both Piaget and Bruner deal extensively with the hypothesis that an individual must possess an appropriate category (Bruner) scheme or structure (Piaget) prior to exposure to a stimulus in order for that stimulus to be understood, grasped, or perceived veridically. According to Bruner, "perceptual readiness" corresponds to "the relative accessibility of categories to afferent stimulus inputs" (1957, p. 723). Failure to perceive,

Bruner adds,

is most often not a lack of perceiving but a matter of interference with perceiving. Whence the interference? I would propose that the interference comes from categorizations in highly accessible categories that serve to block alternative categorizations in less accessible categories. (p. 719)

Thus, in the present study, the failure of the youngest children to perceive the doctor ignoring the accident victim can be attributed to the lack of something equivalent to a category of malicious or inconsiderate doctors. Given the general pattern of childhood socialization in this culture and the popular image of doctors in the mass media, this would certainly be a highly tenable hypothesis.

This line of reasoning raises the general question of what is the most productive and the most parsimonious way of conceptualizing these kinds of social-perceptual categories. Specifically, perhaps it would be simplest to think of relatively unitary (and more general) categories of social knowledge which might then be placed into broad groups, e.g. roles (doctor, nurse, teacher) role attributes (strong, kind, nasty, etc.) and possibly additional classes such as situations or time-space specifications (e.g. school, hospital). Then the major conceptual problem would be to predict the range of possible (and impossible) intersections of categories. "Possible" multiple categorizations (or n-tuples) then, for a second grader might include:

"Doctor-Helpful," "Man-and-Wife-At Home-Friendly" etc. while "impossible" multiple categorizations could include "Doctor-Not Helpful" for example.

This line of reasoning was suggested by one of the pretest interviews (second grade) in which the child said that the reason the doctor did not help could have been "because he was on drugs". While this interpretation is incongruous to the adult mind, it makes very good sense in terms of the kinds of combinatorial principles outlined above. The naive psychological reasoning might be imagined as follows:

1. Doctor did not help victim.
2. (Reason needed - interviewer has asked why)
3. Could he have been inconsiderate? No. (Reason: intersection of "Doctor" x "Inconsiderate" is usually the null set).
4. Could he be on drugs? Possibly. (Reason: drugs are a big problem these days; "anyone" can get hooked on drugs; drugs can ruin you life, etc.)

This approach to the data analysis is similar to the work of the cognitive psychologist Robert Abelson on "implicational molecules". Abelson has defined implicational molecules as "self-contained set(s) of statements which, taken together, are psychologically self-consistent according to a particular implicational principle" (1968, p. 133). This formulation is an extension of some of the theories of cognitive consistency in social psychology. Abelson's contribution has been to take the focus off simple positive or negative bonds or links between individual beliefs or attitudes (cognitions) and instead to place the focus on the cohesiveness of related cognitions - cognitions which, taken together, form a conceptual "good figure". According to Abelson, the main dynamic of

implicational molecules is "a tendency to complete the molecule by inferring new sentences (cognitions) strongly implied by the givens"* (p. 133-134). Thus in the present study the combination of "This is a story about a doctor" (given in the stimulus material) and "Doctors help people" (a widely held cultural belief comparable to Abelson's implicational principle) leads, for many of the younger viewers, to the necessary conclusion that the doctor must have helped the victim.

In sum, two closely related explanations relying on the availability and suitability of categories of social knowledge are suggested by Bruner's theory.

Piaget's Theory of the Stages of Cognitive Growth: Piaget's concepts of cognitive developmental stages and assimilation can be combined into a third explanation of the striking differences in interpretation between younger and older children.

First, according to Piaget, sensory input can be understood only to the extent that it can be assimilated to existing schemes or structures already present in the organism. Thus in the present study certain gross aspects of the visual stimuli (e.g. role identification)

* For example:

Q: What else do you know about the man in the story?

A: That he was a good man.

Q: Why do you know that?

A: Cause doctors are good men.

Q: How could you tell that this one was a good man?

A: Because he was a doctor. (4)

are initially and securely established ("This is a story about a doctor") and subsequent details are assimilated to the activated image or scheme of a doctor. This assimilation is eminently visible in the creative distortions of second grade children cited throughout the previous chapter, and in the following interview with an eight year old boy done by L. Gross.

Q: What was the most important thing in the story?

A: He was a doctor and he helped people a lot.

Q: How do you know?

A: Well, I think he helped that person in the car wreck.

Q: How do you know?

A: Well, I don't know. But I think he helped him, because that's what doctors are for, isn't it? Helping people?

At this level of description, Piaget's approach is rather similar to that of Bruner (category accessibility) discussed above. Piaget's theory of the stages of cognitive development, however, can contribute to a more precise specification of the psychological mechanism possibly responsible for the observed differences.

According to Piaget, the major single dimension characterizing the intellectual development of the child is the decreasing degree of egocentricity. Cognitive growth, from sensorimotor to operational to formal operational levels of development, is paralleled by a simultaneous lessening, through progressive decentration, of the complete egocentricity of the neonate.

Egocentricity may be seen in the ways in which a child assimilates objects and events he comes into contact with in his personal experiences. Thus, an infant in the sensorimotor period will react to a new object or toy, for instance, by hitting or pushing it according to established schemas of sensorimotor action. Similarly, a preoperational child is likely to assimilate verbal or social stimuli to currently prevailing egocentric schemas of animism, affectivity and the like, while the older child of the concrete or formal operations stage is able to react to verbal or social stimuli in a variety of decentered ways (e.g. as an event viewable from numerous perspectives, as an assumption or hypothesis to be tested, as a construction of indeterminate truth-value, and so forth).

The assimilatory patterns of preoperational children are characteristically egocentric with respect to causality:

"The sun is born because we are born."

"It has grown because we have grown."

(Piaget, 1967, p. 42)

Data collected by Lerner (1937), a student of Piaget, on "sociocentric" moral judgment also show the assimilation to existing schemes of value, affect and behavior norms and the circular reasoning patterns characteristic of this period:

Q: Who is more severe, your dad with you or the other dads with their sons?

A: (Age 8) The dads with the other sons because they are more severe than my dad.

* * * * *

Q: Does your dad love you more than the other dads love their sons, or do the other dads love their sons more than your dad loves you?

A: (age 8) Dad loves me more than the other dads love the other boys because my dad works on the trams; he earns a lot. The other dads don't work on the trams and don't earn a lot.

* * * * *

Q: A boy here . . . told me that boys in X school tell more lies than the boys here.

A: In X school (they lie more) because they get sick more often in that school. Because they run too fast and then they get heated up and they don't want to put on their coats and then they get sick.

(Lerner, 1937, p. 262)

Interpretations highly similar to these egocentric assimilations were found throughout the pretesting and experimental interview data in this study. Second and third grade children interviewed at a downtown YWCA "after school" program very often stated that the most important thing in the story was the fact that the doctor crossed the street with (i.e. not against) a green light.* This interpretation reveals the intrusion of subjective criteria into the judgment of the relative significance of events. These same factors appear to

* The fact that this observation appeared only twice among the experimental groups can probably be attributed to the fact that most of these children were bused to school, while the YWCA children walked on city streets to a neighborhood school.

account for the following favorable attitude toward the lady at the end of the story:

Q: Why (did you like the lady)?

A: Because she was cute, and she didn't yell at the doctor.

Q: Why would she yell at him?

A: I don't know. Maybe if the man did something wrong, she would have yelled, but I don't think she would.

Q: Well, what could he have done wrong? I don't understand?

A: . . . Maybe he could have knocked a plate and broke it and he could have just stepped right on it, without picking it up. And that's what he could have done wrong. (7)

* * * * *

Q: Who was the lady at the end of the story?

A: The nurse.

Q: How could you tell that she was a nurse?

A: Because doctors go to nurses when they see something bad.

Q: Did you like that nurse?

A: Yes.

Q: Why?

A: She sort of looks like my mommy.

.

Q: What do you think the man who took these pictures was trying to make you think?

A: I guess he made us think that doctors are good friends to us, and not be afraid of them.

Q: How do you know that?

A: Because I've been to lots of doctors and they were all good to me. They never hurt me or anything. (4)

The same type of assimilation to the egocentric schemes of younger children's experience and social knowledge was seen in the data on reality of the story:

Q: Why do you think (the pictures) are real?

A: Because the doctor does walk home.

Q: How do you know that?

A: Because my uncle's a doctor and he does it himself. (data from L. Gross)

Piaget's theory of the stages of intellectual growth thus provides a psychological explanation for the major age-related differences that is somewhat different from Bruner's theory. Specifically, Bruner's approach is to examine perception and comprehension from the point of view of category accessibility; Piaget's approach (which can lead to the same kinds of predictions but for different reasons) focuses on the phenomenon of assimilation to egocentric schemes among relatively younger children. It is not being argued, however, that the present data are capable of indicating

the superiority of either of these two approaches.*

* Closely related to the decrease with age of characteristically ego-centric patterns of assimilation in Piaget's theory is the beginning, at approximately age 7-8, of the concrete operations of intelligence, which usually are completely developed by 11-12. One feature of this stage is the acquisition of conservation - the point at which, e.g., a child is aware that the total volume of a liquid remains constant even though its height (in cylinders of varying diameters) may be changed. An understanding of this implies further that the child can grasp the essential reversibility of the transformation (i.e. the child knows that the volume of liquid is the same because if the transformation were reversed, the initial "volume" (amount, height, etc.) would reappear. In fact, Piaget argues that the operations consist of reversible transformations (Piaget and Inhelder, 1969, p. 97).

The inability of younger children to "perceive" the doctor's behavior at the accident can be examined from the point of view of this part of Piaget's theory: (1) First, processes of cognitive development in the social and affective realms are essentially equivalent to the more abstract cognitive functions described above ("The affective and social development of the child follows the same general process, since the affective, social and cognitive aspects of behavior are in fact inseparable", Piaget and Inhelder, 1969, p. 114). (2) The present data show a consistent inability of the youngest subjects to deal cognitively with what is essentially the opposite of the image or stereotype they hold of a doctor (i.e. the image that is suggested by the first four pictures of the story). (3) This inability is consistent with Piaget's description of preoperational subjects as unable to perform mental operations embodying reversible transformations (i.e. to accept, as perhaps nothing more than a logical possibility, the idea of the transformation, "Doctor's help" → "Doctor's do not help"). (4) This explanation differs from that derived from Bruner's theory in that it states that what will not appear is the reverse of some particular category (the argument that the category "Doctor" is favorable was supported by pretesting and by the control interviews) while Bruner's approach states that category accessibility is primarily a function of environmental probabilities.

This comparison leads to the question of what kind of evidence would be needed to clarify this problem. Presumably, a study could be designed in which reversibility was needed for a "correct" interpretation while at the same time environmental probabilities were identical for both versions of the events. That is, a story in which (1) initial pictures or information implied "A"; (2) "Not A" was then presented; while (3) probabilities for both "A" and "not A" were as nearly identical as possible.

4. Practical Implications of the Findings: The primary objective of this investigation has been to contribute to the development of theoretical definitions and relationships in the area of communicative competence in interpretation. Nevertheless, the possible relationships between these theoretical issues and problems of a more practical nature should not be overlooked. Children's exposure to television and certain types of television commercials is an example of one such practical issue.

Recent studies have tried to discover what the child's conception of television commercials is, and in what ways, if any, does this conception lead to or reinforce particular patterns of consumer behavior or attitudes towards commercials and the products and services they advertise (Ward, 1970).

The data collected in this study indicate that, at least for children under age 10-11, certain types of commercials may be particularly misleading - and misleading in ways that are not very obvious to older viewers. Specifically, so-called "slice of life" commercials, which present an actor in a simulation of some natural situation, are likely to be perceived as real by younger viewers. This conclusion is based on the finding in the present study that younger children showed almost no ability to meaningfully discriminate between real and fictional depictions of a socially stereotyped figure (the doctor) and they have shown a very strong tendency to apply a favorable judgmental stereotype to such a figure, even in the face of counter-normative and anti-social behavior on the part of the doctor.

For these children, a doctor is a good man, and therefore will

be perceived as doing good things. By extension, one would strongly suspect that actors playing roles which fit into socially-stereotyped images of positively valued figures would be very likely to be perceived as real (i.e. as qualified to fill the role they are "playing") and would benefit from a "halo" effect by which their actions and words would be seen in a favorable light.

On the basis of this research and the reasoning which follows quite clearly from these findings, it would seem very likely, then, that "slice of life" commercials would be seen by younger children as "real" depictions of events and that actors who appear in the guise of social-role holders would, in fact, be perceived as actually qualified for these roles (Gross, 1972).

5. Suggestions for Further Research: Several lines of further research are suggested by the results of this investigation. Three of these are discussed below.

Expand subject age range: An extension of this study to younger children would provide data on the exact age level below which children are not really able to handle the task that these pictures and interview schedule present. This would provide useful descriptive data on the factors related to the perception of a story per se - i.e. even the youngest respondents in the present study had a fairly complete and firm sense of the narrative structure or story-ness of the pictures. It would be interesting to see just where this ability first presents itself and what its first manifestations are.

Expansion of the age range of respondents to include older children would allow the compilation of data on communicational inference interpretive strategies, something which is almost completely lacking in the present study. The ages of interest here would span the gap between the upper age group used in this study (13-14 years) and the college age students, from whom data were collected by Pallenik (1973).

Since one of the main findings of the present study is that relatively clear and easily differentiated patterns of attributional interpretation can be described for elementary and junior high school students, perhaps comparably differentiated age-related patterns of communicational inference interpretive strategies could be mapped out in studied of older respondents.

Studies with the protagonist in different social roles: These would be useful in order to test the generality of the finding that younger children assimilate much of the perceptual data of the pictures to a positive undifferentiated image of a doctor. The obvious question here would be whether or not the same kinds of assimilation would be observed, for instance, if an athlete were placed in a situation in which his athletic strength and coordination did (or did not) have some bearing on an event, decision or act. Similarly, a story like the present one could be used with a protagonist who was in some other social or occupational role for which behavioral expectations would be comparable to the doctor in the study. The

roles of clergyman or politician would be obvious possibilities.*

-
- * An alternative set of the slides does exist in which the protagonist is characterized as a businessman, rather than as a doctor. Some pretesting has been done with college age subjects to examine the hypotheses that (1) the same act (ignoring the accident victim) is more role discrepant for the doctor than for the businessman (measured by mean perceived likelihood of assistance) and (2) that person perception judgments would be more extreme and more confidently held in the case of the doctor than in the case of the businessman (measured by descriptive trait scales).

The first hypothesis was strongly supported. Data showing the doctor - businessman comparison and results for other social/occupational role comparisons are summarized below:

Duncan's New Multiple Range Test for mean perceived likelihood of assistance for six roles for accident scene (data from 38 college students who had seen the slides - Murphy, 1971). Note: Any two means not underscored by the same line are significantly different at the .05 level.

Policeman*	Clergyman	Doctor	12 Yr. Boy	Construction Worker	Businessman
1.55	1.82	2.66	4.34	5.13	6.08

* How likely is it that _____ would help?
(Likely = 1, Unlikely = 10)

Data bearing on the second hypothesis were in the expected direction, but were not significant. Whether this was due to problems in the design and administration of the scales used is not known; further data are needed to clarify this question.

Studies using different communication modalities: Here the objectives would be to test for possible interactions between communication modalities (still pictures, slides, movies, etc.) and type of interpretive strategy used, with age and story content held constant. A study conducted by Harlan (1972) using the same stimulus items as the present research showed that the presence of a title ("The Doctor" vs. "The Doctor Who Didn't Help" vs. no title) can contribute to an increased salience of certain parts of the story. Although it is not unreasonable to expect that the use of motion picture film, or still prints could influence interpretive strategies, just what the nature of these changes would be is a subject for further experimentation.

CHAPTER SEVEN: SUMMARY AND CONCLUSIONS

This study has examined the interpretations given to a story told in pictures (35 mm slides) by children at the second, fifth and eighth grade levels. The pictures used showed a doctor who, on his way home from work, ignored the victim of an automobile accident. Each child was shown the pictures individually and then interviewed about the story events - What happened? Why did the man behave as he did? etc. and about the pictures themselves - Were they real? Was this a good story? etc.

The major theoretical objective of the study was to examine these data from the perspective of two different types of interpretive strategies drawn from the recent work of Worth and Gross. "Interpretive strategies" referred to assumptions made by a viewer about the natural or symbolic status of events and to corresponding rules for determining the significance or meaning of these events. The distinction between "attributional" and "communicational inference" interpretive strategies was based on the following: In the case of attribution, events are treated as natural events only - they are not presumed by an observer to be intentionally communicative; the observer assumes merely the existence of these events or representations. In the case of communicational inference, events are treated as symbolic events; the observer assumes an intention on the part of the creator or sender to convey some meaning or message.

The data collected in this study show that younger children (second and fifth grades) used attributional interpretive strategies

almost exclusively. That is, they treated the events of the story as natural events. The youngest (second grade) children had great difficulty accepting the possibility of the doctor ignoring the accident victim. In place of this recognition they substituted elaborate alternative interpretations which allowed them to keep their highly favorable image or stereotype of doctors intact. They stated, for example, that the doctor did help in between pictures, or that he saw that the victim was only repairing his car, or napping, and therefore no help was needed. These rather striking constructions were attributed to the high degree of reliance that younger children place on routine social knowledge in perceptual situations such as the one used in this study.

Older children (fifth and eighth grades) still treated the story events as essentially natural events although their attributions were considerably more complex than those discussed above. Thus, although they did see the doctor's behavior as a complex function of dispositional and situational factors, they still reacted to the events of the story as though they actually happened. These viewers strongly disliked the doctor, and they felt that the pictures and story were real because the doctor and hospital "looked real" and because "these things do happen in real life".

Communicational inference interpretive strategies, as defined by Worth and Gross (1973) involve a recognition that visual images such as the ones used in this study constitute symbolic events from which the author's intended meaning may be inferred. The behavior of the doctor in these pictures would be seen, then, not merely or simply

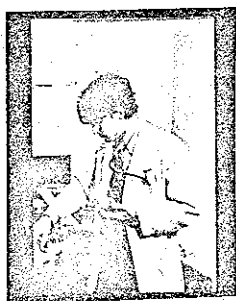
as a cruel act of negligence, but as an actor's (in the theatrical sense) dramatic representation or enactment of a scripted and staged sequence of events which were photographed, edited and presented to an audience. Although there was some evidence in the interviews with eighth grade children of the use of this more sophisticated interpretive strategy (they said that the pictures were staged, and they very often attributed a moralistic purpose or meaning to the story) these viewers still did not reveal a comprehension of the degree of construction or fabricatedness, or of the quality of dramatic or narrative coherence that is suggested by the definition of communicational inference, or that was found by other researchers who obtained interpretations of these pictures from college students.

Some implications of these findings for the practical question of children's exposure to symbolic representations of human behavior (such as television commercials) were suggested. On the basis of the present data, the assumption that young children possess the ability to discriminate real life from fictional, or authentic from role-playing, representations of human actions and events is unwarranted.

In terms of further research and theoretical developments, extensions of the present study were proposed in order to learn more about the ability of viewers under seven years of age to detect narrative or story-like features of visual stimuli, and in order to examine the development of communicational inference interpretive strategies by gathering interpretations of viewers over 14 years of age of stories such as the present one.

APPENDIX A - Description of Stimulus Material.

The 21 pictures on the next two pages were made from the color slides shown to the subjects. Note: two versions each of pictures nos. 6 and 7.



1



2



3



4



5



6 Nice



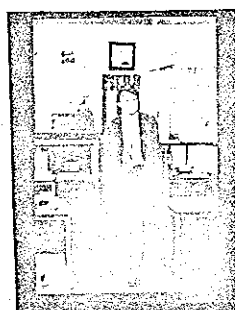
7 Nice



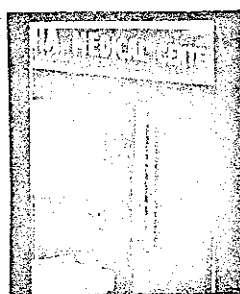
6 Nasty



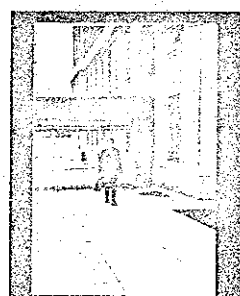
7 Nasty



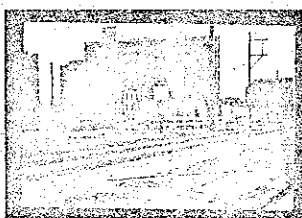
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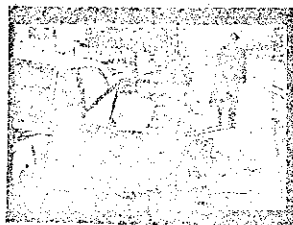
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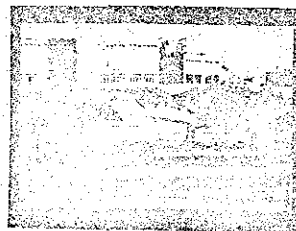
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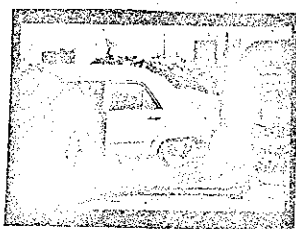
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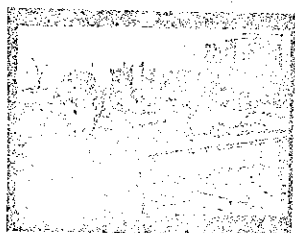
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13



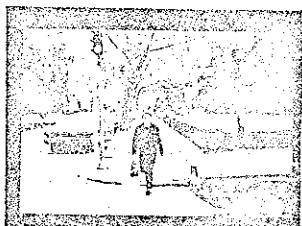
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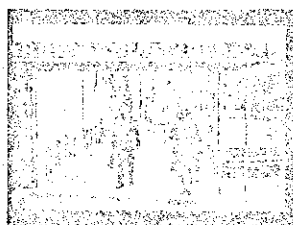
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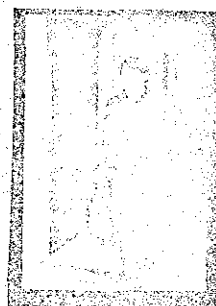
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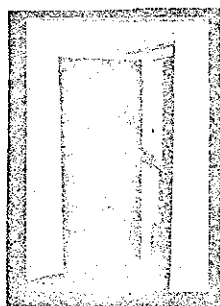
17



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19



20



21

APPENDIX B - Interview Schedule

1. What was the story told in the pictures? How do you know?
2. What was the most important thing in the story? Why?
What else was important in the story?
3. What do you know about the man in the story? How can you tell?
What else do you know about the man in the story? How can you tell?
4. Do you like the man in the story? Why?
What made you like him? Why?
What made you dislike him? Why?
5. Who was the lady the man was talking to at work?
How do you know?
What were they talking about?
Who do you think was to blame for the mistake? (Nasty condition)
How do you know?
6. Who was the lady at the end of the story?
How do you know?
Did you like the lady? What made you like her?
Did you dislike the lady? What made you dislike her?
7. Why do you think the man in the story acted the way he did?
Why do you think so?
8. Do you think that was the right thing?
Why was that the right (wrong) thing to do?
9. What else could he have done? What would you have done?
What would another person have done in that situation?
How do you know?
What would a businessman have done in that situation?
How do you know?
10. Is there anything else about the story that you remember which we did not discuss?
11. What about these pictures, do you think they are real?
How do you know?
How do you think they got these pictures? How do you know?

APPENDIX B - Continued

12. Would you say that the man who took these pictures was a good storyteller?

What was he trying to make you think? How do you know?

What was the meaning of the story?

2

APPENDIX C - Grade, Sex, Age, Race and Experimental Condition
of Subjects

<u>Subject No.</u>	<u>Grade</u>	<u>Condition</u>	<u>Sex</u>	<u>Age</u>	<u>Race*</u>
1	2	Nice	M	7:3	W
2	2	Nice	F	7:6	W
3	2	Nice	M	7:8	W
4	2	Nice	F	7:6	W
5	2	Nice	M	8:2	W
6	2	Nice	F	8:10	W
7	2	Nasty	M	8:3	W
8	2	Nasty	F	8:1	W
9	2	Nasty	M	7:11	W
10	2	Nasty	F	7:5	W
11	2	Nasty	M	8:0	W
12	2	Nasty	F	7:3	W
13	2	Control	M	8:1	W
14	2	Control	F	8:10	W
15	2	Control	M	7:4	B
21	5	Nice	M	10:6	W
22	5	Nice	F	10:8	W
23	5	Nice	M	10:6	W
24	5	Nice	F	11:2	W
25	5	Nice	M	10:10	W
26	5	Nice	F	10:8	W
27	5	Nasty	M	11:0	O
28	5	Nasty	F	10:6	W
29	5	Nasty	M	10:6	W
30	5	Nasty	F	11:0	W
31	5	Nasty	M	10:11	W
32	5	Nasty	F	10:10	W
33	5	Control	M	11:5	W
34	5	Control	F	11:0	W
36	5	Control	F	10:11	W

* W = white, B = black, O = oriental.

APPENDIX C - Continued

41	8	Nice	M	14:1	O
42	8	Nice	F	13:9	W
43	8	Nice	M	14:1	W
44	8	Nice	F	14:2	W
45	8	Nice	M	14:0	W
46	8	Nice	F	13:3	W
47	8	Nasty	M	14:2	W
48	8	Nasty	F	14:0	W
49	8	Nasty	M	14:0	W
50	8	Nasty	F	14:0	W
51	8	Nasty	M	13:6	W
52	8	Nasty	F	13:9	W
53	8	Control	M	15:3	W
55	8	Control	M	13:11	W

APPENDIX D - Sample Interviews

Six interview transcripts follow, two from each grade level. See Appendix C for descriptive data on each subject. Subject number is at top left of each transcript page.

Q: What was the story told in the pictures?

A: First the man, he went to the hospital, then he was talking, and then he went to another place in the hospital. And then he went outside, he was going down the street and he saw a car that was off the road and someone was lying there, and then he went on and he went to a street, and he went across it and then he went to another place and then he went and saw his wife or someone like that.

Q: What was the most important thing in the story?

A: (pause) I guess - the part about the hospital. . .

Q: The part about the hospital?

A: When he was talking.

Q: Why was that most important?

A: Because he had to talk to someone to see if he could go - to see if he could go - had to do something.

Q: What else was important in the story?

A: When he saw the car that was off the road.

Q: Why was that important?

A: Because (pause) . . . Maybe because when he was at the hospital one of the nurses told him that - to look for things. To look for things like that.

Q: What would he do if he found them?

A: He would call for an ambulance or something like that.

Q: I see, what do you know about the man in the story?

A: Well, he was going places a lot, and walking a lot, and he was talking, and he went to a hotel or something like that, and he met his wife

there.

Q: What kind of a job do you think he had?

A: Doctor.

Q: How could you tell?

A: Cause he was at the hospital a lot, and talking to them, and he had that white coat and things on that doctors wear.

Q: Was there any other way that you could tell that he was a doctor?

A: No.

Q: Do you like the man in the story?

A: Yes, sort of.

Q: What do you like about him?

A: That he likes to go places. I like to go places.

Q: Is there anything about the man in the story that you dislike?

A: No.

Q: Who was the lady the man was talking to at work?

A: A nurse.

Q: How could you tell that she was a nurse?

A: She had a hat on, a white hat, and she had a white shirt on, or a white dress on. And he had a thing in his hand.

Q: What kind of thing?

A: Liquid or something like that.

Q: Was there another lady that the doctor was talking to at work?

A: Yes.

Q: Who was she?

A: She was a lady that types things.

Q: What are they called?

A: Typers. . .

Q: Aren't they called secretaries sometimes?

A: Yes.

Q: How could you tell that that's what she was?

A: Cause she types and maybe the man was a boss over her.

Q: What do you suppose they were talking about?

A: About what the lady types about.

Q: What kind of stuff do you think she types?

A: I don't know.

Q: Who was the lady at the end of the story?

A: His wife.

Q: How could you tell that was his wife?

A: Cause they were in his house, his apartment.

Q: Was there any other way that you could tell that?

A: They're sitting together.

Q: Any other way that you could tell that that was his wife?

A: They're smiling and things like that.

Q: Is it possible that she could be someone besides his wife?

A: Yes.

Q: Who could she be?

A: Another lady that he likes.

Q: Anybody else?

A: His girlfriend.

Q: If that was his girlfriend, how would it maybe have been differ-

ent?

A: (pause)

Q: If they wanted to show that that was his girlfriend, how would it have been shown?

A: (pause) Well if they kissed or something like that.

Q: What would that mean?

A: That they were going to get married, or something, or that they were already married.

Q: Which would it be more likely to indicate, that they were going to get married, or that they were already married?

A: That they were already married.

Q: I see. Did you like the lady at the end of the story?

A: Yes.

Q: Why did you like her?

A: She was pretty.

Q: Was there anything else about her that you liked?

A: Not really.

Q: Was there anything about her that you disliked?

A: No.

Q: Let's go back to the car that the man in the story saw on the way home. Why do you think the man in the story acted the way he did?

A: I don't know.

Q: What do you think he wanted to do?

A: Call the hospital (pause).

Q: Why would he want to do that?

A: Because the man - whoever was in the car - might be hurt.

Q: Do you think the man in the story did the right thing?

A: No, he didn't call.

Q: What else could he have done?

A: He could have woked the man up. . . if he was OK.

Q: What would you have done?

A: Go to a telephone booth and call an ambulance.

Q: Why would you do that?

A: Because the man might - if he was still alive - he might die.

Q: What would another person have done in that situation?

A: He might do the same thing.

Q: How do you know that?

A: (pause) Because he just would do the same thing.

Q: What would a businessman have done in that situation?

A: If that was his man, he would hurry - real fast - to a telephone booth.

Q: If that was his man? What does that mean?

A: His secretary or something like that.

Q: What if it wasn't?

A: He would still call the ambulance, I guess.

Q: How do you know that about a businessman?

A: Because they're nice, and they would do it like that.

Q: Is there anything else about the story that you remember which we didn't discuss?

A: When he got a potion and he walked into the place where the nurse

was . . . in the beginning.

Q: Is there anything about that that you remember particularly?

A: No.

Q: OK, what about these pictures, do you think that they're real?

A: No.

Q: Pardon me?

A: It could be, but I don't think that they are.

Q: How can you tell?

A: Because he wouldn't just let a man lie there like that.

Q: How do you think they got these pictures?

A: People acting it out or . . . (pause) or maybe the man was blind or something like that.

Q: Which man?

A: The man we saw mostly.

Q: He could have been blind?

A: Yes.

Q: What would that mean? I don't understand.

A: That he couldn't see the man that was lying out of the car.

Q: Oh. Well if he was blind, then do you think the pictures were real, or not?

A: Yes, if he was blind.

Q: Would you say that the man who took these pictures was a good storyteller?

A: Yes.

Q: Why?

A: Because he could take them very good, and he got him in the act.

Q: What is it like when it's a good story?

A: Like a movie, and . . . (pause).

Q: How is it like a movie?

A: Well, because it got him in the act, but . . . well, it didn't talk in it, and they were sort of slides.

Q: Yes. But I want to know what it is about a movie that makes a good story?

A: Well, it's not funny and they don't put dumb parts in it, a lot of dumb parts.

Q: What are dumb parts?

A: Well, if a man is going on a trolley and he goes by his wife and he doesn't say anything, and next time he sees her he looks at her, and he sees her and he goes home, and he doesn't like her anymore.

Q: Where would you see that? Did you ever see anything like that?

A: Yes, in a movie.

Q: What movie? Do you remember?

A: No, I forget what it's called.

Q: Was it in the movies that you saw it, or on television?

A: On television.

Q: And that's your idea of a dumb part?

A: Yes.

Q: What would be another example? Of a dumb story?

A: Well, sort of like a scary part: First they have the part that's

really good, and then they have the part that's really dumb. And that would be a dumb story. And like a monster story -- they have monsters that don't really look like monsters, like they're supposed to.

Q: What are monsters supposed to look like?

A: Dinosaurs, or way back.

Q: And what do the monsters look like that aren't very good monsters?

A: Some of them are, and some of them aren't.

Q: What would you say the man who took these pictures was trying to make you think?

A: That is was pretty . . . (pause) dumb; that there was a dumb part in there.

Q: There was a dumb part in it?

A: Yes.

Q: Which is the dumb part in this story?

A: If he wasn't blind, he could see the man and he wouldn't do just what he did.

Q: What would you say was the meaning of the story?

A: The man, and what he does -- he does a lot of things (pause).

Q: OK, I think we can stop here.

End of interview.

Q: What was the story told in the pictures?

A: It was a doctor - - and I think he was mixing some medicines or something together, and I think there was a man and he came sort of like to check into the hospital and the next one was a man threw a paper down on a desk like that and . . .

Q: Then what happened?

A: I think there was the same man and he was walking by an accident and he (was) coming a little bit closer and then he walked away from the car. And he went to somebody's house - I don't know whose it was. I think the last one was the man sitting on the sofa with the girl.

Q: How many different men were in the story?

A: Two.

Q: Two? Who were they?

A: A doctor and a man --- another man.

Q: Are you sure it wasn't the same man?

A: It could have been but I thought, like, if a doctor saw an accident and he saw someone was hurt he would have stopped at the car and this man just walked away.

Q: And that's why you think it was another man?

A: Yes.

Q: What if it had been the same man?

A: It could have been but, the men looked the same but I don't think they were because a doctor wouldn't walk away from something like that.

Q: What was the most important thing in the story?

A: I think the most important thing was when the doctor was mixing the two things together.

Q: Why was that important?

A: I think because he made medicine to cure something and that was the most important thing in the story, and there weren't any other things in the story that were important like that was.

Q: There weren't any other important things in the story?

A: Well, there were some important things but they weren't as important as, well, you need medicine to cure, to be cured if you are sick.

Q: What were some of the other less important but still kind of important things in the story?

A: Well, a man was checking out, checking into the hospital - I don't know if he was checking in or checking out - that would be important because you have to do that so the doctor knows what patient he has.

Q: Did you see the man checking into the hospital?

A: Yes, he was standing there and the lady at the desk, she was writing something down on a piece of paper and that's what they usually do when you go to the hospital - they write things down, I think.

Q: How could you tell that the doctor was in fact a doctor?

A: Because he had on what a doctor, he had on the kind of thing that a doctor would wear and you could see the bed that you would be lying on if you came in for a checkup or something.

Q: Did you like the doctor?

A: Yes.

Q: Why?

A: I don't know - I like all doctors - - doctors help you.

Q: What about the other man in the story? Did you like him?

A: Well, I don't know - not as much as I liked the doctor, because I don't like the way he walked away from an accident like that without telling someone about it (or) trying to use the phone to call the doctor.

Q: Was there anything about the other man that you did like?

A: I don't think so.

Q: Who was the lady the man was talking to at work?

A: I guess she was the lady who would - well, the lady that you see when you come in, she takes your name and everything.

Q: What do you suppose they were talking about?

A: I don't know. Maybe they were talking about -- if it was the man they could have been talking about him, and if it was the doctor they could have been talking about medicine.

Q: I see. Do you remember which it was?

A: No.

Q: Why do you think the man in the story acted the way he did at the accident?

A: I don't know - he might have been scared to be around something like that. Or he might have been in a hurry.

Q: Are there any other possible reasons?

A: He could have wanted to go somewhere and he wasn't on time and he wanted to get there on time. So he didn't have time to do anything else.

Q: Do you think he did the right thing?

A: No.

Q: Why was that the wrong thing to do?

A: Because when you see something like that you don't just walk away from it - you should do something.

Q: How do you know that?

A: Well, I just don't think that a person should walk away from something as important as that. It might not be important to that person, but it is very important that somebody get a doctor.

Q: What else could that man have done?

A: You mean when he saw the accident, what could he have done? Well, he could have asked to use the phone or he could have - well, the patient was hanging out of the car, he could have put him back in so nothing else would happen to him and he wouldn't fall out into the street.

Q: What would you have done in that situation?

A: I would probably call the doctor.

Q: What would another person have done in that situation?

A: Another person would have done the same thing that I would have done, or if they were a doctor or if they were with a doctor . . . or if they knew a doctor who was close by they might have gotten him.

Q: What do you think a businessman would have done in that situation?

A: I think he would have called a doctor.

Q: Why?

A: Because if you are just a businessman and you don't know anything about what - if you don't just walk away from it like that man did - the

best thing to do is to call a doctor.

Q: How do you know that a businessman would do that?

A: I don't know. He might walk away from it, but I think if he thought it was important that someone gets the doctor, then he might do it.

Q: Who was the lady at the end of the story?

A: I don't know. I think she was the lady who checks the people in and checks them out.

Q: Well how come she was in a different place?

A: I think she was at her house.

Q: I see. Do you think she was friends with the man?

A: Yes.

Q: In what way?

A: I don't know. It could have been her friend or her boyfriend or something.

Q: Did you like that lady?

A: Yes.

Q: What did you like about her?

A: Well, she helped in a hospital - she helped the doctor by doing what she did - checking out the people or checking them in or something like that. I like when people think of things like that, being nice, if you know what I mean.

Q: Sure. Was there anything else about her that you liked?

A: I don't think so.

Q: Was there anything about her that you disliked?

A: No.

Q: Is there anything else about the story which you remember which we haven't discussed?

A: No.

Q: What about these pictures, do you think they're real?

A: I think they might be.

Q: How can you tell?

A: Well, it looks like a real person, and I think it might really have happened.

Q: How do you think they got these pictures?

A: They might have taken -- the people might have acted, doing this and they took the slides. But they could have, . . . out on the street or in the doctor's office when they took them.

Q: Which do you think it was, actors or the real thing?

A: Actors.

Q: What would indicate to you that it was probably actors?

A: Because I don't think you could take slides of a doctor while he was in his laboratory or whatever it was -- when he was mixing medicine -- I don't think you could (do) that.

Q: Why not?

A: Because unless you're sick, you wouldn't be able to get in there. Unless you're sick or you have a broken bone or something, or you come for a checkup.

Q: So you think they were acted then?

A: Yes.

Q: Do you think that man was a real doctor?

A: He might have been. I think so.

Q: You do think so, or you don't?

A: I do.

Q: Would you say that the man who took these pictures was a good storyteller?

A: Yes.

Q: Why?

A: Because they looked so much like they were real and they looked just like they should have a sound to them, because they looked so real.

Q: What kind of sound do you think they would have if they had a sound?

A: Voices of all the people, what they were saying.

Q: If there were to be a title to this story, what do you think the title would be?

A: I don't know. (pause) It could be something like, "What would a doctor do?" or something like that, while you were watching the film. And you could think about, like, when that man walked past the thing you could think, what would a doctor do?

Q: And what would a doctor do?

A: Well, he would probably, you know, look at the person, see what happened, and he might get the police or something for the car so they could get it out of there before someone else runs into it. I think he'd give the person an examination.

Q: What do you think the person who took these pictures was trying

to make you think?

A: (pause) I don't know - Maybe that a doctor is good - like you know, a doctor is good, he wouldn't do some of the things that the other people did. He would do something else instead.

Q: What would you say is the meaning of this story?

A: (pause)

Q: Any ideas?

A: No.

Q: Would you say that it's pretty much what you were telling me before?

A: Yes, I guess so.

End of interview.

Q: What was the story told in the pictures?

A: Well, I think it was a doctor that was starting to experiment with some medicine, and he went to check out some things with a nurse who was sitting at her desk. Then he got all his stuff and his sport coat and his regular clothes on, and he started to go home, and he saw a car all smashed up with a person leaning out, and it must have been a dummy because he walked away. And then he went into his house or hotel or apartment or something, and there was his girlfriend or wife.

Q: What was the most important thing in the story?

A: Well, maybe when he was testing some medicines for people that were in the hospital.

Q: Why would you say that that would be most important?

A: Well because maybe some people needed them very badly - they might die if they didn't have them.

Q: How could you tell that he was testing medicine?

A: I don't know - but that's what it looked like he was doing.

Q: I mean what gives you that impression?

A: It looked like he had some things in his pockets like a chemist would have, so he was testing something.

Q: What else was important in the story?

A: Well, that he checked to see if that was a dummy or a person - it must have been a dummy because he walked away.

Q: Is there any other way that you could tell that it was probably a dummy? I mean what was the main reason that you feel that it was probably a dummy?

A: He just walked away - at least that's what it looked like in the slides.

Q: Well, what would he have done if it was a person?

A: Probably would have picked them up and . . . well, maybe ran to the hospital or got into a house and called the hospital to tell an ambulance to come over.

Q: Do you like the man in the story?

A: Well, yes, I guess so.

Q: What made you like him?

A: Well, that he checked the person who was in the car - whether it was a dummy or anything. He checked out everything when he was testing - it looked like that.

Q: Anything else about him that you like?

A: Well I can't think of anything else.

Q: Is there anything about him that you dislike?

A: No.

Q: Who was the lady the man was talking to at work?

A: I think it was a nurse sitting at a desk - probably doing some paper work.

Q: How could you tell that was a nurse?

A: Well the way it looked like she had a nurse hat on.

Q: What do you suppose they were talking about?

A: Maybe he had some notes of what he did, and he was checking them out with her.

Q: Who did you say was the lady at the end of the story?

A: Probably his wife or his girlfriend, or his friend.

Q: Which one would you think it was if I asked you to choose between his wife and his girlfriend?

A: I would probably have to say his girlfriend.

Q: Why would you say that?

A: Well, maybe they hadn't seen each other and they were talking. . .
I don't know - I didn't get that part.

Q: What was it about their talking that would indicate . . .

A: Because it looked like they were having a good time talking together.

Q: And that would make it look less like that was his wife?

A: Maybe.

Q: What would it have been like if it was his wife? What do you think the shot would have shown?

A: Well, she'd be washing dishes or doing some housework.

Q: Do you think she would have been dressed differently?

A: Well, it looked like the girl was dressed up - that's what gave me the clue.

Q: Any other clues in there?

A: And the man was dressed up too.

Q: And if it was his wife, it would have been more "everyday", would you say?

A: Well, I guess so, unless it was some special occasion.

Q: Did you like the girlfriend?

A: I don't know.

Q: Well, was there anything about her that you liked?

A: Not really. Nothing that I disliked either.

Q: Is there anything else about the story which you remember that we didn't discuss?

A: Only about that he was walking along the streets and coming out of a door of his. . . out of the medical center -- that's what gave me a big clue that he was a doctor, or studying to be a doctor. And he went into his house or apartment or hotel -- something like that. He was just walking home.

Q: OK, now what would happen if in fact the person in the car wasn't a dummy but was a real person?

A: He probably would have ran to the nearest house, knocked on the door and asked if he could use the telephone and ran in and called the hospital real quick and send over an ambulance.

Q: Why would he have done that?

A: Because the person might have been hurt real bad and have needed help.

Q: What would another person have done in that situation?

A: Well, if they were nice people they probably would have done the same thing. But if they're just a bunch of dummies walking along the road, they probably would've just said, "Ha Ha, look at you!"

Q: What would you have done?

A: Probably what the doctor did: Ran to the nearest house and, well, if I didn't know the phone number, I'd ask them, and if they didn't know, I'd have to see if the nearest taxi would come and go to the hospital

real fast.

Q: What do you think a businessman would have done in that situation?

A: Well, if he was coming home - like he was doing, I think - he probably would have - if his house was near, he probably would have gone into the house and done what the doctor did.

Q: How can you tell that? Or what makes you think that that's what a businessman would do?

A: Well, if he was a nice businessman, that's what he would do. But if he wasn't very nice he probably would have just left him alone.

Q: What about these pictures, do you think they're real?

A: (pause) No, I don't think so.

Q: You don't. Well what do you think they are?

A: They probably just told him to do that . . .

Q: Well how can you tell they're not real?

A: Well for one thing they wouldn't just have a car smashed up and a dummy there - unless they were testing something. They probably just told them to pose like that.

Q: Well why do you suppose they did that then?

A: So you could bring it over here to see something - I don't know.

Q: Do you think that the man who took these pictures was a good storyteller?

A: I guess so. For that particular story, yes.

Q: Why would you say yes?

A: Well there's one thing that he might have shown one or two more pictures of -- testing the medicine and stuff what he was doing.

Q: What would that have told you?

A: I don't know -- for some other children it might have helped them.

Q: Would you have needed it, though?

A: I didn't need it this time -- maybe in another one. . .

Q: You would need more information that he was a doctor, is that what you're saying?

A: Well, no, but maybe on another kind of these things I might have needed it.

Q: What was the meaning of the story?

A: Maybe to show you a doctor that was just starting to get ready to come home from work, or a college student. . .

Q: But to show you what? Just that?

A: Well to show you what might happen. That was kind of a more exciting one because the car was all smashed up and there was a dummy in it.

Q: Well, what about the man in the story -- going back to him for a minute. When he came across that accident, what do you think his thoughts were?

A: Well, I would have ran to see if they were alright and do what I said a little while ago.

Q: But what do you think his thoughts were?

A: "I wonder if the person's badly hurt or not, if they're just laying there unconsciously?"

Q: You said that the doctor recognized that that man was a dummy in fact. So what do you think he thought it was? A joke?

A: Probably - that's what I would have thought. Well, not really a joke.

Q: I mean I'm not sure I understand this?

A: Well maybe a car factory was testing what would happen if a person was in a car and had a smashup like that. Maybe safety people. And he didn't know about it, and he just came across it.

Q: Where have you seen that done?

A: Well, on a tv commercial - they have a dummy and crash into some kind of wall.

Q: So that could have been what was going on?

A: Yes.

Q: But do you think the doctor would recognize that? That it was a dummy from a commercial?

A: I don't know if he would have recognized it right away, but after a minute or two he should have recognized it. When he came closer.

Q: Why? Because he would not look like a real person?

A: Well you could tell - maybe he could see some stitches where they sewed it up. I'm not really sure, though.

Q: Well, the fact that the doctor didn't stop tells you that . . .

A: He was probably a dummy.

Q: But was it a real doctor?

A: It was probably a college student studying to be a doctor. Because it said "Pennsylvania Medical Care" or something like that.

Q: Well what does that tell you?

A: Or "Pennsylvania College", I'm not sure.

Q: You mean you think it was a medical school?

A: Yes.

Q: OK, is there anything else about this story that you can think of that we didn't talk about?

A: Only except that when he was done testing, he started walking down some kind of hall and went to the nurse to check things out.

Q: Just that, though?

A: Yes.

End of interview.

Q: What was the story told in the pictures?

A: The guy - the doctor, I think - he went over to his nurse to go tell her about the patient maybe - about this medicine he was mixing, and he went home and he saw this guy who was laying in the car because he must have had an accident, and he didn't pay no attention to it because I think he was going to a date or something, and he should have gone over to help the guy but he didn't. He just went past him and went on what he was going to do.

Q: What would you say was the most important thing in the story?

A: Well he should have helped that guy - not just leave him there because he's a doctor - he should go over and help him.

Q: Why was that the most important thing in the story?

A: Because you shouldn't leave people just laying like that.

Q: What else was important in the story?

A: (pause)

Q: Well, was there anything else important in the story?

A: I don't think so.

Q: What do you know about the man in the story?

A: Well, he was a doctor.

Q: How can you tell?

A: Well, he walked out of the medical center.

Q: Does that tell you that he was a doctor?

A: He could either be that or he could be a scientist - in the beginning when he was working with those chemicals and things.

Q: What do you think he was?

A: I think he was really a doctor.

Q: What other ways could you tell that he was a doctor?

A: By his case he was carrying.

Q: Any other . . .

A: And the coat he was wearing - with the white.

Q: Do you like the man in the story?

A: Not that much - because he should have went over and helped that guy.

Q: What made you dislike him?

A: He went over and started looking at him, and then he just probably thought, "Well, I don't care, I'll just leave him there", and walked away.

Q: Who was the lady the man was talking to at work?

A: Nurse, probably. Secretary.

. . .

Q: I'm sorry. You say it was the secretary? How could you tell?

A: Well, the typewriter, and she wasn't - maybe she could have been a nurse - but she wasn't wearing a gown or nothing.

Q: Who was the lady at the end of the story?

A: Maybe it was his wife or his girlfriend.

Q: Which do you think she was?

A: Maybe his wife.

Q: What would indicate that maybe it was his wife?

A: (pause)

Q: I mean what would your reasons be for saying maybe it was his

wife?

A: Now I think maybe it was his girlfriend because his wife wouldn't be in a Plaza. She would be at home. I think it was his girlfriend because he went over to the Plaza to meet her.

Q: Well what's the Plaza?

A: (pause)

Q: I mean is it an apartment building, or is it something else?

A: I don't know.

Q: I don't know either. But assuming it was an apartment building, who would you say it was?

A: I don't know. It could be either because maybe they lived in an apartment building. Or maybe his girlfriend lived in an apartment building.

Q: I see. So you can't tell by that, in other words?

A: Yes.

Q: Well if you had to take a guess, which one would you say?

A: His girlfriend.

Q: What would be your main reasons for saying that?

A: Because like she - if it was his wife - then they wouldn't be like that so much, I don't think.

Q: What do you mean "like that?"

A: Smiling and everything.

Q: You think it would be more "everyday", or something?

A: Yes.

Q: Any other reason?

A: No.

Q: Did you like the lady at the end of the story?

A: Yes.

Q: Why?

A: I don't know - I just liked her - she didn't do nothing wrong.

Q: But was there anything particular about her that you liked?

A: No.

Q: Why do you think the man in the story acted the way he did?

A: Well maybe when he was in the medical center, after he came out he thought his work's over with and just was too lazy to go over and help him. He was probably in a rush. He didn't want to help him because he was lazy or something.

Q: Do you think he did the right thing?

A: No.

Q: Why was that the wrong thing to do?

A: Because you shouldn't - if you see somebody you should go over and help them like that - especially since he's a doctor. He should go over and help him and not just pass him by.

Q: Well why do you think he did what he did?

A: Well, because he was just in a rush and he didn't want to go over to help him - he just wanted to go to his girlfriend.

Q: What else could he have done?

A: Besides passing him like that?

Q: Yes.

A: He could have went over and helped him and brung him back to

the center. If there was a telephone nearby, he could have called the ambulance or something and let them take him to the hospital and helped him.

Q: What would you have done?

A: I would have went over and helped him.

Q: How would you have helped him?

A: Well first I'd go over and see if he was still alive and see if he was alright a little bit enough to get up or maybe to wait a little bit so I could go and get somebody for help.

Q: What would another person have done in that situation?

A: Well some people would have done what he did, but I think that most people would have went over and helped him.

Q: How can you tell that. . . or how do you know that?

A: Because some people are lazy like him - like if they think that their job's done, then they just - like him, when he got out of the medical center, he thought probably his job was all done since he's not there, so why should he help him - because his job's over.

Q: What do you think a businessman would have done in that situation? Instead of a doctor, if he were a businessman?

A: He probably would have went over and helped him too, and called up the hospital or something.

Q: How can you tell that?

A: I don't know. Because that's what someone would want to do.

Q: Is there anything else about the story which you remember that we didn't discuss?

A: The chemicals. . .

Q: What do you think they were for?

A: They were some medicine that he was planning to give the nurse to give some people.

Q: How about any other things in the story that you remember?

A: I don't think there are any.

Q: What about these pictures, do you think they're real?

A: Yes.

Q: How can you tell?

A: Because they didn't look like drawings or nothing. They looked like regular pictures.

Q: How do you think they got these pictures?

A: By taking shots of it - shots like of them. . .

Q: Who would have done that?

A: I don't know. Maybe a photographer.

Q: Do you think the accident really happened?

A: No, maybe they just did that for kids like to see that you shouldn't do that - maybe that wasn't really true - they were just getting actors to do that to show that you shouldn't do that.

Q: Well what do you think happened?

A: Maybe the guy was driving too fast or something and the road was slippery or something and he slid off the road and crashed into that fence or something.

Q: But I mean what do you think happened as to how they got these pictures?

A: Well they were probably just going to get them so that they could show that you shouldn't just do that and those people weren't - like that wasn't really true - they were acting like that to teach you a lesson like that - but they were real people.

Q: Well, what were they trying to make you think from this story?

A: That you shouldn't just - if you see somebody, you should go over and help them.

Q: How do you know that's what they were trying to make you think?

A: I don't know - I just think because - because they wouldn't have that guy laying there like that and the other guy passed him up if they didn't want you to think that. They could have just took that out and just shown him going over to his girlfriend's house.

Q: What would you say was the meaning of the story?

A: You shouldn't ever - if you see somebody, you should go over and help them - call the police or call somebody else or the ambulance to come and help them.

Q: Would you say that the person who took these pictures was a good storyteller?

A: Yes.

Q: Why?

A: Because he just was trying to teach people lessons that you shouldn't do that, and a lot of people, they wouldn't think up such good things.

End of interview.

Q: What was the story told in the pictures?

A: This guy was pretty - inconsiderate. . .

Q: In what way?

A: Well, maybe I'm wrong but, he didn't say hello or anything to the secretary, or - when he was walking - he saw that guy in the car and he didn't even bother to help him - he just looked at him. And then when he went to that house - I noticed in the picture the lady was already married - I didn't see a marriage ring on that guy.

Q: You noticed that he was married?

A: He wasn't. He wasn't wearing a marriage ring.

Q: I see. But do you think he was married?

A: No.

Q: What else do you remember?

A: Well, I know all that stuff. First they showed, like, he had a bottle of iodine. In the second picture he had like a bottle of iodine in one hand and like a needle or something in the other. And then he was checking some reports of some person in the third one. In the fourth one he was leaving the medical center, and the fifth one he was walking away from it. And then he went to his secretary, and the next one he went to another secretary. And then he left, saw the car - saw the guy that could have been dead of internal bleeding, and he was unconscious - could have been he had a heart attack - or it could be anything - and he didn't bother helping him. There was about three slides of that. And then he was walking past houses on a street, and he was opening the door and he met that lady.

Q: What was the most important thing in the story?

A: What do you mean "important"?

Q: The most important thing - that happened. As far as you, in seeing that story, what do you think is the most important thing . . .

A: That he didn't help the guy in the crashup.

Q: Why would you say that?

A: Like I say, he could have been really bad. And he was supposed to be a doctor, I guess, because he went to the "terian" (Presbyterian) medical center at the University of Pennsylvania, and he could have tried and helped him - see if anything was wrong - or else went home and call an ambulance or something.

Q: What medical center did he go to?

A: Terian medical center - University of Pennsylvania.

Q: What else was important in the story?

A: That he was going to medical school, I guess.

Q: What do you know about the man in the story?

A: He's inconsiderate. It seemed like he's inconsiderate some ways - (and) in one way he's a doctor (and) would help people. So, I can't tell. Was that a medical school?

Q: I'm not sure.

A: It said terian medical school.

Q: I'm not sure what it was. Do you think he was a doctor, or a medical student?

A: Most likely a medical student.

Q: Why would you say that?

A: Because he looked like he was about 23 or so, and when you go to college, you graduate from your four years of college, and then you'll be 21, and then you have to take as many years -- sometimes seven, sometimes three . . . it depends (on) what kind of doctor you want to be. And it would be kind of young to be a doctor. I think he was an intern or a student or something.

Q: What else do you know about him?

A: He was pretty well dressed. He wasn't very neat, though, he didn't comb his hair or anything. . . he just let it flop in his face.

Q: Do you like the man in the story?

A: I don't know -- I really couldn't tell you unless I talked to him.

Q: Well, on the basis of what you've seen?

A: Not really.

Q: Why not?

A: Because -- he didn't bother to help that guy.

Q: Was there anything about him that you liked?

A: That he had the courage to go on to medical school and try and be a doctor.

Q: Does that take courage?

A: Sometimes . . .

Q: What does it take?

A: It takes brains. You have to have the courage to get in there, to operate . . . to take care of somebody. Because if you do one thing wrong, you could be sued. Maybe that's why he didn't help that guy -- he's afraid if he did something wrong, he'd turn around and sue him.

Q: Who was the lady the man was talking to at work?

A: Which one? The one that was showing the report or something?

Q: Yes.

A: It was probably another intern, another medical student.

Q: What do you suppose they were talking about?

A: A person in a hospital.

Q: Who was the other lady that he was talking to at work?

A: That was a secretary. She didn't seem very happy with him. He was reading this stuff while she was sitting there saying . . . "Why do I have to take this?"

Q: The first lady that he was talking to - how could you tell, or what would suggest, that she was another intern?

A: She had the white suit on . . . she seemed to have that report . . . like usually people don't carry around reports in steel things - in hospitals that's what they do.

Q: And how about the lady at the end of the story?

A: The one he was at the house with?

Q: Who do you think she was?

A: A friend. Maybe he was calling to talk to her about her husband or something. You know, he might be in the hospital.

Q: What would indicate that she was probably a friend of his?

A: Well they were laughing . . . she had a drink in her hand, I think. . .

Q: Is it possible she could have been somebody else?

A: Yes.

Q: Who?

A: Maybe his sister, or an aunt or a cousin. Not an aunt - a cousin - they looked kind of like the same age.

Q: Is it possible that could have been his wife?

A: Yes, maybe he doesn't wear a wedding ring. Some people don't do that.

Q: Is it possible that could have been his girlfriend?

A: Yes. If she's that kind of woman. . .

Q: Was she married?

A: Yes.

Q: Oh . . .

A: That's why I say, "If she's that kind of woman . . ."

Q: I see. Did you like her?

A: I don't know. It depends on the circumstances - if that was his friend or . . .

Q: Well (under) what circumstances would you say that you liked her?

A: She seemed to be young . . . have a sense of humor. Otherwise they could have been talking about something and he cut a joke or something, and he had a sense of humor . . . it could be anything. She's alright I guess.

Q: Was there anything about her that you disliked?

A: The place she lived - it was . . . Garden Court . . . Plaza. I don't know what that is . . . Do you know what that is?

Q: No.

A: It might be an apartment. . . Well, people should . . . first thing they should try to do is buy land of their own, because the guy who owns it might higher the prices. He could do a numerous amount of things.

Q: He could do what?

A: He could do a numerous amount of things.

Q: The landlord?

A: Yes. He could raise their prices . . . make her pay the bills. . .

Q: You think that she would be better off if she didn't live there?

A: Yes.

Q: Going back to the accident, why do you think the man in the story acted the way he did?

A: Scared he would be sued. It's happened before, like when a couple years ago we were talking about this in sixth grade, some guy was beat up and thrown down the stairs and was killed. People just walked right by him - didn't care. Maybe somebody would've helped him and they did something wrong - like put a tourniquet on his arm - and he could have to have it amputated, he could sue the person.

Q: Any other reasons?

A: He could have been called the killer - he could have been called the causer of the accident.

Q: He could have?

A: Yes.

Q: What could he have done?

A: He could have thrown a rock through the window . . . because the window was open . . . He could have thrown something at the car . . .

Q: Would you say that he could have been accused of that, or . . .

A: Yes, he could have been accused.

Q: I see. Do you think the man did the right thing?

A: No.

Q: Why?

A: Because - he was a doctor. He should have tried to help him.

Q: What else could he have done?

A: Called an ambulance . . . Police usually drive around - out on the main streets - maybe that was a back road - he could have stopped one of the police and said there was an accident and the guy might be dead or might be hurt or something.

Q: What would you have done?

A: If I was that guy?

Q: Yes.

A: I would take him out of the car and check his heartbeat, and see if he was alright. And if he was alright, I'd lay him down and run out to the street and tell somebody to call the police, and try to keep him alive by that . . . respiratory thing . . .

Q: Artificial respiration?

A: Yes.

Q: What do you think another person would have done in that situation?

A: Like me?

Q: Just an average person.

A: Some people might just walk by. Some people might see if he's alright and do the same thing.

Q: What do you think a businessman would do in this situation?

A: If he was driving by?

Q: Driving or walking.

A: Some might ignore it; some might help. It depends on what kind of person they were.

Q: Is there anything else about the story that you remember that we haven't discussed?

A: In the beginning, the guy had the iodine . . . he had a needle or something else in the other hand . . .

Q: What do you think it was for?

A: Well, he could have been giving a guy a needle, and when he did it he could have popped open a blood vein and he went to get some iodine and put a bandaid on.

Q: OK, what about these pictures, do you think that they're real?

A: Nope.

Q: How can you tell?

A: Because when you first saw the picture of the guy . . . and his arm hanging out. . . then the last two pictures - there's no arm there.

Q: Well, would that mean that they're not real?

A: What's a guy going to do when he's half alive, pull up his arm!?

Q: I don't know - he might have moved his arm.

A: But still - you could have seen it.

Q: Any other indications that they were or were not real?

A: Well, a guy's going to think something's wrong when every minute a guy pops in front of him and takes a picture. Like he was never looking down when they took the pictures; he was always looking straight.

Q: How do you think they took these pictures?

A: How'd they take them?

Q: How'd they get them?

A: With a camera.

Q: I know that they took them with a camera, but as to what they were taking a picture of, how do you think they got them?

A: Well, maybe . . . I know the guy was you . . .

Q: Who?

A: I know the guy was you. I could kind of like tell. Because when I first saw you I kind of like erased in my mind what you would look like without a beard, and when I saw you in the movie, I knew it was you.

Q: It wasn't me, but I'll show you that (shows first slide).

A: (Looking at first slide) No, that isn't you. I don't know, he might be a guy who's . . . maybe they're doing it for a college test, and he says he'll do it.

Q: Well do you think he's a real doctor?

A: Yes.

Q: Was the man who took these pictures a good storyteller?

A: No.

Q: Why not?

A: Because that guy could have helped the man in the car and he

didn't show it. To tell a life . . . a real day of a guy . . . you're going to need more than like 15 pictures to say . . .

Q: I don't understand. You say no, because he didn't show that he could have helped?

A: Yes.

Q: The storyteller didn't show that the doctor could have helped?

A: Yes.

Q: Now what's your next point?

A: And they didn't show the name of the guy . . . and when he's opening up the do-hickies . . . like you see on the mailbox - they have a picture of a mailbox. If they told the name of the guy in the first part of the movie and then on the mailbox in that apartment house - you see his name, Mr. and Mrs. _____. It could be that.

Q: You saw that in here?

A: No. I said that's why it's a bad picture.

Q: Because it doesn't have that kind of information?

A: Yes. It doesn't have very much information.

Q: And what else are the things that you feel should be included?

A: Sound - you could see what he's saying.

Q: What else?

A: See if he gave that guy in the car help, you know. A lot of things.

Q: Do you not know whether he helped him?

A: I can't tell. Because you just see him - he's looking at him and he just walks away. It looks like he did that, but he could have

looked at him to see if he was alright and everything and ran out to the street and started walking back. Like it may be that in the last frame the ambulance came and got the guy out of the car and maybe that's why I don't see the hand.

Q: What would you say that the person who took these pictures was trying to make you think?

A: That the guy was no good.

Q: Why?

A: Because he doesn't help anybody.

Q: Why would the person who took the pictures want you to think that?

A: Maybe just to get across a point -- that there are bad spots in a person's life.

Q: What would you say was the meaning of the story?

A: To show that people can be bad in some parts and be dislikeable, but maybe likeable in other times.

End of interview...

Q: What was the story told in the pictures?

A: Well, it appeared like he had been at work in a hospital and he was getting ready to leave and, apparently one of the secretaries showed him something and asked his advice or something. He looked at it and read it and got angry . . . crumpled it up and I guess he threw it down. Then he left and walked home. And on the way he passed by and saw a car wrecked on the side of the road with a person inside. And he just walked by without doing anything. Then he continued home, went into his apartment - and I guess that was either his wife or his girlfriend.

Q: What was the most important thing in the story?

A: I think that he left the man there and he didn't do anything.

Q: Why would you say that was the most important thing?

A: Because there was more at stake there than anything else. I mean, there was a man there lying in the car - could have died.

Q: What else was important in the story?

A: Well that he . . . I guess he got kind of angry at the person in the office and that was kind of important. He couldn't control his temper.

Q: What do you know about the man in the story?

A: Well, I guess that he can't handle his temper too well, and also that . . . I guess he doesn't even . . . it's kind of inconsistent that he'd be a doctor and not care for a person.

Q: What else do you know about him?

A: He was married . . . I assume he was married. And he walks home. He's a doctor, or intern . . . I guess he's a doctor. I guess he loses his temper pretty easily.

Q: How can you tell that he was a doctor?

A: Well, because he was in the medical center, and he looked like he was handling medicine . . . he had a stethoscope, and he was in a hospital.

Q: Did you like the man in the story?

A: Well at first I thought I liked him, but then when he lost his temper I had a little doubt about him. And when he started walking home, I thought he was a person who liked outdoors and have exercises and things, but then when he walked away from that person I was surprised at first and I guess I sort of resented it.

Q: Was there anything about him that you particularly liked?

A: Well, he was a doctor and - I thought he was going to help the person - I would have liked that. There wasn't anything exceptional about him. . . that I wouldn't like him over any other person.

Q: Was there anything about him - other than what you've mentioned - that you particularly disliked?

A: Well, I could understand his losing his temper - I lose my temper and I'm sure everyone else does - but the thing about him leaving the person there - I thought that was pretty bad.

Q: Who was the lady the man was talking to at work?

A: You mean the one . . . with the typewriter?

Q: Yes.

A: I guess that was a secretary.

Q: How could you tell that she was a secretary?

A: She was at a desk and she looked like she was doing secretarial

work. She had a typewriter and . . . well, I assume that she called him over for something, so that it just seemed to me that she would be a secretary.

Q: What do you think they were talking about?

A: I haven't the faintest idea.

Q: What do you think the problem was that the guy lost his temper over?

A: Well, I guess it was something to do with the medical center or the hospital, but I don't know exactly what.

Q: Who was the lady at the end of the story - you mentioned her once?

A: Well I guess it was his wife, because if he wasn't married and he had a girlfriend, I think he would have gone home first and dropped off his luggage, his coat and things that he had worn.

Q: But he didn't do that here?

A: No.

Q: Well, how do you know that that was his wife?

A: I don't know.

Q: Well, what makes you think that she probably was?

A: Well, like I said, if he had a girlfriend he probably would have gone home and changed and got dressed, and then gone out again and left his . . . I think he was carrying a medical bag with him . . . so I guess he would have . . . well, I guess doctors are supposed to carry that with them at all times . . . I thought he might get changed.

Q: Was there anything else about her that would indicate that

perhaps she was his wife?

A: I can't think of anything.

Q: Did you like her?

A: Well I didn't see that much of her. I don't know - I liked him also at first . . . but he did the things he did, and I didn't like him too much after that.

Q: Was there anything about her that you particularly disliked?

A: No. Well, at first I thought . . . if she liked this guy, and he was such a cruel person, I thought that she might have the same qualities, but then I just realized that she may not even know that he left the person and has a quick temper. . .

Q: Going back to the accident, why do you think the man acted the way he did?

A: Well . . . now that I think of it . . . well, it seemed a little unreal . . . If that was his girlfriend, I guess he didn't want to miss his date or something like that . . . but I don't know why he would . . .

Q: Well, can you think of any other reasons?

A: He may have been upset from at the office, but I still . . . I can't imagine anybody just leaving a person there - I mean not even telling anybody. You know, the car . . . looked like it was in a pretty unused area . . . he could have been lying there for days.

Q: Are there any other reasons why he may have not helped?

A: Well other than maybe he was in a hurry to get home, I guess he was upset. I can't think of too much more. Except maybe he was just that kind of person - doesn't want to get involved.

Q: What do you mean by not wanting to get involved?

A: Well not go through all the trouble. I guess he'd have to talk to police and things like that. Maybe he'd use up too much of his time -- he'd have to get the person to a hospital. If the person were to die, he may be responsible for it.

Q: In what way could he be responsible?

A: Well, if he had moved the person, and the person died or something, . . . even given first aid . . . I don't know too much about legal matters, I guess he could have been responsible.

Q: Do you think the doctor was possibly thinking about this?

A: He might have been, but I didn't see too much change of expression on his face . . . I mean he just . . . well, I guess he went a little bit out of his way and walked towards it . . . I mean he didn't look like he was making any major decisions. It looked like he just ignored it and put it out of his mind.

Q: Do you think he did the right thing?

A: No.

Q: Why was it the wrong thing to do?

A: Because the person could have died. . . more or less . . . I wouldn't leave a person out to die.

Q: Why is it wrong to have left him out to die?

A: Well, first of all, I guess he could be charged with something by the police, but that's not the main reason. I think people just have a natural feeling about other people. Well, if he doesn't go by this . . . it's not something you have to do, but I think most people should . . .

just to help other people.

Q: Because they have this feeling?

A: Well, it's kind of hard to explain . . . I guess so . . . but, as for myself, I just couldn't feel right - I'd feel very upset if I left somebody out there.

Q: I see. What else could he have done?

A: Besides walking away?

Q: Yes.

A: Well he could have done a lot of things. If he didn't want to get involved, he could have just phoned up an ambulance and he could have not given them his name, and then left the scene. That wouldn't have been right either but that would have been better than what he did. He could have walked over and helped the man. He could have went down towards the city - towards the street - flagged down a cab or car and ask them to help him or move him to a hospital. I guess that's about it.

Q: What would you have done?

A: Well, I used to be a Boy Scout and I learned a little first aid - I guess what I would have done was gone over to the person and seen if he was bleeding or something like that. If he wasn't in too serious condition, I'd just do what I could to help him and then go and get some help.

Q: What would another person have done in that situation?

A: Well I couldn't say . . . I guess a person would just see the person . . . I guess he'd just run . . . calling for help. I don't know - I've never been in a situation like that. I don't know what most people would do.

Q: What do you think a businessman would do in that situation? A typical businessman?

A: I guess he would get help.

Q: Why do you say that?

A: Well I don't know what's different about a businessman than any other kind of person. I think that most people would react the same. I think most people would go get help, unless they knew what to do and (would) take care of the person.

Q: Is there anything else about this story that we haven't discussed?

A: No . . . other than that he was a doctor and was helping other people.

Q: What about these pictures, do you think that they're real?

A: I thought it was real until the accident part . . . but then I'm sure lots of people went away from things like that. But I didn't think something like that would happen exactly that way. I mean he seemed like he wasn't concerned at all. I think most people would have at least a change of expression their face. . . It could have happened, but I don't think it would have happened at all.

Q: How do you think they got these pictures?

A: I guess they had hired people, or had volunteers, and photographed them.

Q: Do you think that that man was a real doctor?

A: You mean the person who was supposed to be in the movie, or the person they got to do the part?

Q: The person they got to do the part.

A: No, I don't think so.

Q: Why not?

A: Well . . . I can't think of any reasons in particular, except that I think that a doctor might have more to do than spend the day doing this. I mean a medical doctor.

Q: Would you say that the person who took these pictures was a good storyteller?

A: Well, I thought the pictures were pretty complete - for this story. I thought they showed the whole scene pretty well . . . they didn't skip it. It guess it was pretty good photography.

Q: What would it be like if the person were a bad storyteller? How would things be different?

A: Well, it wouldn't give as much realism. I mean they showed several scenes of him walking home, and it wouldn't have been as realistic.

Q: What do you mean by "realistic"?

A: Well I mean if a person had been working in the laboratory, or if he was working, and in the next scene he was throwing down the paper, you wouldn't know what happened in between. And then this photographer showed a picture of him talking with - I guess - the secretary, and then he showed a series of photos of the person walking home. So that gave the appearance that he didn't live exactly close by to where he worked.

Q: What would you say the person who took these pictures was trying to make you think?

A: Well that the doctor - if he was a doctor - I guess he was a

hypocrite. That he didn't really care about what he was doing.

Q: Anything else?

A: I think that's the main subject.

Q: What would you say was the meaning of the story?

A: You mean like the moral, or just what the whole story was about?

Q: Both.

A: Well, it was such an unusual situation that I don't think there would be a moral to the matter, except that - well - you should help other people. I don't think you could get that exactly out of the story, but the story itself was about a person who was working as a doctor, or an intern or something, and just a segment of his life . . . and how he . . . I guess he was upset somehow at the office, and then he walked by . . . he saw a person who needed help, and didn't give it to him . . . and walked away. And then he came home, and I guess met his girlfriend or his wife. And then that was it.

Q: Anything else?

A: No, I can't think of anything.

End of interview.