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ABSTRACT

A study explored a developmental theory of perceptual skills in theater, assessing developmental perception, reflection, and evaluation of theatrical reality, conventions, and themes. Subjects, 33 second graders, 33 fourth graders, 23 sixth graders, and 23 adults, viewed a 48-minute, nonrepresentational, metatheatrical play entitled "This Is Not a Pipe Dream." Children were interviewed individually and adults completed a questionnaire. Results indicated that: (1) while focused primarily on production values, children increasingly judged a playwright's text for its social believability with greater use of their interpersonal intelligences; (2) second graders relied on explicit visual and verbal cues to perceive the actuality or authenticity of theatrical reality and to describe the overt dramatic actions in themes and conventions; (3) fourth graders began a developmental shift by inferring more character's thoughts, interpreting more artistic motives for conventions, and applying more outside knowledge to judge the possibility of thematic actions; (4) sixth graders considered the plausibility of the protagonist's superobjective and reported acting as a key theater convention as they also prescribed the play's theme to follow one's dreams to society like fourth graders; (5) pre-performance elementary art training may have motivated critical, integrative perceptual searches about physical and social reality; and (6) unlike children, adults suspended disbelief more willingly by judging the performance text contextually from expressionistic conventions and propositional language with more "surrealistic" concepts. By relying primarily on textual content and overt, visual and verbal production forms, this "novice" audience indicated their stereotypical perspectives about non-linear drama and non-realistic theater. (Forty-one tables of data are included. Sixty-five references and nine appendixes containing survey instruments and data are attached.) (Author/SR)

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Developmental Perceptions of
Reality, Conventions, and Themes in Theatre:

This Is Not a Pipe Dream

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Honorable Mention for Winifred Ward Fellowship, August 2, 1991
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Abstract

Theatre creates a symbolic illusion of reality with actors performing a fictive play live for audiences who are assumed to suspend their disbelief willingly within a given theatrical context. The purpose of this study was to explore a developmental theory of perceptual skills in theatre based on aesthetic symbol systems and cognitive models.

To assess developmental perception, reflection, and evaluation of theatrical reality, conventions, and themes, 33 second graders, 33 fourth graders, 23 sixth graders, and 23 adults viewed a production of Barry Kornhauser's This Is Not a Pipe Dream. This 48-minute, non-representational, metatheatrical play is based on biographical facts about the early life and work of surrealist painter, René Magritte. Children were interviewed individually one day after attendance, and adults completed an analogous questionnaire. Inductive coding methods generated qualitative narratives and emergent quantitative data analysis.

Results confirmed the findings of other narrative, visual art, and television studies. While focused primarily on production values, children increasingly judged a playwright's text for its social believability with greater use of their interpersonal intelligences. Second graders relied on explicit visual and verbal cues to perceive the actuality or authenticity of theatrical reality and to describe the overt dramatic actions in themes and conventions. Fourth graders began a developmental shift by inferring more characters' thoughts, interpreting more artistic motives for conventions, and applying more outside

knowledge to judge the possibility of thematic actions. Sixth graders considered the plausibility of the protagonist's superobjective and reported acting as a key theatre convention as they also prescribed the play's theme to follow one's dreams to society like fourth graders. Unlike children, adults suspended their disbelief more willingly by judging the performance text contextually from expressionistic conventions and propositional language with more "surrealistic" concepts.

Pre-performance elementary art training may have motivated critical, integrative perceptual searches about physical and social reality. Asking what the protagonist learned increased children's metaphoric interpretations over the "main idea," and explicit thematic dialogue reinforced what they knew from actions as "fact" and "truth." By relying primarily on textual content and overt, visual and verbal production forms, this "novice" audience indicated their stereotypical perspectives about non-linear drama and non-realistic theatre. Intermediate teachers may have confused their students' reported difficulty in understanding and enjoyment with their culturally taught preferences for linearity and realism.

This study dispels myths and questions assumptions about children's appreciation of fantasy and reality. By knowing how young audiences make meaning of theatrical reality, theatre artists and educators may create experiences more conducive to children's perceptual "gazes" upon theatre with other texts and experimental production styles.

To Barry Kornhauser
for understanding pipe dreams

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Introduction

Theatre deals intrinsically with the fiction of dramatic characters and situations within a context of reality--real human beings in action playing here and now live before an audience. For these reasons, theatre producers for young audiences believe that live theatre has the power to affect children's emotions, attitudes, beliefs, and behaviors in countless positive, prosocial ways. Audiences are expected to understand and appreciate human values through the immediacy of live actors sharing the same time and space, and to "suspend disbelief" willingly by believing in an illusion created live on stage. These goals are assumed to create future discriminating audiences with standards of artistic taste (Davis & Evans, 1987, 41).

However, artistic intentions and adult assumptions about theatrical communication and young audiences are not synonymous propositions. Theories regarding children's "dramatic literacy" and "theatrical sensibility" or what aesthetic judgments they can be expected to form about theatre offer ideal and speculative assessments with a limited basis in cognitive developmental empirical research (Davis & Evans, 1987, 60-71; Collins, 1985; Rosenblatt, 1984). No theatre studies have been conducted with children to determine how young audiences discriminate between "real" live actors in theatre and "fictive" dramatic characters and situations. While children prefer theatre over television for its "more real" live values (Klein, 1987; Klein & Fitch, 1989), little is known about audiences' perceptions of fictive

stage reality and how these perceptions affect their interpretations of human values and universal themes in theatre.

A cognitive developmental theory of theatre for young audiences, particularly in regard to perceptual skills, remains to be tested directly with child audiences. To test the expectancies (or hypotheses) outlined in the National Drama/Theatre Curriculum (1987, 61-71), researchers continue to explore children's comprehension of theatre directly in formal interviews with child audiences, primarily with one grade level and one specific production (e.g., Saldaña, 1987, 1989). What is needed is a developmental study which explores the perceptions and comprehension of different age groups regarding one theatre production.

Because the form and content of plays in the children's theatre repertoire varies considerably, the need to evaluate theatre productions with local audiences remains an on-going process of summative assessment. By interviewing small groups of children directly after performances, educators may evaluate more closely the success or failure of each production in engaging children's hearts and minds. Theatre artists can then choose, stage, and design their productions accordingly to enhance children's appreciation of theatre. In the end, both educators and theatre producers can ultimately develop children's theatre education and promote theatre as meaningful and worthwhile cultural entertainment.

Review of Literature

In a review of the active, participatory role of theatre audiences, Susan Bennett (1990) illustrates how the culture of diverse audiences and the unique contexts of the theatrical event have been neglected by theatre critics bent solely on textual analysis. Based on the theories of Brecht, reader-response criticism, and semiotics, her audience reception model includes the bi-directional interactions of cultural expectations, familiarity, competences, fixed time frames, and the multiple readings, codings, and constructed interpretations of the myriad and overlapping signs involved in fictive stage worlds. Her resulting theory calls attention to the need for the inclusion of age as a critical component of audience culture, and she argues for its potential application "to the experiences of children's theatre" (1990, 185) in direct research. One purpose of the present study is to lay the foundation for a newly revised developmental theory for children's theatre based on theoretical advancements in cognitive science and audience reception theory.

Children's theatre researchers and pedagogues have long argued for attention to children's developmental needs in producing theatre for young audiences of different age groups (Ward, 1939; M. Goldberg, 1974). Davis and Evans (1987, 60-71) extended these notions by applying and synthesizing theories of cognitive, affective, spatial, social, and moral development as "age profiles" or a developmental theory for theatre for young audiences. Yet with the revolution in cognitive psychology in a

post-nuclear age of relativity and "absurdism" came a new science of meaning and theories of mind and human development (Gardner, 1985). Piaget's stages of child development have been advanced and integrated with numerous other theoretical and philosophical foundations. More importantly, psychological research has shifted from empirical, scientific methods of inventing and testing hypotheses to more naturalistic, narrative ways of discovering how children actively perceive and construct reality.

In his book, Actual Minds, Possible Worlds, Jerome Bruner (1986, 159) argues, that the cognitive revolution "has led us from concern with what we know to a preoccupation with how we know." Specifically, "What gives great fiction its power: what in the text and what in the reader?" (4). Essentially, cognitive scientists are discovering what dramatic theorists have known about narrative art forms since Aristotle defined tragedy in his Poetics: Powerful stories contain universal themes about the human condition through characters in action whose intentions are in conflict with self and/or consequences. The most powerful stories are those which help the reader/audience member to enter into the protagonist's psychological consciousness or "inner" vision in order to empathize with her "outer" reality (21).

From a philosophical foundation based on symbol systems (Goodman's "worldmaking," Piaget's epistemology, and Langer's "virtual semblance of feeling"), Howard Gardner and his colleagues at Harvard's Project Zero have studied the arts as a unique way of knowing, learning, and experiencing through

perception, reflection, and production (Gardner & Perkins, 1988, 157-167). Rather than adopting Piaget's biological, curvi-linear stages (where the next stage can't occur until the previous stage has been mastered), Gardner (1983, 303-320) argues that artistic development occurs in "streams, waves, and channels of symbolization" in a U-shaped fashion domain by domain. Rather than argue for a separate and distinctive "dramatic intelligence" (Gardner, 1984), theatre as a domain probably entails all "streams" or "multiple intelligences": linguistic (playwriting, acting, directing), musical (directing, acting, composing musicals), logical-mathematical (designing, directing), spatial (designing, directing, acting), and bodily-kinesesthetic (acting). The interpersonal and intrapersonal intelligences may be the most crucial skills for all theatre artists and audiences because theatre deals inherently with human communication and relationships. During the preschool years, children develop four "wave" abilities which extend into other symbolic domains. Most critical to drama and theatre is the first "role or event structuring wave" which begins between the age of eighteen months and two years (Nelson, 1986). The second wave, "analogical or topological mapping," which occurs around three years of age, involves the ability to recognize how symbols serve as referents or representations of other concepts. Thus, through pretend play, children play characters, structure dramatic events, and create scenic environments from found objects much like adult actors, playwrights, designers, and directors who juxtapose

fantasy and reality freely. "Digital or quantitative mapping" finds the four-year-old dealing with numbers and counting. Between the ages of five and seven, children embark on the final "wave" of "notational symbolization" where they invent and use various symbols (e.g., language) to refer to other symbol systems as "genre channels" (e.g., drama/theatre). The codification and mastery of these "channels" is bound in large part by cultural and educational systems which value or dismiss each domain.

Once in school, children enter a stage of literal realism where they learn to master the technical rules and crafts of each symbolic domain. Though preschoolers exhibit behaviors more like practicing artists, middle childhood is marked by a preoccupation with operational rules, at the expense of figurativity, which restricts creativity and imagination. Because theatre is not valued highly as a basic academic subject in education and society, few children (and adults) study theatre's symbol systems formally, though language arts nurtures an understanding of narrative stories and themes. Significant individual differences in each "multiple intelligence" may be nurtured or atrophied by the educational system during the school years, placing specific dramatic skills and theatre knowledge at a further disadvantage.

While separate and different developmental progressions have been studied in the visual arts (Parsons, 1987) and in music (Hargreaves, 1986), little direct research with young audiences, empirical or otherwise, exists in theatre upon which to identify developmental "channels" or codification schemes in theatre

(e.g., Landy, 1977; P. Goldberg, 1983; Saldaña, 1987, 1989, 1992; Saldaña & Otero, 1990; Klein & Fitch, 1989, 1990). Such a theoretical model may be constructed by integrating and synthesizing research from cognitive development in the arts (Gardner & Perkins, 1988), television studies (Wright & Huston, 1987), aesthetic theory (Langer, 1953), and semiotics (Elam, 1980; Esslin, 1987).

The proposed "channel" model assumes a constructivist view of how children perceive and create reality. That is, children construct a personal version of the real world based on how they perceive, interpret, transform, and act upon their environments through increasing knowledge that comes with age and experience. How children perceive and understand theatre's symbol systems and how theatre triggers memorable, aesthetic perceptions and powerful emotions is the goal of this model.

In her book, Paradigms and Fairy Tales, Julienne Ford (1975) delineates four types of truth or meanings of reality. Truth⁴ is the empirical truth of the scientist which consistently preserves the appearances of nature through objective observation. Logical truth³ is consistent with other claims known or believed to be true, such as the "poetic truth" of a playwright's fiction in Aristotelian terms. Ethical truth² conforms with moral or professional standards of conduct. When we judge and evaluate plays and theatre productions against standards of excellence, we are engaged in reflective aesthetic criticism. Through aesthetic distance, we attend to the symbolic forms, semiotic signs, and

conventions of theatre by interpreting dramatic and theatrical content. Finally, our ultimate goal, as theatre artists and audiences, is toward an ideal metaphysical truth⁴ which cannot be measured against any external criteria of the above truths. Instead, we experience Langer's "felt life" intuitively within our inner imaginations in Romantic Kantian or Dionysian terms. We know the theatrical experience to be true and real because we feel it in our hearts and souls, rather than in our discursive, rational minds. Just as Plato deduced, theatre's imitation of life is three times removed from Truth⁴ (Republic, Book X, 597e).

We know our world by what we experience directly, empirically, and figuratively through our five senses. By attending to actual people, explicit events, and concrete objects, we make deductions from these particulars to form general concepts and to predict future situations. From objective perspectives, we learn to understand cause and effect operations in logical, rational ways in a classical Aristotelian or Apollonian sense. We construct schemas, or prototypes of how the world operates, from enactive representations (e.g., dramatic play), iconic representations (images in motion), and symbolic representations (e.g., language, theatre conventions), until automatic templates are formed and revised from perceptually salient searches of critical features in the environment (i.e., Piaget's accommodation and assimilation). From Piaget's Pre-operations stage (ages 18 months to 7 years), where perceptions are based on intuition rather than logic, to Concrete Operations

(ages 7 to 11 years), where physical concepts are translated into mental, abstract concepts based on rules and problem-solving strategies, children increase their ability to perceive and understand their actual worlds in abstract ways, until Formal Operations (ages 12 to 15 years), where psychological thinking takes on inductive approaches from multiple points of view. Because theatre for children is defined for ages 5 to 12 (Davis & Behm, 1978), our focus here lies primarily on middle childhood.

Susanne Langer (1942, 1953) explicates how we come to know theatre and how theatre creates powerful, empathic feelings within the spectator through presentational (art) symbols. First, we create stories (or schemas) by perceiving successive images (e.g., characters in action) to conceptualize the passage of events in space (1942, 145). The forms of theatre symbolize human feeling through a spontaneous gestalt of virtual semblance, or more specifically, the "virtual destiny" of characters in action (1953, 40, 59-60). Theatre presents the image and illusion of life, in what Thornton Wilder calls "the perpetual present"--"not finished realities, or 'events,' but immediate, visible responses of human beings . . . [Action] which springs from the past, but is directed toward the future, and is always great with things to come" (1953, 306). This illusion of reality keeps spectators in suspense about the characters' destinies, so that when expectations are thwarted, spectators are surprised about the protagonists' "comic fortune" or "tragic fate."

Langer separates and clarifies key differences between dramatic illusion and theatrical delusion by noting "a broader fallacy--the confusion of theatrical representation with "make-believe," or pretense, which has always led both playwrights and directors to misconceive the relation of the audience to the play" (1953, 316). Illusions, elicited by theatre artists so that audiences will be made to share the protagonists' emotions, trigger the spectator's own "virtual text" through (Bullough's) aesthetic distance. This distance is disrupted when playwrights delude audiences and call attention to this psychic distance through presentational, Brechtian devices such as direct address, which teach morals. The delusion of "make-believe" through story-telling or narration has an opposite effect from illusion because "each person becomes aware not only of his own presence, but of other people's too, and of the house, the stage, the entertainment in progress" (1953, 318). Most importantly, dramatic illusion "varies also according to the individual's capacity for maintaining a greater or lesser degree" of aesthetic distance (1953, 319).

Though theatre borrows the virtual illusions of architecture (space, scenery), poetry (past memory, literary script), music (time), and dance (power, gesture), the primacy of dramatic illusion lies in actors conceiving and enacting inward emotions and actions, rather than realistic production styles (e.g., Realism) which delude the audience into making the play as real as possible (1953, 322-23, 317). "A public that enjoys such pure

acting gives itself up to the dramatic illusion without any need for sensuous delusion" in the plastic arts which are secondary (1953, 324). Likewise, "if the acting can only duplicate what the [playwright's] lines already effect, there will be unintended redundancy . . . [which] makes the total form impure and opaque" (1953, 314). Therefore, according to Langer, theatre artists should focus their respective creative energies on eliciting the dramatic illusion of virtual destiny through characters in actions in order to create intense emotions in audiences.

Comprehension of theatre's symbolic forms requires imagistic and metaphorical applications which go beyond simple recognition, recall, and classification of perceived features (1942, 266). An artistically trained mind spontaneously understands and interprets these images and metaphors, while an untrained mind finds only discursive meanings and feels superficial, sympathetic emotions in perceived forms (1942, 145; 1953, 167, 378).

It is characteristic of figurative images that their allegorical status is not recognized. Only a mind which can appreciate both a literal and a 'poetic' formulation of an idea is in a position to distinguish the figure from its meaning. In spontaneous envisagement there is no such duality of form and content (1942, 149).

Therefore, the critical issue for our purposes lies in understanding how children are able developmentally to feel and abstract the forms of theatre's images and their conceptual, metaphorical content: simultaneously and beyond discursive means--all while sustaining the dramatic illusion of virtual destiny. Langer's rationale may help to explain why imaginative preschool

children operate intuitively like practicing artists, though they don't yet have the discursive ability to explain or evaluate these intuitive feelings like aesthetic critics by translating visual, enactive images into verbal, propositional discourse.

Children who do verbalize their experiences with audio-visual stories do so with an emphasis on visualized images. In general, children ages 6 to 12 recall characters and their dramatic actions most strongly and frequently over dialogue, theme, and spectacle in theatre and television, particularly when given linear, cause-and-effect plot structures (e.g., Deldime & Pigeon, 1989; Klein & Fitch, 1990, 1989; Klein, 1987; Wright, et al., 1984). Young children tend to describe characters' external behaviors, while older children infer characters' internal intentions and motives to a greater extent (Shantz, 1983). Likewise, the ability to interpret and recall themes from plays occurs later in development as children increasingly infer and abstract global concepts from dramatic situations (Deldime & Pigeon, 1989). Depending on the recall task, they infer abstract main ideas spontaneously by relying on characters' visualized dramatic actions more than verbal and aural cues in dialogue (Klein, 1987; Klein & Fitch, 1990, 1989). Though young audiences prefer realism in theatre, their memories are stimulated and sharpened most by those productions which depart from real life in non-realistic ways (Deldime, 1990; Deldime & Pigeon, 1989).

Cognitive developmental research has shown that, during middle childhood, children increasingly discriminate among levels

of reality in stories, yet they tend to use literal or photographic realism as the chief criteria when judging fiction against real world experiences. When asked to compare the level of reality between television and print materials (Kelly, 1981; Landry, Kelly & Gardner, 1982), second graders focus upon the salient, external appearances of photographic realism to judge reality against their actual, physical world. When television contradicts physical laws, second graders proudly attribute these fantasy characteristics to camera tricks. Not until the fourth grade do children increasingly focus upon the creator's intention. Though still tied to literal applications, children recognize that fictional stories are relatively possible if the stories relate to their understanding of physical, social, and behavioral phenomenon. They recognize television's manipulations of social reality. By the sixth grade, children accept Aristotelian poetic truth, yet they still rely upon photographic realism to discern content plausibility against self-defined rules of social and psychological reality. Like French Neoclassicists, they criticize any exaggerations of character decorum, while they scrutinize production standards for degrees of distortion and sensationalism. Though theatre's live quality may heighten perceived reality, scenographic distortions of realism may impinge upon children's perceived similarity with characters and events and break their aesthetic distance from dramatic illusions, as suggested by Parsons' scheme below.

In proposing stages of aesthetic development in the visual arts, Parsons (1987, 1976) has shown that middle school children also use realism as the primary criterion for aesthetic evaluation. Preschoolers in stage one are preoccupied with favorite colors and objects, until they shift their focus to the nature of representation in a painting's subject matter. Here, in stage two, they focus on beauty and realism as they search for "rules of realism" in form and content by comparing and judging art works against the literal appearances of people, objects, and events depicted in their everyday world. They reject distortions and abstractions of realism until they learn to differentiate and judge an art work's formal quality against their own personal tastes and preferences. Yet these rigid, conventional, and rule-bound aesthetic constraints contain an inner logic necessary for greater aesthetic maturity. Rules of realism provide an easily accessible and organized structure that anyone can see for evaluation purposes. Personal preferences become irrelevant if they do not follow the rules. This advance in the sense of perceptual relevance assists children positively in the development of their aesthetic sensibilities as they move to stage three to judge an art work's expressiveness. In stage four, closer attention is paid to the medium's form and style until stage five when critical judgments are integrated and based on the autonomy of the art work.

Television may cultivate audiences' tastes for realism and their schemas for reality (Gerbner, et al., 1986). Television

models for perceived reality are based on program genres (e.g., news documentaries, cartoons, fictional drama, sports, and variety shows), and most dramatic programs rely on photographic realism. In contrast, children's theatre often diverges from representational realism with a multitude of production styles ranging from minimalism to expressionism, though the live human actor constitutes real life on stage. However, television models for perceived reality may assist the present research in its early conceptualizations.

Children increasingly use television's formal production cues to determine differences between fantasy and reality along two primary dimensions: 1) factuality, the factual or fictional content; and 2) social realism, the realistic or unrealistic portrayal of characters and events based on real life experiences (Dorr, 1983; Wright & Huston, 1987; Truglio, 1989). Realistic portrayals of characters affect emotional responses, attitudes, and beliefs. For example, Austin and her colleagues (1990) find that "perceived realism predicts perceived similarity, which in turn predicts identification" with television characters. Fictional portrayals of characters may elicit as much emotional response as factual documentary portrayals if the viewer identifies with the characters (Ross & Condry, 1985). However, young children have difficulty discriminating between "characters" and "actors" in both television and theatre, while older children know that actors don't play their character roles in real life (Scheibe, 1989; Saldaña, 1989).

The live nature of theatre, in perpetually present rather than pre-recorded time, may heighten a greater sense of perceived reality and emotional response from children than television. Nothing could be more "real" than live actors before a live audience. One study (Campbell & Campbell, 1976) found that preschoolers who heard a live narrator derived more correct themes in their story retellings than those children exposed to the recorded version. The authors question whether live presentations elicit greater attention and comprehension than recordings. Unfortunately, researchers have not compared live and recorded dramatic stories in any persuasive studies.

In approaching a theoretical model for children's perceived reality in theatre which parallels cognitive development and television models and encompasses dramatic theory and semiotic criticism, several dimensions, each on its own continuum from actual, concrete reality to virtual, metaphoric meanings overlap in multiple ways. As Esslin (1987, 176) argues in his semiotic analysis of theatre and film:

Drama is a mimesis of real life. But the book of nature is not written in a language that can be codified in a dictionary or a grammar. There are so many meaning-producing systems at work there that any moment of experience is abundantly over-determined and ambiguous. There is no fixed code in reality, hence the theatre cannot be reduced to a fixed system of codes either.

Nevertheless, a theoretical model or developmental "channel" of constructed reality in theatre may be schematized for narrative purposes by integrating several philosophical foundations.

Physical Stage Reality (or Empirical Truth) presents human actors wearing costumes, using props, lit in scenery on one stage of limited size in an auditorium. Things happen on stage and audiences observe events unfold. These concrete, visual and aural aspects are translated into analogical representations of human situations from the Playwright's Text (or Logical/Poetic Truth)--characters enact various events, times, and places which may change and vary in the course of a one-hour children's play. The dramatic content (factuality) will always be fiction, though some plays may be based on factual biographies and historical events.

The playwright's text finds expression in different forms of Theatrical Reality (or Ethical Truth) which range from naturalism to realism to expressionism and other avant-garde styles. Aesthetic distance may be broken by theatre artists who seek to delude audiences with realism and/or children may come to the theatre expecting familiar, realistic representations of life similar to television. Audiences are then set up to judge the ethical truth of the drama by comparing characters' actions against life (social realism) and by judging the applicability, utility, or relevance of themes to their own lives. They begin to evaluate the believability of the acting and the scenographic execution of theatrical elements against standards and "rules" of realism. Such criticism also involves the decoding of notational theatre conventions--symbol systems which communicate consensual rules and signal semiotic signs about characters and settings in

time and space. For example, lights fade to black to signal a change in time and/or space; actors may change costumes entirely to take on new characterizations when double-cast (a frequent convention in children's theatre); vocal recordings may signify a character's thoughts; a box may be used as a chair, bed, and table; etc. The human actor remains constant, even if costumed as an animal or a ghost. Animation is seldom used unless on projected slides, video, or film.

Ultimately, if all theatre artists have elicited a dramatic Dream-State or illusion of virtual destiny and audiences have refrained from judgments or premature closure and sustained aesthetic distance, then viewers construct Metaphysical Truth in their ephemeral, daydream-like imaginations. Audiences enter into a relationship and interact with theatre by responding intuitively, vicariously, and empathetically in a dream state of consciousness with protagonists in action, moment by moment. If artists have fused form and content seamlessly, without calling attention to any one semiotic element over another, viewers integrate dramatic and theatrical images simultaneously as "felt life" far beyond discursive means. Through a willing suspension of disbelief, spectators remain open to irrational impossibilities to achieve a higher, ideal state of aesthetic experience and a felt understanding of what it means to be human. They create individual, personal "virtual texts" and apply thematic ideas to their own lives and to society at large.

This model seeks to capture multiple and overlapping versions of possible worlds based on others' theoretical versions of their respective worlds in Goodman's sense. It attempts to narrate a story about how novices process several symbol systems--perceiving actual and symbolic realities; understanding theatre conventions; analyzing and synthesizing actions and sequenced events; evaluating text and performance; experiencing "felt life"--to become masterful experts in the symbolic domain of theatre. It attempts to visualize this transparent process as Gardner's moving, ever-changing image of a developmental "channel" of water: from the young child's wave of role-event structuring to her textual analysis of a playwright's text; from her analogical and digital waves to her decoding of theatrical reality; from her notational symbolization of theatre to her comparisons against experienced life. All the while, personal intelligences are working to understand self, characters and relationships, and human events which signify contemporary society.

Given our "absurd" world where the human race can be obliterated by the human push of a mechanical button, Bruner predicts that future developmental theories will come to grips with these uncontrollable contexts of cultural reality for future generations:

I think that its central technical concern will be how to create in the young an appreciation of the fact that many worlds are possible, that meaning and reality are created and not discovered, that negotiation is the art of constructing new meanings by which individuals can regulate their relations with each other. It will not,

I think, be an image of human development that locates all of the sources of change inside the individual, the solo child. For if we have learned anything from the dark passage of history through which we are now moving it is that man, surely, is not 'an island, entire of itself' but a part of the culture that he inherits and then recreates. The power to recreate reality, to reinvent culture, we will come to recognize, is where a theory of development must begin its discussion of mind. (1986, 149)

It is hoped that the present research may illuminate the possible receptive worlds of theatre for young audiences--a theory based on the narrative voices and truths of children empowered to speak about their interactive theatre experiences. By listening to children's voices from a caring perspective based on mutual trust (Gilligan, et al., 1988), theatre artists, educators, and researchers may come to renew their respect for young audiences by producing more innovative theatrical experiences which challenge young hearts and minds. Theatre means "to gaze upon." With a greater understanding of how children construct (or deconstruct) theatrical reality, more theatre may be produced from children's perceptions--from a "child gaze" rather than from the usual "adult gaze" of what adults perceive or think children will know, enjoy, and appreciate (cf., Dolan, 1988; Mulvey, 1975). Only then may the young audiences of today become the future audiences of tomorrow.

Purpose of Study

Questions arise regarding children's constructions of perceived reality in theatre and the aesthetic judgments they derive from this live experience. Given the fact that drama is not taught regularly in elementary curricula and that students see few theatre productions, how do children of different age groups make sense of unconventional, non-linear theatre productions? What theatrical cues do they use to distinguish between factual and fictional content and realistic and non-realistic forms in theatre productions? How do they interpret "non-realistic" theatrical conventions to infer themes in plays? How do they discriminate between "real" live actors in theatre and "fictive" dramatic characters and situations? How do unrealistic theatrical forms affect audience's perceptions of realistic characters and situations? How can theatre directors produce plays in such a way to enhance children's comprehension and appreciation of thematic content in non-realistic plays? The purpose of this study is to explore some initial and potential answers to these and the following operational questions:

1. How do children rate their enjoyment (or appreciation) and understanding of a given non-realistic theatre production based on surrealism?
2. How do children define and construct reality regarding aspects of a theatre production which are "make-believe" (or not real), "actually real," "realistic" (or seems real), and "factual"?

3. What theatrical cues do they use to distinguish fact from fiction and realism from real life?

4. How do children interpret theatre conventions or semiotic symbol systems regarding dialogue, movement, staging, scenery, costumes, props, lighting, and sound?

5. What explicit or implicit themes do children recognize and interpret from non-linear plays, and what theatrical cues do they use to infer themes about the action and human condition?

6. How do children's responses and evaluations compare with theatre artists' intentions, adults' responses, and teachers' evaluations?

Method

Respondents

Eighty-nine children from 2nd, 4th, and 6th grade classrooms each from three separate schools were selected from the local area based on the willingness of teachers and principals. They represented a wide range of socio-economic statuses of urban and rural neighborhoods within the community. The majority of the children were white with 24% representing non-white cultures (12-African-American; 4-Native American; 5-Asian-American). There were 52 girls and 37 boys. Thirty-three 2nd graders ranged in age from 7:0 to 8:7 with an average age of 7:6; thirty-three 4th graders ranged in age from 8:9 to 10:8 with an average age of 9:6; and, twenty-three 6th graders ranged in age from 11:0 to 13:6 with an average age of 11:6. None were seriously learning-disabled or visual- or hearing-impaired.

Twenty-three university students were also selected from a discussion group in an introductory theatre course. As freshmen through seniors, their ages ranged from 18 to 25 ($X = 20:4$), and their mean years of college according to credit hours was 2 1/2 years or first semester juniors. There were 13 women and 10 men. Majors included business (7), political science (3), journalism (2), psychology (2), English (2), graphic design/illustration (2), education (1), environmental studies (1), theatre/film (1), or undeclared (2).

In sum, there were 112 respondents--65 females (58%) and 47 males (42%), as shown in Table 1 below:

Table 1

Number of Respondents by Grade and Gender

| | <u>2nd</u> | <u>4th</u> | <u>6th</u> | <u>College</u> | <u>TOTAL</u> |
|--------|------------|------------|------------|----------------|--------------|
| Female | 19 | 18 | 15 | 13 | 65 |
| Male | <u>14</u> | <u>15</u> | <u>8</u> | <u>10</u> | <u>47</u> |
| Total | 33 | 33 | 23 | 23 | 112 |

Theatre Production

Surrealism may be defined as an attempt to dramatize a pre-conscious dream-state not limited by reality. It juxtaposes seemingly unrelated visual images to create new metaphoric connections of meaning. While surrealism became a noted movement in the art world through the manifesto of André Breton (1924), the movement never really extended itself to the world of theatre beyond the plays of Apollinaire, Cocteau, Artaud, and Lorca. However, surrealism has re-surfaced as a new mode of perceived reality and theatrical expression in modern performance art and the work of Robert Wilson (Brockett and Findlay 1991, 165-172).

The theatre production, This Is Not a Pipe Dream, was originally conceived by Barry Kornhauser as an audience participation play for grades 1 through 6 and was produced by the Fulton Opera House, Lancaster, PA (1988). As produced by the University of Kansas Theatre for Young People (1990), the unpublished, non-participation version of the script was staged for the intermediate grades 4 through 6. It was performed by undergraduate college students, with scenic and lighting design by a faculty member, costume design by an undergraduate student,

and sound design by a graduate student. The production ran approximately 48 minutes without intermission.

a. Synopsis of the Text

The play deals explicitly with fantasy/reality distinctions in theatre by dramatizing the early life and work of surrealist painter, René Magritte, and by comparing these distinctions used in common theatre conventions. Magritte's own fascination between reality and illusion in his art provides an apt opportunity for child audiences to distinguish levels of reality within fictive theatre. The title of this unconventional, non-linear script comes from Magritte's painting The Betrayal of Images--a realistic picture of a smoking pipe with the label, "Ceci n'est pas une pipe," which translates as, "This is not a pipe."

Like Magritte's fanciful and mysterious paintings (projected with 107 slides throughout the production), the play celebrates the mysteries of a child's artistic imagination by recreating on stage what Magritte creates on canvas. The Interlocutor (narrator) shows and tells how theatre is like painting the illusions of real life. Even though Magritte paints a very realistic-looking pipe, that pipe cannot be smoked. Likewise, theatre is not real life, no matter how realistically people act. But the illusion is so real, that theatre and paintings make us think, imagine, and dream the impossible.

In the biographical story, the playwright imagines how Magritte as a youth may have invented his images for his

paintings. As a young boy, René discovers an anonymous painter one day while playing in a cemetery. Though his Mother urges him to follow his dream of becoming an artist, his Father hates the idea and calls it "a pipe dream." At school, René feels overwhelmed by words. He wants to express himself with pictures instead. One night, René dreams that his Mother is a ghost rising out of a crypt. (In fact, she commits suicide that night by drowning in a river.) René searches for his Mother and the River by trying to defy gravity--symbolizing his search for personal, artistic meaning and the mysteries of life. Along the way, he meets Georgette, his future wife, at a fair. Gradually, René learns that mystery is invisible: "If everything is possible, then there are no pipe dreams."

b. Director's Content Analysis of the Performance Text

Like Magritte's paintings, the overall intended mood and objective of this production was to surprise, astonish, and "trick" the audience with theatrical illusions in order to illuminate and ponder the mysteries and wonder of life, art, and theatre. In the playwright's words, the play's purpose is "to negate the traditional theatrical illusion of reality."

The dramatic structure of this non-linear, episodic plot jumps erratically between and within scenes among three states of "reality"--the Stage World, René Magritte's Biographical World, and René's Dream World (Klein 1991). When the Interlocutor discusses theatre explicitly and explains the crafts of various theatre artists, we are in a Stage World of Reality (Scene 2 and

13). This Stage World continues to operate when she narrates or comments on René's actions (introductory lines to most scenes); and when, John, an actor, "breaks character" and argues about the lines in the script with the Stage Manager (Scene 4). The Stage Manager, who remains visible on stage calling her cues throughout the play, serves as a constant reminder that this is a play, not real life. During the introductory, non-verbal Scene 1 of Magritte's images (particularly Le mois des vendages--bowler men in a window), the ensemble plays "peek-a-boo" games from two windows. The Anonymous Women and Men attempt to trick the Interlocutor, but she tricks them in return by watching the Stage Manager's cues and forcing them to hit one another, instead of her, with "metal plumber's" pipes. Essentially, the Interlocutor serves as a confidante between audience and actors and as René's conscience (e.g., Scene 10).

René's Biographical World occurs when the action recreates the biographical aspects of Magritte's actual life through the theatrical illusion of reality and "the fourth wall." In addition, the playwright imagines and creates a plausible, fictive world about René's family and school life, based on what little facts are known of Magritte's parents, Leopold and Regina. Here, we watch René as he explores an old, abandoned cemetery, meets a mysterious, anonymous painter (a fact based on Magritte's writings), and decides to become an artist (Scene 3). At home, his Mother consoles him about his dream of becoming an artist, while his Father berates it as a "pipe dream" (Scene 3)

(playwright's re-creation). At school, René feels assaulted by words and problems from his Teacher who buzzes students for not answering his nonsense questions immediately (Scene 6)

(playwright's re-creation). After his Mother tucks him in bed one, last night, she leaves a paintbrush for him in his backpack (Scene 7) (playwright's re-creation). When his Father gives him a bibloquet (cup and ball toy) and then tells him that his Mother has been "lost at the river" (based on the biographical fact that his Mother committed suicide by drowning in a river), René resolves to find her (playwright's re-creation). At a fair, René meets his future wife, Georgette, (a biographical fact) and tries to seek answers to the meaning and mysteries of life (Scene 11 and 12). Finally, René reconciles the loss of his Mother, wins his Father's acceptance (Scene 18 and 19) (playwright's re-creation), and becomes an artist.

René's Dream World, re-created entirely by the playwright, occurs non-realistically in several scenes: when René is assaulted by the words of his Father, Teacher, and his conscience (the Interlocutor) simultaneously (end of Scene 6); when he hears the voices of his Mother and Father, and his adult voice recalling his past (taken from Magritte's writings)--all recorded over speakers (in various scenes); when he has a nightmare envisioning his Father's pipe inside an egg inside a bird cage covered by cloth painted like his cut-out images, and then dreams of his Mother's death and her ghostly image (Scene 8). Finally, after metaphoric struggles to find his Mother and to confront the

mysteries of life (Scene 14, 15, and 16), René's major "dream" (and the overriding metaphor of the play) occurs as he discovers the River--a symbol for his discovery of artistic method and meaning that "Everything is possible" on canvas and in life (Scene 17 and 18).

All three Worlds combine when René sits at the easel to paint "reve" (dream) (The Art of Conversation) with his Mother's spirit behind/inside of him (Scene 19), and when the Interlocutor narrates about Magritte's life as an epilogue (Scene 20).

Essentially, this episodic plot structure has two separate (and colliding) through-lines: the Interlocutor's Stage World which makes explicit analogies between Magritte's visual art paintings and theatrical stage conventions; and the story of René Magritte, a young boy searching, struggling, and achieving his pipe dream of becoming an artist. To clarify one guiding principle or through-line for the audience, the director chose to focus the action primarily on René's World and to integrate the Interlocutor's Stage World into René's dramatic actions as much as the playwright's text would allow.

To this end, the Interlocutor could be seen and heard only by René to reinforce the idea that she was his ever-guiding conscience. In Scene 5 when René arbitrarily labels four objects with other words, she suggests new labels in the way she hands him these objects. In Scene 7 as he silently reads a dictionary, she recites his definitions of "artist." In Scene 10 after René resolves to find his dead Mother, she encourages him to find by

looking at the stone and other objects with open eyes (reinforced with the projection The False Mirror--a huge, clouded eye). René does so by naming and imagining various objects in new ways (reinforced with various projected slides of these objects) and by finding his voice "for asking questions without answers" with the Interlocutor. After lifting a teardrop from his eye which transforms into rain, she hands him an umbrella for his journey in the rain to a fair.

In Scene 13 when the Interlocutor discusses the masks of theatre, René continues his incessant search for his Mother. Here, his veiled Mother enters to represent tragedy, while Georgette enters blindly to represent comedy (still wearing a handkerchief over her face from the previous scene) trying to find René. René tries to imitate a magician's disappearing cloth trick as the Interlocutor notes how an artist/actor "reveals as he conceals--reveals the "make-believe" that makes believers of us all." He exits to follow the mystery of the magician and to search for the river from up high (above the main set unit) (Scene 14). His "thoughts turn earth-bound" when he descends, using an umbrella with a glass on top (Hegel's Holiday), and lands on a stone to ponder the mystery of gravity; while the Interlocutor discusses Magritte's Le chateau des Pyrenees with an Anonymous Man who struggles with the "weight" of a boulder (made of foam) (Scene 15).

In Scene 16 René begins to understand that "We exist in mystery" (Magritte quote in Torczyner 1985, 16). He snaps off

the ball from his bibliouquet toy to represent his growing maturity and to break his ties to his Mother's "umbilical cord." He realizes, "You cannot speak about mystery. You must be seized by it." At this moment, he sees the mystery of his veiled Mother seated at the easel and follows her across the stage. As she exits, she is "replaced" by the dark figure of his Father who enters mysteriously with another Anonymous Man (the Teacher actor) who follow, chase, and seize René. To escape entrapment, René exits into the box as the Interlocutor notes how, "Offstage . . . he doesn't exist." He pops his head out of the box to tease the Men only to discover, much to his surprise, actual potatoes in (behind) his ears--a reference to his Mother's earlier dialogue about his growing potatoes in his dirty ears. He tosses the two potatoes to the Men who play "hot potatoe" and exit.

With danger gone, René comes out of the box and discovers the river all around him (Scene 17). As he cleanses himself in its waters, all the characters/actors enter and dance around him in slow, graceful movements. As a result, René discovers the wonders of this metaphoric river and all life's possibilities, as his veiled Mother exits last and says (in a recording), "Despair must be faced with the courage of hope" (quote taken directly from Torczyner 1985, 7). The Interlocutor encourages René to approach a canvas of painted clouds on the easel. He takes the stone and places it firmly in its center confirming that,

"Everything is possible" in art (Scene 18) (taken from Torczyner 1985, 7).

The spell of this metaphoric, dream journey is broken when his Father enters to declare, "You won't find her, René." René replies, "I know that. Not here. But here. (Touching his heart.) Maybe in here." He returns the broken bibliouquet to his Father, signifying his break from childhood and parental dominance. His Father gives him his smoking pipe and the two grasp hands in silent reconciliation. When René puts the pipe into his packpack, he discovers the paintbrush left by his Mother (in Scene 7) and proclaims, "There ARE no pipe dreams. If everything is possible, there are no pipe dreams." (This explicit line of dialogue essentially constitutes the main idea or theme of the entire play.)

The Interlocutor then gestures to René to come sit at the easel to paint with his paintbrush (Scene 19). She then gestures to René's veiled Mother to enter and stand behind him. Without looking at the spirit of his Mother, René speaks with her and shows her his painting (The Art of Conversation projection--the word "reve" or dream stacked in stones "like baby blocks"). As the Interlocutor narrates the play's epilogue (Scene 20), Georgette joins René at the easel, and the juggler performs one last mysterious trick "to consider the wonder that is our world, reminding us of what life is by showing us what it is not." With one last reference to the "reve" projection, the Interlocutor

queries, "Ridiculous?" and the play ends (cf., Torczyner 1985, 16).

c. Design Concepts and Realizations

Because Magritte's imagistic ideas figure so highly in this play, 107 slides of his paintings (about four times the 28 required in the text) were incorporated throughout the production to illuminate or counterpoint René's actions (using 3 rear slide projectors). For this reason, the main setting consisted of a large, ochre-painted wooden unit (15' wide x 10' high x 2' deep and placed 7 1/2' above the proscenium line), with "wainscoating" (3' from the bottom) stenciled like Magritte's cut-outs. This unit was designed as a central, white-covered projection screen (9' x 6' or two-halves) or "quartered window" with two additional, practical, white-covered windows on either side (2 1/2' x 6') which opened outward. Surrounding this entire unit was a huge painted backdrop (29' wide x 18' high) of blue sky and white clouds and a recreation of Magritte's "Ceci n'est pas une pipe" painting, with clouds painted in the middle of the pipe. The sides of this backdrop, painted in rosy-red, were literally tied back at either end to suggest Magritte's familiar stage curtains.

The only other set piece consisted of a huge box (6' long x 2' high x 3 1/2' wide) placed center stage just below the proscenium line. The box had a large hinged lid on top through which many actors/characters made exits and entrances from behind the box's back opening and a black "tunnel" of cloth which led

under the main unit. This box served to represent various realistic and non-realistic locales--René's house (e.g., parlor with sofa, bedroom with bed), a cemetery (with its underground vault and crypt), a classroom (with Teacher's desk and students' chairs), the fair (a park bench); and basically a place to sit, stand, lay upon, sleep on, hide in, pop out from, crawl over, escape, etc.

The Stage Manager's "booth" was located in the stage right alcove area in front of the brick proscenium wall. Side backstage areas were masked with black drapes to create "voids" from which characters made exits and entrances. In order to see the slide projections clearly and still light the actors, most stage action occurred around the box and downstage of it on the entire raised orchestra pit (40' x 10 1/2') closest to the audience.

Major scenic props consisted of a small wagon unit containing four cupboard doors labeled like Magritte's "primer" painting (Dreaming Keys) which was pulled on stage right and used by René in Scene 5. (The Teacher used its contents in Scene 6, and the Street Performer at the fair carried it off after his fire-eating and juggling act in Scene 11.) On stage left, a painter's easel and short stool were brought on and used by the Anonymous Painter in the cemetery and remained on stage through the end of the play. Here, the Anonymous Painter "painted" a painting of a painting of the actual stage setting (like Magritte's The Human Condition). When this canvas was reversed,

it revealed a recreation of Magritte's painting of a briefcase on a hand mirror. (In fact, the Father used it as a briefcase in Scene 3 by carrying it by its top handle.) Later, during the River scene, the Interlocutor placed another painting of clouds on the easel, to which René added a foam "stone" in its center to "suspend it in mid-air" and proclaim, "Everything is possible."

Other hand and costume props consisted of the following: bowler hats (worn by everyone); a cow bell and stick (to create the sound of being hit with a metal pipe); 3 foam-rubber, metal-looking, plumber's pipes (to hit others over the head harmlessly); an actual green apple; foam-made "stone"; a mannequin arm (used by the Teacher to point to Ceci n'est pas une pipe); Stage Manager's applause (and various other responses) sign; actual scripts; René's khaki backpack; Mother's handkerchief; backstage squeaking balloons (to create the sounds of René's ears being swabbed and the sound of birds "peeping"); backstage tuba (to create the sound of René's nose blowing, Father's factory whistle, and René's "descent" from the sky); Father's smoking pipe; a bowl of "prunes" rigged with an elastic band so Father could mistakenly wear it as a hat; oversized, blue plastic scissors; a small dictionary; folded newspaper pre-cut into Magritte's "snowflake" pattern cut-outs; the Teacher's small school bell and hand buzzer; a map of Belgium placard; school boy caps; a large painter's paintbrush; another smoking pipe inside a paper-mache "egg" inside a large bird cage covered with white cloth painted with black stencil patterns (to recreate Magritte's

Les affinites electives painting for René's nightmare); Mother's lace veil completely covering her head and shoulders to represent her as a ghost and to convey Magritte's penchant for masking faces; René's red bibloquet toy (cup and ball game); Georgette's parasol; a black umbrella and plastic cup (a balancing trick to recreate Magritte's Hegel's Holiday); another black umbrella with a plastic cup of water sealed and glued on top of it; various juggling balls, fire-eating wand, and small red "disappearing" cloth for magic tricks; 2 large white handkerchiefs (which René used to cover his and Georgette's faces for the kiss and to recreate Magritte's The Lovers); a huge, foam "boulder"; and, 2 actual potatoes.

Sound design played an important role in this production to enhance visual images with aural imagery. In addition to those sounds created live with props above, recorded sound effects included the sound of someone crunching into an apple (for both the real apple and "stone"), an iron door (from a cemetery) opening and shutting, a huge water splash (to suggest Mother's suicidal drowning in the river), and sounds to represent a playwright (computer keyboard), sets (hammering and sawing), and costumes (sewing machines) in Scene 2. As noted in the script, characters' speeches were also recorded to suggest the voice of the adult Magritte (quotes from his written work) or René's imagination of his Father's and Mother's haunting dialogue. In addition, the Interlocutor spoke always into a battery-operated, hand-held microphone at all times to enhance her roles as

narrator, performance artist (Madonna?), René's conscience, and "all-knowing goddess."

Recorded music, especially "New Age" styles, played a central role in enhancing moods created throughout the entire production--tick-tocking anticipation (during the opening scene), haunting mystery (at the cemetery), nightmarish dreams (the climax of the school scene and René's nightmare), gaiety (realistic circus-like music for the fair), magical airyness (René's attempt to defy gravity), danger and suspense (during René's seizure by two Anonymous Men), a great sense of wonder mixed with the sounds of running water (for the climatic River scene), and a sense of peaceful closure (for the epilogue).

Lighting design also held an equally important role in illuminating these moods, focus, and stage action at all times. In addition to the usual stage lighting positions masked in alcoves and ceiling catwalks, numerous stage lights were unmasked on two side battens and above the stage in clear, theatrical view for the audience. In order to see the slide projections most clearly (running continuously as an additional backdrop to the action), stage lighting was limited primarily to a small circular area of warm light around the box where characters most often gathered or around the entire orchestra pit in larger scenes. René's Biographical and Dream Worlds were distinguished continually by warm and cool colors respectively and intensity of light. Throughout the play, two follow spotlights followed the Interlocutor and other key characters (mostly René) around the

entire stage as well to retain the theatrical Stage World nature of the whole play.

Several special lighting effects created additional desired moods. In Scene 4, when John, the actor, "forgets" his lines, the stage work lights came on to suggest a complete interruption to the fictive world. When René felt assaulted at school and was later seized by the two Anonymous Men in Scene 16, the lights flashed repeatedly to match his psychological confusion and frustrations. As the two Anonymous Men followed René, the dim lights allowed only silhouetted shadows of their forms. When Mother arose from the box/crypt, two blue and green lights from inside the box glared from below to enhance this nightmarish vision. To climax René's discovery of the river, a film of real running water was projected from the front onto the backdrop and the entire stage, together with moving, blue gobo-ed lights which cast a rippling effect of water on the entire stage.

One hundred-seven slide projections of Magritte's paintings were selected and used for four main purposes: 1) to refer to particular paintings literally, as noted in the script (e.g., The Betrayal of Images, labeled "Ceci n'est pas une pipe," was explained by the Interlocutor and used as René's French lesson by the Teacher); 2) to match and reinforce the dramatic (stage) action with the Magritte painting from which the scene was created by the playwright (e.g., Le cap des tempetes--a person sleeping in a box with a boulder above, as René sleeps on the box); 3) to suggest the visual images going on in René's

imagination and his feelings of the moment (e.g., Time Transferred--a train coming out of a fireplace, when Father says, "Everything in its proper place!"); and, 4) to create heightened moods during René's climatic, emotional struggles (e.g., flashing montage images of various paintings when Rene is "seized by the tyranny of words" in Scene 6 and 16). In addition, photographic slides of Magritte as a child with his mother, Regina, as a young adult with Georgette, and as a mature man (two years before his death in 1967) were also used to provide biographical images of these actual people.

Magritte's images of a dove were projected at measured points to symbolize and connect René's quest for his pipe dream and peace of mind: when Father enters and interrupts Mother's encouragement of René's dream--Musical Moment (music-noted dove and smoking pipe); as the Interlocutor said, "Even in the rare self-portrait, Magritte would invariably mask his own true features"--La therapute (cloth-covered, seated man with doves in a cage as his face and torso); when René exclaims that he can see the river from up high--The Man in the Bowler Hat (literally, with a dove in front of his face); and, finally, when René discovers the River--La grande famille (a huge clouded dove above the sea with its wings spread wide, projected twice in both halves of the projection screen).

While the image of Father or bowler-hatted men (or the adult Magritte's self-portraits?) infused many Magrittian slide projections throughout the play, other paintings were also chosen

to represent René's Mother at particular points: when Mother told René "to better honor the dead"--The Balcony (several seated caskets at a balcony); when Mother arose and spoke from the crypt--Perspective: Madame Recamier of David (a casket seated on a chaise); when Father told René that his Mother was lost at the river--The Knowledge (music-noted open door with crescent moon and chess piece); when René imagines the River--Scherzade (a woman's beaded eyes at the sea with beach and clouds); when René goes to the fair on his way to the river--The Great Wall (a woman at the sea dressed in a white lace dress holding a parasol with posies in front of her face); when René understands, "We exist in mystery"--La bouquet tout fait (a nymph in front of a bowler-hatted man with his back turned); and, finally, when René understands "possibilities"--La domain de arnheim (an eagle/mountain with a nest of eggs and moon) and La plaqiat (silhouetted vase of flowers with a pastoral scene inside).

All slide projections, music, and special lighting effects stopped completely for several key moments (e.g., when René screams at the end of the classroom scene and when he wakes up from his nightmare); especially when René makes philosophical verbal discoveries, in order to contrast and heighten the dramatic effect of his realizations.

In contrast to these surrealistic visual and aural design concepts, costume design reflected a more realistic, period approach to Magritte's youthful Belgian life (roughly 1910 to 1915) for this seven-member ensemble. The Anonymous Men and

Women wore Magritte's typical black suits (period jackets), white shirts, dark ties, black shoes, and bowler hats. In contrast, the Interlocutor wore black "balloon" slacks and blouse with gold trim, black shoes, and a bowler hat. (Her white blond-dyed hair set her off against the blackness.) René Magritte wore rosy-red knickers, argyle socks, a pin-striped ivory shirt, and brown vest to suggest his boyish youth, until "adulthood" when he added a black suitcoat and bowler hat. Mother wore a corseted, full-length, blue satin and white lace-tiered period dress which flowed gracefully as she moved; while Georgette wore a peach-colored shorter dress with green trim, a straw hat, and high-buttoned shoes. The Father and Teacher wore the same black suits--though Father had a more period-looking wing-tip collared shirt and tie. Teacher added a farcical graduation cap with green tassel for his scene, and a flashing-light bow tie for his role as the Street Performer at the fair. Even the Stage Manager was costumed in blue jeans and a dark, blue and green printed shirt--and a bowler hat.

Pre-Performance Training

Fifty children (45%) from two of the participating schools received no training whatsoever before attending the play. (All classroom teachers were asked not to use the KU Teacher's Guide with children until after the interviews.)

Thirty-nine fourth and sixth grade children (35%) from one of the participating schools received advanced training by their art teacher regarding Magritte and his art eight days before

seeing the production. The training consisted of the following information: a 15-minute video about six surrealist painters; 18 slides of Magritte's paintings, including The Betrayal of Images; and a lecture/discussion on Magritte's techniques of using optical illusions, transfiguration, translocation, transformation of objects, and his penchant for painting bowler-hatted men. Regarding Magritte's life, children were told how Magritte's mother committed suicide by drowning; and the fact that authorities found her nightgown over head in the river may suggest the reason for Magritte's The Lovers with cloths over their heads. They were also told that Magritte worked in a wallpaper factory, and that he painted earnestly beginning at the age of 40.

College students (20%) heard one introductory lecture regarding the play from their college professor three days before the performance. The lecture consisted of the following information: Magritte's mother committed suicide when he was 12, and he later married Georgette. The theme of the play is that he "discovers he can do anything through the painting medium; that all things are possible and nothing is a pipe dream." Because the play deals with the nature of artistic illusion, it was used as a case study to begin this theatre course. Students were asked to look for mechanisms or signal systems to know when performers became different characters. The professor also showed 14 slides of Magritte's paintings, most of which were used in the production, and how they connected with perceptions of

reality. When viewing the production, students were asked to look for various "theatre language systems" (text, actorly behavior, scenic display, handling of props, sound, costumes, make-up, etc.) and how these convey meaning and the nature of this "fictive world."

After attending the play, college students discussed it during two more lectures two days before responding to the questionnaire. Some doubted whether a child audience could understand it, primarily for its fast pace of audio-visual media. They felt the theme, anything is possible, was obvious, though the subject matter was "awfully philosophical." The professor went on to discuss: "open and closed texts" which offer alternative perspectives or singular answers, respectively; the emotional and intellectual "baggage" audiences expect or bring with them to performances; and, "convergent and divergent thinking" where one looks for "closure" or no ambiguity versus creative, imaginative thinking, respectively. Essentially, the play becomes a "stimulator to ideas in your head. [Its] data is potentially available to make for closure. However, the possibilities can never be exhausted. [There is] much capability in the eye of the beholder, [as long as the viewer holds a] 'willing suspension of disbelief' (Coleridge) and avoids terminal closure."

Professor and students went on to discuss how the various "theatre languages" operated in the play: the "actorly behavior" showed performers "stepping in and out of Magritte's story;" the

lighting supported the "dropping out of the show" (Scene 4); the use of a script as prop; how the actor transformed from adult to child through costuming changes; and, how the Interlocutor was set apart from other performers by the use of a microphone.

Procedure

Eleven children from schools other than those of the formal study were interviewed as pilot subjects the day after the third dress rehearsal for 20 to 30 minutes (4 second graders, 4 fourth graders, 1 fifth grader, and 2 sixth graders). Eight interviewers (2 undergraduate theatre majors, 1 graduate theatre major, 4 graduate child development majors, and the principal investigator) were trained at this time in interviewing techniques and procedures. From this pilot study, the interview questions were reworded, edited, and finalized to a 15-minute time length.

Children in the present study were bussed from their respective schools to the auditorium (seating 1,188) for 1 p.m. matinee performances on three different days (Tuesday, Wednesday, and Thursday). (Special arrangements were made to include one second grade classroom from each of the three participating schools in addition to the fourth, fifth, and sixth graders for whom the production was intended.) All classrooms sat in the first 6 rows of the center front orchestra 10' to 22' from the downstage edge of the raised orchestra pit. Second graders were seated in the first rows, with fourth and sixth grade participating classrooms seated behind them respectively. (One

participating school insisted on having second and sixth graders paired in the first rows with fourth graders seated behind them.) Programs were distributed after the performance on the bus ride home or at school.

Since testing was not possible immediately following the performances, individual, 15-minute interviews were conducted on the day following the school's theatre attendance at the respective schools. At two of the participating schools, interviews were conducted in separate, quiet rooms free from distractions; while at the third school, interviews were conducted in three separate areas of the school's library. Each child was picked up from his or her classroom to begin an informal acquaintance and to seek the child's verbal assent to be questioned. All interviews were audio tape-recorded for later scoring purposes. After the interview, the child was thanked and escorted back to the classroom. (See Appendix 1 for the complete interview.)

Most college students attended the public performance (composed primarily of an adult audience) held on Saturday at 7 p.m., though a few attended earlier school matinee performances. Students were administered a written questionnaire (which duplicated the children's interview questions) by a graduate teaching assistant four days later without photo prompts. (See Appendix 2 for the questionnaire.)

Interview Materials

Eight color photographs of specific moments in the production were used as visual prompts for recall purposes in regard to theatre conventions. They were taken during each of the four dress rehearsals as best representations of specific theatre conventions and interview questions. Each shot visualized, as closely as possible, the size and perspective of the center front viewing experience. Care was taken to ensure that all necessary characters and scenery were included in each shot. Photographs were enlarged to 5 x 7 inches for easier detail recognition and with a matte finish to decrease finger printing marks. (See Appendix 3 for photographs used.)

Response Measures

The sequence of questions progressed from general ratings to more challenging recall of the whole play to more specific open-ended questions (cued recall) about particular moments in the play. Questions were ordered in such a way so as not to suggest answers to later questions earlier. To assist in recall, questions were asked in the chronological order in which moments occurred in the play.

1. Familiarization with Story

Subjects were asked whether or not they already knew the story before seeing the play to confirm their lack of pre-training or to help determine their opinions and knowledge about pre-training, as described above.

2. Enjoyment of the Play

Subjects were asked to rate enjoyment of the play on a 3-point scale in terms of other audience members in their same age group from another city to arrive at more objective opinions.

3. Understanding: Difficulty and Attribution

Subjects were asked to rate their personal opinions about the ease or difficulty in understanding this particular production on a 4-point scale and to explain their reasons for these ratings.

4. Perceived Reality

Subjects were asked to distinguish four categories of reality in the production by citing anything in the play that was "make-believe" (e.g., Mother's ghost), "actually real" (e.g., live actors), "realistic" (e.g., actors' expressed emotions), and "facts about René Magritte" (e.g., he became an artist). Each question was followed by the probe "How do you know?" to determine modal sources for each inference.

5. Theatre Conventions

Using photo prompts to assist recall (for children only), respondents were asked specific questions about the following theatre conventions used in the production to determine their understanding of these symbolic cues and representations:

- a. Dialogue - "What did this woman [the narrator] mean when she said a play is not real life?"

- b. Costumes (change from actor to character) - "What did it mean when this man [Vaughn/René] took off his jacket and bowler hat?"
- c. Sound - "What did it mean when you heard René's voice recorded over the loudspeakers?" (Subjects were first asked if they remembered hearing these recorded sounds. No photo prompt was used for this aural recall question.)
- d. Lighting - "Why did the lights flash on and off during this classroom scene?"
- e. Slide projections/Scenery - "Why were Magritte's paintings (pictures) projected on the screen during the whole play?" (No photo prompt was used for this question so as not to confuse subjects with any one specific slide.)
- f. Costume Prop - "Why did René's Mother wear a handkerchief (cloth, veil) on her face?"
- g. Character Objective or Actor's Movement - "What was René doing at the river?"
- h. Prop or Character's Gesture - "Why did René's Father give René his smoking pipe?"
- i. Staging - "Near the end of the play, why was René's Mother standing behind him when he was painting at the easel?"

6. Theme of the Play

Respondents were asked questions regarding the play's main ideas or themes in several different ways to test their integration and understanding of key thematic concepts intended

by the director and playwright. Such questions were ordered starting with the most global inference to more explicitly cued questions about possible main ideas. First, subjects were asked to infer the main idea as a whole, and then to infer what René Magritte learned at the end of the play. Both questions were probed by asking "How do you know?" to determine modal sources for these inferences. Next, subjects were asked to define the cliché term, "pipe dream," as a set up for the explicit main idea question stated in the play (i.e., "What did René mean when he said, 'If everything is possible, then there are no pipe dreams'?").

Coding and Data Analysis

This research rests on the constructivist or phenomenological view of reality; that is, we construct personal, divergent realities based on our perceptions of the world (phenomenon) and multiple intentions which cannot be judged for its "correctness." Bruner notes our post-modern revolution in science and philosophy which "has led us from concern with what we know to a preoccupation with how we know" (1986, 158-159). Therefore, when seeking to discover children's realities from emerging patterns in the data, a researcher must deconstruct this "worldmaking" and synthesize both deductive and inductive approaches in data reduction.

To this end, Julienne Ford (1975) proposes a retroductive (or deconstructive) approach to theory construction as "a creative art of composing fairy tales." As methods of data

reduction, "neither wholly invented nor wholly discovered, they are articulated as a result of deduction from more basic beliefs combined with induction from the worlds of appearances. They are neither exclusively a priori nor entirely a posteriori; they comprise a bricolage of seeings and believings, an abstraction of believings and seeings" (163). Measurement, then, becomes "the assignment of values to observations" (171). Other arts empiricists (e.g., Wild and Kuiken, 1992) have termed this approach a "numerically aided phenomenological method."

After transcribing audio tapes of children's interviews and adult questionnaires, each response was read, studied, and analyzed to determine emerging categories or types of answers. Responses were compared against the director's intentions and the indepth content analysis of explicit and implicit audio-visual features in the performance text.

When coding the four terms of reality, the Interlocutor's dialogue (i.e., "Play is not real life"), and attribution, this open-ended, inductive method resulted in the generation and emergence of six symbol systems or theatre conventions which were divided into two main dimensions: Theatrical PRODUCTION values included 1) Acting (i.e., live actors, actors playing characters, and metatheatrical actions), and 2) Spectacle (i.e., authentic and fake props, scenery, costumes, and sound/lighting/special effects). Dramatic SCRIPT values included 3) Fictive Play (i.e., characters' fictive actions created by the playwright), 4) Factual Story (i.e., enacted biographical facts about Magritte),

5) Fantasy (i.e., Mother's ghost after her reported death and indications that the respondent watched the play from René's dream perspective), and 6) the protagonist's goal or René's Objective to become an artist. Because René's superobjective constituted both the thematic spine of this fictional play and an integral fact about Magritte's story, these responses were kept separate as a distinct convention for statistical analysis. Likewise, the fantasy or imaginary conventions of Mother's supernatural ghost and René's dream-state were also kept separate for initial analysis, rather than including these aspects as fictional playwriting or acting conventions.

The same qualitative method was employed to generate eight categories of cues which resulted from asking "How do you know?" (cf., Klein 1987; Klein and Fitch 1989, 1990). These, too, were defined and collapsed into two main dimensions: Cues INSIDE the production's confines included 1) Visual and 2) Verbal/Aural cues which indicated explicit perceptual recognition from the production, while 3) Psychological cues were defined as implicit inferences from characters' thought processes. Knowledge from OUTSIDE the confines of the production was defined as 4) Social Realism (i.e., possible and impossible knowledge about people), 5) Theatre Context (e.g., regarding theatre or plays), 6) General Knowledge (i.e., about objects or Magritte), 7) Personal Experience, and 8) Training explicitly stated and gleaned from teachers. Each discrete category for both coding systems was

treated as a nominal variable and scored once when a subject used that category.

Responses for theatre conventions, thematic questions, and "pipe dream" definitions were treated as ordinal variables (ranked in terms of the director's conceptualized intentions) and coded once with an ordinal number. Main Idea, What René Learned, and What René Meant by his pipe dream dialogue were coded with the same ten categories which emerged from the data. Pipe dream definitions resulted in six emerging categories. Categories which emerged from theatre convention responses ranged from four to eight distinctive categories per question. Essentially, all coding of these variables ranged from (1) concrete and literal answers, heard or seen explicitly as given in the production, to (highest number) more abstract inferences which involved greater cognitive interpretation, analysis, and/or empathy (i.e., perceiving the play from René's dream perspective). In final data analysis, these variables were collapsed further as "accurate" and "inaccurate" responses. Demographic data and forced-choice questions were coded accordingly.

Descriptive and correlational analysis of the data were based upon the most frequent number of respondents who answered these primarily open-ended questions. Pearson correlations were run on all variables to determine linear relationships between variables. Chi-square analyses were run to determine developmental relationships among all frequencies for each discrete and combined variable. When running oneway ANOVAs

between grade levels and variables to determine significant developmental age differences, scores were converted into means (i.e., scores for collapsed variables were created by dividing by the total number of categories added into each collapsed variable). (See Appendix 4 for details regarding the coding methods used.)

Two independent raters were trained in this coding method by the principal investigator who served as a third rater. After clarifying definitions in the coding schemes and discussing disagreements, reliability ranged from 91% to 100%. (See Appendix 5.)

Results

General Opinions About the Play

a. Familiarity and Training

Second graders were not familiar with the play, and they received no training. Of fourth graders, 23 out of 33 received some training on Magritte's art from their art teachers; as did 16 out of 23 sixth graders. In sum, 50 children (45%) received no training, and 39 children and all 23 adults (55%) heard art or theatre lectures, as discussed above. Thus, more older than younger respondents received training ($r = .86, p < .001$).

b. Enjoyment of the Production

Of 111 respondents (1 college student did not answer), 45% said that their peers in another city would enjoy this play "a lot," 51% said "a little bit," and the remaining 4% said "not at all." Those who received training tended to rate peer enjoyment of the play higher ($r = .22, p < .01$). A oneway ANOVA revealed that adults differed significantly from 6th graders by rating peer enjoyment higher, $F(3,107) = 3.03, p < .05$ (see Appendix 6 for means). Table 2 below shows how more 2nd graders and adults reported higher enjoyment than 4th and 6th graders.

Table 2

Number and Percent of Respondents Who Rated Enjoyment by Grade

| | <u>2nd</u> | <u>4th</u> | <u>6th</u> | <u>Adult</u> | <u>Total</u> |
|--------------|------------|------------|------------|--------------|--------------|
| A lot | 17 (52%) | 13 (39%) | 5 (22%) | 15 (65%) | 50 (45%) |
| A little bit | 14 (42%) | 18 (55%) | 18 (78%) | 7 (30%) | 57 (51%) |
| Not at all | 2 (6%) | 2 (6%) | | | 4 (4%) |

c. Understanding and Attribution

When asked to rate the ease or difficulty in understanding this play, 37% rated it as "sort of easy," 32% as "sort of hard," 15% as both easy and hard, 11% as "real easy," and 5% as "real hard." Age groups appear to have rated their understanding proportionately across the scale, though older respondents who had more training rated the play easier to understand ($r = -.24$, $p < .01$; $r = -.34$, $p < .001$ respectively). Children were more divided about the ease or difficulty of this play than adults who tended more often to rate the play as "easy," and a oneway ANOVA revealed that adults differed significantly from 2nd and 6th graders in this regard, $F(3,107) = 3.70$, $p < .05$. (Note: one missing data from 4th grade.)

Table 3

Number and Percent of Respondents Who Rated Understanding by Grade

| | <u>2nd</u> | <u>4th</u> | <u>6th</u> | <u>Adult</u> | <u>Total</u> |
|--------------|------------|------------|------------|--------------|--------------|
| Real Easy | 1 | 3 | 2 | 6 | 12 (11%) |
| Sort of easy | 11 | 12 | 7 | 11 | 41 (37%) |
| EASY | (36%) | (46%) | (39%) | (74%) | (47%) |
| Both | 6 | 7 | 3 | 1 | 17 (15%) |
| Sort of Hard | 12 | 9 | 9 | 5 | 35 (32%) |
| Real Hard | 3 | 1 | 2 | | 6 (5%) |
| HARD | (46%) | (30%) | (48%) | (22%) | (37%) |

When asked why this play was easy or hard to understand, 17% (more younger than older) gave no reason ($r = -.26$, $p < .01$). The remaining offered overlapping responses dealing with various aspects about the script (60%) more than production values (40%).

In regard to the script, most responses (41%) attributed understanding to fictive and fantasy aspects of the whole play, René's actions, objective, and dreams, Father's objective, and the ghost. Acting (28%) and spectacle conventions (12%) were attributed less frequently. More older than younger respondents attributed their ease or difficulty in understanding to vocabulary or words, ideas about art in general, or the symbolic meanings and messages in the play (27%) ($r = .23, p < .01$), but with no significant relationship to training. As shown in Table 4 below, oneway ANOVAs revealed that adults differed significantly from children in regard to noting spectacle, especially scenery, [respectively $F(3,108) = 5.23, p < .01$; $4.50, p < .01$]; and in referring to the whole play, $F(3,108) = 4.33, p < .01$, in which there was a significant relationship here with college training ($r = .27, p < .01$). Adults also differed from 4th and 6th graders in attributing more production values, $F(3,108) = 3.56, p < .05$, and from 2nd graders in attributing more script values, $F(3,108) = 3.70, p < .05$. (See Appendix 6.)

Table 4

Means of Attributed Reasons for Understanding Play by Grade

| | <u>2nd</u> | | <u>4th</u> | | <u>6th</u> | | <u>Adult</u> | | <u>Total</u> | | <u>F(3,108)</u> |
|-------------------|------------|-----------|------------|-----------|------------|-----------|--------------|-----------|--------------|-----------|-----------------|
| | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | |
| <u>SCRIPT</u> | .07 | .09 | .12 | .12 | .11 | .10 | .16 | .06 | .11 | .10 | 3.70* |
| Whole Play | .15 | .36 | .09 | .29 | .13 | .34 | .44 | .51 | .19 | .39 | 4.33** |
| <u>PRODUCTION</u> | .11 | .14 | .08 | .15 | .12 | .15 | .22 | .22 | .13 | .17 | 3.56* |
| <u>SPECTACLE</u> | .05 | .15 | .03 | .12 | .04 | .14 | .22 | .33 | .08 | .20 | 5.23** |
| Scenery | .09 | .29 | .03 | .17 | .04 | .21 | .30 | .47 | .11 | .31 | 4.50** |

*p < .05 **p < .01

Attributions about the ease and/or difficulty in understanding this play reveal salient features of the script and production which caught children's attention and provoked reflection. In some cases, children's responses appear to mimic those of teachers who evaluated the play (see Teachers' Evaluations in Appendix 8). Many responses seem to contradict one another; that is, what appears "easy" to some becomes "hard" for others to make meaningful sense. The following quotations note grade levels and ratings of understanding, and the interviewer's questions or clarifications are noted [] where appropriate.

The episodic, non-linear, metatheatrical, or essentially non-traditional, structure of the whole "long ago" play and its title seemed to confuse 2nd graders in particular. Language arts curricula tend to teach "well-made forms" or linear stories which follow the main character from a clear beginning, middle, and end. Several children expressed difficulty in following this "different" structure, perhaps because non-linear stories are not part of their formal training:

I knew it was gonna be weird and I wouldn't understand because the name sounded silly. [2nd, sort of easy/hard]

I didn't know the story, so it was harder to understand. [2nd, sort of hard]

It was difficult. I never heard a story like that. It's different. [2nd, sort of hard]

I didn't know what was going on. Things kept coming in and then something would end. [2nd, real hard]

. . . It just seemed different and I wasn't really used to that. [4th, sort of easy]

Well, they like did all sorts of different stuff, and they changed it at times a lot, and it was a little confusing at times . . . Like when they were running around, like when he was in school and he couldn't find the answer or anything, and like when his mom died . . . [4th, sort of easy]

. . . One minute he would be there thinking, and then they'd pop up and do something, and then they'd forget . . . about that talk [referring to Scene 4]. . . . You just didn't know what was going to happen next. [6th, sort of hard] [Emphasis added]

There was depth to it, and it was not all fast. [6th, real easy]

Nothing was too complicated to understand. [6th, sort of easy]

The metatheatrical actions and explicit dialogue of the Interlocutor, in particular, appeared to make the play easy or hard to understand depending on children's acceptance of her non-traditional and non-realistic acting style. Some 2nd graders referred to the Interlocutor as "singing" her lines, perhaps because the character spoke into a hand-held microphone. Sixth graders seemed to find her explicit narration more helpful than harmful to their understanding:

Well, it was sort of easy by, you know, just sitting there and watching the play . . . and you would like just see that they were singing. That was kind of the easiest part to listen to. But . . . some people didn't want to sit down and watch it or nothing because some parts of it was boring. But I thought it was all interesting. It was fun to watch it. That was a fun part. [2nd, sort of easy]

One person didn't know what character the girl was. She kept on talking. She didn't know. [2nd, sort of hard]

When [that girl with the blond hair] was talking . . . and like singing . . . I couldn't understand what everybody was singing. [2nd, sort of hard]

That lady kept going back and forth. [2nd, sort of hard]

The people. How they moved . . . jumping and walking and going around the circle. [2nd, sort of hard]

They were dancing and talking weird. [2nd, sort of hard]

. . . You could tell what they were talking about, but then what made it like hard to understand was--I mean, there was a lot of kind of nonsense stuff in it. [4th, sort of easy/hard]

They kept doing the same thing over and over, and the woman told about the play. [6th, real easy]

The lady with the microphone often told what was going on. [6th, sort of easy]

The narrator girl did a lot of intervening which helped. [6th, sort of easy]

It was really confusing because the Interlocutor, whatever you call it, was always talking and then I didn't understand. I didn't know if she was like his conscience or what. [I think she was. I think you're right. What gave you the idea that she might be René's conscience?] Because he was like the only one that could hear her and all that. [So why did that make that really hard to understand--that she was his conscience?] Well, see, instead of saying, "conscience," they put some big--I mean, "conscience" is kind of a big word, but like "locutor," however you pronounce that--[Yeah, you're saying it right.]--was on there, and not many people know what that is at the age of 6th grade, and that also goes for 4th and 5th. [So you don't know what "Interlocutor" means, but you got the idea that she was René's conscience, right?] Yeah, because she was all dressed in black, and she was like always talking . . . [6th, real hard]

[Note: Later this child perceived the Interlocutor to be "make-believe" because "your conscience isn't really a person."]

This "surrealistic," dream-like nature of the production's style and the Interlocutor's role as "René's conscience" further affected some ratings and interpretations as well:

It was pretty easy. The only thing that was hard was probably knowing what was real life and what was his dreams or what was his thoughts. . . . [4th, sort of hard]

[She also noted that, "I think other 4th graders would like it because it teaches you a lot. Lots of kids in our class had definite ideas. I think most of them liked it . . ."]

If you weren't listening, you might miss something. Like dreaming about being artist--if you missed this, you might not get the play. [6th, sort of easy/hard]

Older children appeared to confuse their ratings and attributions with their seeming empathy with René's confusion and struggles in becoming an artist. The play became "confusing" and "hard to understand" because older children couldn't understand why René's father would not allow his son to become an artist. This key obstacle and some of René's actions (e.g., playing in graveyards) went against their sense of social realism. These children tended to attribute their confusion to the "acting," but they had a difficult time separating and defining the actors' performance style from the script's content. In contrast, some 4th graders found the acting and "live people" to be "clear" and easy to understand. This subjective analysis may help to explain why children rated the play "easy and/or hard" to understand:

I don't think 2nd graders would of understood the play. . . . Well, it was talking about . . . someone who really didn't know what to do if he was an artist and his father was really against it. . . . I mean, even though they explain everything in the play, it's kind of hard to understand the acting, and I'm not sure why. [4th, sort of hard]

Well, the part that made it easy for me to understand was that it was a story about a kid who felt like he wanted to be a famous artist, but his father kept saying, "This is not a pipe dream." That made it easy for me to understand. [4th, sort of easy]
 [Note: Ironically, this child did not know the definition of "pipe dream."]

Well, that the boy wanted to be an artist but his father wouldn't let him be . . . [4th, sort of easy]

Well, the play was very interesting, but it was kind of hard to follow; but I just didn't really get the play. . . . Well, it was just like the way the people were acting, and the father didn't want him to paint, and I don't know why. [6th, sort of hard]

. . . They said that it was supposed to be about a painter, but it was really about how he grew up and how he wanted to be a painter. . . . Well, I can't really explain it, but it's like how they were acting with all the other people--how he acted and what kinds of things he did. . . . Like he would go to the graveyard . . . or he'd go to the fair, and then he was like not very nice to his father and that kind of stuff. [6th, sort of hard]

Older children who had been trained on Magritte's life by their art teachers expected the play to answer the reason why René's mother committed suicide. Those who thought in literal ways did not accept the non-realistic portrayal of Mother's death:

It was confusing why the mom killed herself and why the dad didn't let him be an artist. [4th, sort of hard]

Since our art teacher told us; but I didn't get when the mother was walking around because she was dead. [4th, sort of easy]

His mom came back. [6th, sort of hard]

It doesn't tell how his mom died. [6th, sort of easy/hard]

Some children attributed their ease or lack of understanding to "art" in general, perhaps as a reflection of society's attitudes about visual art:

Art and things about art were sort of hard to understand. [2nd, sort of hard]

. . . It was about art and [his art], and he wanted to be a painter, and that's about it. [4th, sort of easy]

Well, they told you a lot about what the man was about and that's it. [4th, sort of easy]

I didn't understand about the pipe. [4th, real hard]

. . . You kind of had to be into art if you wanted to [understand it]. [6th, sort of hard]

Many children mentioned "words" as an attributable reason, but there was wide disagreement over whether the words made the play easy or hard to understand. Children's sensitivity to unfamiliar vocabulary words may also reflect the "easy or hard" emphasis placed on this language arts area by their teachers in schools:

Well, just the actions made me think about the play, but the words were kind of hard to understand, so I just went with the flow. [2nd, sort easy/hard]
[Emphasis added]

[The words] were kind of boring. [2nd, real hard]

[I] can't understand all the French words. [2nd, sort of easy/hard]

It's because they were talking. . . . Like when his dad said, "When I say this is underwear, then this is underwear." That's easy to understand. [2nd, sort of easy]

The parts they acted, and stuff that didn't mean what it really meant. [6th, real hard]

Well, they didn't really use like really long words. [6th, sort of easy]

Children who focused on the physical stage reality of the production in a more literal sense rated their understanding accordingly depending on whether or not they understood or accepted theatre conventions. For example, the center box either confused 2nd graders as a mystery or intrigued them as "magic," while another used the scenic projections of Magritte's art to help make sense of the story:

Because people were coming out of that white thing [center box]. We don't know why they were coming out. [2nd, sort of hard]

. . . Was there a hole under that [center box]? [Yeah, there was a hole behind it.] Because I was wondering how they got under there. So we won't see you! We thought it was magic! They thought that we would think that was magic. [2nd, sort of easy]

[The] projector gave me ideas about the story. [2nd, sort of easy]

Again, the lack of authentic realism in props and sound effects confused some 4th grade literal thinkers:

Like when his dad wouldn't let him be a artist? And when he had that paintbrush, he didn't have any paint? I didn't know how he could paint without paint. [4th, sort of hard]

It was hard because when you hear noises, like the egg, birds don't cheep before they hatch. [4th, sort of easy/hard]

One 6th grader was particularly bothered by the fact that the scenery did not change to represent each brand-new, textual setting realistically, as he seems to expect the function of scenery to do. Though he followed and understood changes in the setting by the actors' subtle visual movements, he argued that this production factor made the play "sort of hard" to

understand. (Ironically, his preference for the scenic style in Charlotte's Web suggests his greater acceptance of minimalist expressionism when he was a 4th grader. The setting here was also highly non-representational with one round, revolving and raked, central unit to suggest both Wilbur's home in Zuckerman's barn and his stall at the fair. Perhaps this child means to recall the more spectacular changes of Charlotte's cat walk-bridge in the barn, which extended the length of the stage, to the colorful pennants which descended from battens above for the fair scene.):

. . . Because they stay in the same place. They didn't really have different scenes. They just changed them a little bit. So they didn't really change scenes that much when they went to different places, because they would just move over a little bit, and they would be somewhere else. . . . They were pretending like they were somewhere else. . . . It was hard to follow because then they'd take a couple more steps and they were in different places. [So you knew they were in a different place?] Yeah, but it was kind of hard to follow. I like Charlotte's Web where they had that turning thing where they showed the different scenes. . . [6th, sort of hard]

In contrast to children's ratings, more adults rated the play "easy" to understand, and their written reasons show how their attributions both counter children's reasoning above, sometimes in opposite ways, and reflect their pre-performance training:

The plot was simple. We can easily see the points being made because they were repeated several times.

The play was performed very differently. It did not seem to tie together until the very end. Even at the end it seemed almost like two different plays.

There were two levels of this play to understand: the plot and the deep meaning. The plot was easy to understand, and the meaning was not hard as long as you looked for it.

It was straight forward. There did not seem to be too many hidden messages. A lot more interesting than expected, with some light moments.

It didn't really have any real mysteries. It was just about a boy who was confused about what to do w/his life and confused about reality.

Some of the details were a bit surreal.

I felt that it was on more than one level but I feel that the play followed what was learned in Theatre 100 class. I also felt it was more appropriate for us because of this.

It was explained throughout the play by the Interlocutor and the actors/characters. I felt the views about the alternate vs. real world were very interesting. I'm a very disjunctive thinker, so the open text thinking was very new and refreshing to me.

The narrator and some knowledge of Magritte's life.

It wasn't too difficult of a story and also the narrator and the other actors made it real easy.

The narrator helped--she acted as a "road-map." Thought-provoking--I didn't like the scarf effect on the dead mother. It was too morbid for my personal taste. The play was more on a upbeat fun atmosphere and the start seemed out of place.

The main point was easy, but the suicide and slides were sometimes hard to understand (if I hadn't seen it before). OK--not my favorite. I like deeper, longer plays. Not real child-based--too strong for small children, but not enough for adults.

The montage of pictures and sound made it easy to understand the message being relayed.

The combination of slides with dialog. Perhaps I attributed more symbolization than intended.

Costumes, lights, decor, etc. made the performance very clear.

Those adults who rated the play "sort of hard" to understand provided reasons which point up the audience's need to invest mental effort in order to understand the many symbolic levels which this play offered:

If you took into account all that was going on on stage and thought about it, some understanding was possible. But I did think about it quite a lot.

It made me think and analyze the actions being played on stage to my experiences in the past. I felt that the play was trying to portray the idea of following your dreams, no matter what obstacles you encounter.

The balancing of what is real and subjectivity. Stimulated my thought processes.

The way the pictures were incorporated and the change of characters. The artist is someone I have studied and I understood the meanings behind pictures.
[Illustration major]

The masks on apples; stone on painting; people popping up and down out of window. This play was OK but it was confusing in some parts.

Too much symbolism.

Perceived Reality and How They Knew

When respondents were asked to identify various terms of reality in the play, answers reflected diverse personal meanings for the words "make-believe" (or "not real"), "actually real," "realistic" (or "seemed like it was real"), and "facts about Magritte." While developmental age differences are the primary concern, results are reported according to respondents' perceived definitions for each of the four reality terms (grouped together into semiotic conventions divided by production and script) and how each age group judged perceived reality (grouped by inside production cues and outside knowledge). Statistically significant age differences are reported in abbreviated tables within each section, and other tables for each section are located in Appendix 6.

The narrative quotes which follow contain the interviewer's prompted questions only when needed for clarification purposes. Note that throughout the interviews, some children confused Rene with the Interlocutor for his name. Interviewers clarified these distinctions as needed to be sure of the characters being discussed. For example, one 2nd grade boy volunteered:

You know what my friend said? He said that, "Is his real name René?" [What do you think?] Yeah. [You think it is?] No. [His real name is Vaughn.] My friend, she's a girl. She said, "That's a girl's name." (Child stated with a strong inflection.) [René is a French name. In English, you say Rene.]

a. "Make-Believe" Aspects and How They Knew

When asked what was "make-believe" or "not real" in the play, respondents interpreted "make-believe" as meaning several things: Mother's fantastical ghost character; René's dream-like ability to fantasize; socially unrealistic or implausible character behaviors; seemingly impossible or magical actions performed by actors; inauthentic-looking, unrealistic, or magical spectacle elements such as props, scenery, sound and special effects; and the entire theatrical event which portrayed a fictive world of live actors performing as fictional, though historically based, characters.

When combining conventions, respondents focused primarily on René's Mother as a ghost (38%), metatheatrical actions (28%), inauthentic or fake props (26%), the scenery (20%), and sound or special effects (17%). Spectacle conventions accounted for 40% of the total responses, acting conventions 24%, fantasy conventions 23%, and fictive and factual story conventions 13%. Few respondents (5%) did not know or report any make-believe aspects.

When asked how they knew these aspects were make-believe, 40% of the total responses involved visual cues, 23% relied on social realism (or the knowledge that make-believe things can't happen in real life), and 16% used aural and verbal cues. Fantasy aspects of both Mother's ghost and René's dreaming were known to be make-believe primarily by what René said and thought (both $r = .28$, $p < .01$) and by their lack of social realism ($r =$

.39, $p < .001$). Total spectacle conventions, recalled by males more than females ($r = -.29$, $p < .01$), were perceived as make-believe from combined visual cues ($r = .28$, $p < .01$). Total acting conventions were make-believe from the ensemble's general actions ($r = .26$, $p < .01$) and the context of theatre ($r = .34$, $p < .001$). Fictional aspects of the play script, recalled by more older than younger respondents ($r = .22$, $p < .01$), were known to be make-believe primarily from René's actions ($r = .39$, $p < .001$). Table 5 below shows significant age differences in what and how groups judged "make-believe" conventions.

Table 5

Significant Mean Age Differences for "Make-Believe" Conventions and Cues

| | <u>2nd</u> | | <u>4th</u> | | <u>6th</u> | | <u>Adult</u> | | <u>X</u> | <u>SD</u> | <u>F(3,108)</u> |
|----------------------|------------|-----------|------------|-----------|------------|-----------|--------------|-----------|----------|-----------|-----------------|
| | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | | | |
| <u>SCRIPT</u> | .08 | .13 | .12 | .12 | .14 | .10 | .08 | .10 | .11 | .11 | |
| Ghost | .33 | .48 | .42 | .50 | .52 | .51 | .13 | .34 | .36 | .48 | 2.99* |
| Whole Play | .03 | .17 | .06 | .24 | | | .35 | .49 | .11 | .30 | 8.27**** |
| <u>PRODUCTION</u> | .13 | .12 | .19 | .15 | .14 | .16 | .19 | .13 | .16 | .14 | |
| Scenery | .09 | .29 | .36 | .49 | .22 | .42 | .09 | .29 | .20 | .40 | 3.52* |
| Sound/Lights | .03 | .17 | .15 | .36 | .13 | .34 | .44 | .51 | .17 | .38 | 6.16*** |
| <u>IN CUES</u> | .12 | .12 | .13 | .13 | .05 | .08 | .06 | .07 | .10 | .11 | 4.22** |
| Visual | .19 | .17 | .20 | .22 | .10 | .15 | .08 | .14 | .15 | .18 | 3.76** |
| Appearances | .52 | .51 | .39 | .50 | .30 | .47 | .17 | .39 | .37 | .48 | 2.51* |
| <u>OUT KNOWLEDGE</u> | .06 | .09 | .18 | .16 | .18 | .17 | .12 | .10 | .13 | .14 | 5.71*** |
| Soc Realism | .27 | .45 | .55 | .51 | .52 | .51 | .04 | .21 | .36 | .48 | 7.21*** |
| Th Context | | | .12 | .33 | .13 | .34 | .30 | .47 | .13 | .33 | 4.12** |
| Gen Knowledge | | | .12 | .33 | .22 | .42 | .09 | .29 | .10 | .30 | 2.59* |

*p <.05 **p <.01 ***p <.001 ****p <.0001

As shown above, children reported the ghost more than adults, primarily for her lack of social realism ($r = .38$, $p < .001$). Adults differed most from 6th graders in reporting the ghost, $F(3,108) = 2.99$, $p < .05$; while 4th and 6th graders differed most from 2nd graders and adults in noting social impossibilities. Adults found the whole play and sound and lighting effects more "make-believe" or unrealistic than

children, [respectively, $F(3,108) = 8.27, p < .0001$; $6.16, p < .001$]. Fourth graders differed from second graders and adults in pointing out how the scenery was unrealistic, $F(3,108) = 3.52, p < .05$.

More 2nd and 4th graders than older viewers, tended to rely on all available visual cues, $F(3,108) = 3.76, p < .01$, with 2nd graders differing most from adults in their use of visual appearances, $F(3,108) = 2.51, p < .05$. Sixth graders applied more outside general knowledge about objects than second graders who didn't use this category at all, $F(3,108) = 2.59, p < .05$. Likewise, adults tended to note the theatrical context, $F(3,108) = 4.12, p < .01$, more than 2nd graders who either assumed or ignored it. What follows is a detailed report of what respondents perceived and how they knew make-believe aspects in the play.

Five percent of the respondents (mostly 8 trained adults) noted how the whole play was make-believe ($r = .31, p < .001$), and they were less likely to rely on visual appearances ($r = -.25, p < .01$):

[Everything] was just kind of hard to believe. [2nd]

They already told you it was just a play, and plays are make-believe. [4th]

The whole story was some make-believe. . . . I don't think it was a true story. [4th]

Everything is possible on stage; everything that happens there is reality. [adult]

Everything, the actors were creating an alternate reality where nothing is real. [adult]

The whole play was "not real," and I had the feeling of looking into a crystal ball, yet the narrator kept bringing me back to reality. [adult]

The entire play was a cross between make-believe and reality much like Magritte's work, while everything that exists by itself in the play in reality. Many were combined in a not real way. [adult]

Everything was real given the context. By juxtaposing the "make-believe" with my view of realism. [adult]

Mother's ghost appeared to be the most salient make-believe or fantasy aspect of the play for 38%, largely because ghosts do not exist in real life ($r = .38, p < .001$) and other symbolic visual cues:

Because when people die they don't have things on their heads and walk around talking with their arms out. [2nd]

[T]here was no way, I mean, you could talk to a ghost. [2nd]

Because nobody can come back to life. It's just a body. [4th]

Well, we know that ghosts aren't real, and you really see someone with a thing over their head and walking real slow. [4th]

Because people don't walk around when they're dead still. [6th]

Because usually you don't see them when they're dead. [6th]

Well, there's no such thing as ghosts. They wouldn't have a live ghost on stage, and you wouldn't see her face through the cloth. You could see her face. [6th]

When people are dead, they just lie in a coffin. [6th]

Mother's ghost and the Interlocutor were also tied into René's dreaming or imagining their presences. In fact, 5 of these respondents cited René's dream-state or nightmares in

particular--known by his visual actions ($r = .37$, $p < .001$),
 dialogue and thoughts (both $r = .30$, $p < .001$):

Because the [Interlocutor] was like talking to us, but she was talking to the boy, man, too, so it was kind of like she was make-believe, but she was talking to us at the same time. So it was kind of an illusion. [How do you know the Mother was make-believe?] He thought of her and he thought she was walking around. He was imagining that she was there walking around. [4th]

[What made the Interlocutor make-believe?] Well, usually if you're trying to make someone invisible, you dress them in black or something. . . . You see, only René could hear her, and so it must have been his conscience, and your conscience isn't really a person. [6th]

I like the part when he was dreaming and then he got up and he said, "Mom! Mom!" (with strong inflections). [2nd]

[T]hat funny dream that that boy had. That dream was really weird. He would like just run around and stuff, and then he would have those dreams. That was weird. I didn't understand that part very much. I was like, "Huh? What do you mean?" Because his mother was walking around. Like she came out of that thing, and said, "It's not a pipe dream. It's not a pipe dream." And then she went in there and then they saw her through that window. And he tried to run. And then-- it was sort of fun and sort of weird. [2nd]

He had that dream about the woman and stuff. I mean, because they could never know what his dream was like unless he told somebody. [4th]

The supernatural part--that wasn't true. . . . I've read in books, when you're dead, you're dead. Your heart stops, and you just don't come back. [6th]

He saw his mother all the time. [How do you know that was make-believe?] Because you can't see someone walking around with their face covered when they're dead. [4th]

That his mother's ghost would keep coming to him every time he thought of something. [How do you know that was make-believe?] Because it doesn't really happen. [4th]

The boy saw his mother . . . when after she died. He was sad and so she started to show up. . . . I've had a grandfather die and he didn't come and show up to me. [4th]

The symbolic depiction of Mother's death proved troublesome for some literal-minded youngsters who weren't sure whether or not his Mother had died, because "she was still walking" [2nd]:

The mother that, she died down by the lake. [How do you know that was make-believe?] Because the mother came back to the boy a couple days ago. [2nd]

When she pretended when she died. Because you could see her. You could see her hair up in a bun and the cloth was over her face. [2nd]

Because she was walking around and everything, with a towel on her head, whatever it was. Then at the end, she was alive. She was alive still. [4th]

[How do you know that was make-believe that the lady was dead?] Because . . . you see she was walking around with a mask on her face, and I don't think she was dead. . . . Because you can't be dead and still walk. Because you'd have to be a robot--you made a robot and made a control. [4th]

[Referring to René's nightmare seeing his mother rise from the crypt] . . . But it wasn't his mother. . . . It was someone else, but it might have been his mother, but it wasn't supposed to be playing his mother." [4th]

The way that his mom came back alive. . . . Because his dad [said] she drowned in the river. [6th]

Metatheatrical actions, or those actions and gestures performed by the Interlocutor and the ensemble apart from René's story, were also discussed by many (28%) as make-believe aspects. Some cited the action of hitting one another on the head with styrofoam pipes, or the Interlocutor trying to chew a "rock" with the sound effect of a bite into an apple: "Because she, can't

nobody bite a rock. All her teeth would be laying on the ground" [6th]. Others noted how the actors came out of the center box as if by magic:

Because I've never seen a box like that--that could do that. [2nd]

Because when they got in the box, and they would come out like in a different spot. [4th]

Because [they] can't be invisible. [4th]

Because it's kind of impossible, because once you see them in there and the next thing you know, there's a different person in there. [4th]

I don't think people do that. I mean, I don't go popping my head out. [4th]

Magic scarf and ball tricks were considered make-believe, and some children perceived the fire-eating as such (even though the actor actually swallowed real fire!):

He just put [the fire] on the side. [2nd]

Because I know that nobody could really do that. [4th]

Because nobody couldn't put fire down their throat. [6th]

Scene 4, where the actors purposefully broke character and argued over the script, was also mentioned:

The most thing that made it more unbelievable is when all these lights came on and . . . everybody was shouting at each other and the Narrator was just saying some stuff. . . . I mean, I think that was part of the acting thing. And also I don't think two people who didn't know each other would fight about it. Something just isn't right. [4th]

The introduction of the play appeared make-believe because the windows seemed to open by themselves "magically," and the ensemble's heads and arms popped out of the windows in

fantastical ways:

It was in a way real because I could see that if two arms were up, you couldn't have an extra pair of arms to pull them down. [4th]

Inauthentic or fake props were noted frequently by 26%, especially boys ($r = -.24$, $p < .01$), partly from the Interlocutor's dialogue ($r = .25$, $p < .01$); especially the styrofoam-constructed objects used in connection with metatheatrical actions (i.e., the long pipes used for hitting one another). The styrofoam stone which was velcroed to the painting on the easel was make-believe, "Because . . . a rock is just a stone. You can't just put it on a painting. At least if it was a pebble, you could" [2nd]. The styrofoam boulder which was lifted as if it were heavy was fake, but then "That's kind of hard, I bet, to find something that looked near" [6th]:

Nobody could make a rock float in thin air that weighs at least 110 pounds. [2nd]

Because a rock's too heavy to stay in the air. If we didn't have gravity . . . but there's no way a rock could float in the air on earth. [4th]

However, some authentic props were also deemed make-believe by 8% of the respondents. For example, the oversized scissors were "fake because when he tried to cut up the paper, they bend" [2nd], and "They didn't have sharp blades and were plastic and they were really big" [4th]. "Underwear" hats were make-believe "Because nobody would call their hat 'underwear'" [2nd], as were René's paintings on the easel "Because there were no paints and all he just had was a brush" [2nd].

In fact, 10% found René's actions make-believe, especially his painting at the easel:

Because . . . he had it [the easel] turned towards him so you couldn't really tell. But I could sort of tell, but he wasn't putting the paintbrush right on the picture. And there weren't no paints there. So how was he going to paint a picture? He could have put the thing on the thing, but there wasn't any paint or water. So, he couldn't paint a picture, because the picture was already there, too. [2nd]

I draw a lot of art and it takes me a long time to draw it, and it only took them like five minutes. [4th]

It didn't show what he was drawing. [6th]

Some aspects of the scenery were perceived as make-believe by 20% from visual appearances ($r = .23, p < .01$). One 2nd grader thought the whole back wall was real, except for the large, central muslin-covered window, and another perceived the smaller side windows as make-believe "Because they opened" (seemingly by themselves in the introduction). Some thought the projected slides of Magritte's paintings were "not real" because they were "projected" "on cloth" [4th], while others focused on all or specific paintings by Magritte:

[The pipe] looked like a toy. [2nd]

His paintings . . . were of real things in a different way. [4th]

They were kind of put apart together or put out of place. [4th]

Some of the paintings he drew. Because some of the objects he was drawing seemed a little bit strange for somebody to draw. [4th]

Again, the center box drew attention, in part "Because the box did not look like a bed or coffin, and it never changed" [adult], and "The bed couldn't open" [4th]:

[When they were coming out of the box] That didn't seem real because you can't--it was like his bed, and it was his box, and the box was like a lot of stuff. Like it was what the ghost came out of. [4th]

Two children associated the box with their disbelief over the biographical fact that Magritte played in graveyards as a child ($r = .27, p < .01$):

Like the bed he slept on had that trap door right under it, and then they would go to the graveyard and get in the coffins. . . . Well, you know, people usually don't go down there and go through steel trap doors and graveyards unless they work there for some odd reason like that. [6th]

Well, I mean, the fact that, like he played in graves. . . . No one would like really play in a grave, not that I know of. [4th]

Sound effects, known to be make-believe from viewers seeing the Stage Manager making these sounds ($r = .31, p < .001$), and special effects were noted by 17% of the respondents, more adults than children ($r = .34, p < .001$). The film of running water symbolized the river, together with the recorded sound of running water and blue gobos which turned from the back of the house orchestra:

The river . . . because I turned around . . . and there was something--it was going around on one of the lights, and it made it look like there was a river, but it wasn't really a river. You could tell. At first I thought it was rain, but then I looked at it real careful and [I] can't believe it was a river. [4th]

The waterfall was coming down. . . . Because if it was [real], the water would be coming out through the side of the rock, and water would be all over the place. [4th]

The water--where he bent down and he was pretending he was getting water. [6th]

The rain . . . because I thought if it was raining out, you would be wet. [4th]

Actors (4%) were considered both "make-believe" and "actually real" by one 2nd grader by "How they talk, how they move, and how they dress. Because when they're pretend, their feet don't move, and when they're real, their feet move." The convention of acting was also perceived as make-believe by 11%, for its theatre context ($r = .48, p < .001$):

Because the real people lived a long, long time ago. [4th]

He's not really René. . . . I knew that these were college students. [4th]

In addition to the "make-believe" actions performed by René cited above, one 2nd grader discussed the climatic scene when René was chased by two men and he threw their hats (calling them "underwear"), jumped inside the box, and pulled two potatoes from behind his ears, "because there wouldn't be no such thing as potatoes coming out behind your ears." Others noted the scene when René was above the wall unit looking down to the river:

When he climbed up in the thin air and he dropped down. Because I could see his shadow [2nd]

He got up on top of something, but he used a ladder, but it was behind the curtain so you couldn't see the water. [4th]

In real life, people can't be suddenly stuck in the air. [6th]

b. "Actually Real" Aspects and How They Knew

When asked what was "actually real" in the play (immediately after "make-believe" for contrast), again, respondents' interpretations of the words "actually real" point up diverse meanings and perceptions of staged reality. For many, "actually real" meant the actual existence and empirically proven, visual appearances of live people and concrete, tangible objects on stage. For example, second graders focused on authentic props twice as much as fourth graders, while all groups noted living actors rather proportionately. For others, "actually real" meant socially realistic characters, actions, and motivations with perceived similarities and relevance; all of which could (or did) happen in real life, known from personal observations and experiences, or those true-to-life aspects which contrasted against René's dream-state. Older respondents applied "actually real" interpretations to the play as a biographical, historically accurate, and therefore factual and truthful, account of René's life story; in part, because their teachers had told and trained them on this factual knowledge. Though part fact and fiction in nature, fourth and sixth graders and adults perceived many fictional play aspects as "actually real" over three times as much as second graders; while children (but no adults) found René's pipe dream of becoming an artist "actually real" because he did, in fact, become an artist.

When combining each convention, 30% of the respondents cited live actors, along with authentic props (19%), scenery (18%),

costumes (12%), and René's superobjective to become an artist (17%). Story or playwriting conventions accounted for 38% of the total responses, spectacle conventions 32%, and acting conventions 30%. Again, some respondents (8%) found the whole play to be "actually real," and one adult labeled René's dream in this way because "Magritte lived it." Few (4%) respondents did not know or report such aspects.

When asked how they knew reported play aspects were "actually real," 22% of the total responses involved visual cues and 20% were aural/verbal cues. General knowledge (15%), theatre context (13%), and social realism (10%) were also relied upon as bases to a lesser extent. [Note: 41% of the respondents, mostly younger children ($r = -.25, p < .01$), were not asked how they knew some reported aspects were "actually real;" especially when pertaining to live actors or real people, for obvious reasons.] More older than younger respondents knew these aspects to be "actually real" primarily from hearing sound effects ($r = .25, p < .01$), from their general knowledge of objects or Magritte ($r = .20, p < .01$), and from the theatre context ($r = .32, p < .001$).

[As will be discussed more fully later, three second graders cited four spectacle and acting aspects when asked for "facts about Magritte." For the purposes of statistical analysis, these responses were combined with "actually real" aspects.] Total spectacle conventions were perceived as "actually real" primarily from the ensemble's visualized actions ($r = .25, p < .01$); and total acting conventions were judged real primarily from visual

appearances ($r = .24, p < .01$) and from the theatre context ($r = .38, p < .001$). René's superobjective was known to be real from training ($r = .29, p < .01$), yet it was also considered socially unrealistic ($r = .33, p < .001$). However, other fictive aspects of René's story were deemed "actually real" based on social realism (or possibilities) ($r = .25, p < .01$) and René's thoughts ($r = .31, p < .001$). Table 6 indicates a summary of significant age differences in how groups judged "actually real" conventions.

Table 6

Significant Mean Age Differences for "Actually Real" Conventions and Cues

| | <u>2nd</u> | | <u>4th</u> | | <u>6th</u> | | <u>Adult</u> | | <u>X</u> | <u>SD</u> | <u>F(3,108)</u> |
|----------------------|------------|-----------|------------|-----------|------------|-----------|--------------|-----------|----------|-----------|-----------------|
| | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | | | |
| <u>SCRIPT</u> | .03 | .05 | .07 | .09 | .10 | .11 | .04 | .05 | .06 | .08 | 4.28** |
| R Objective | .18 | .39 | .15 | .36 | .35 | .49 | | | .17 | .38 | 3.53* |
| Mother Died | | | .18 | .39 | .13 | .34 | .04 | .21 | .09 | .29 | 2.69* |
| R child facts | | | | | .13 | .34 | | | .03 | .16 | .29** |
| <u>PRODUCTION</u> | .14 | .15 | .15 | .14 | .12 | .13 | .12 | .10 | .14 | .13 | |
| Live actors | .27 | .45 | .30 | .47 | .26 | .45 | .35 | .49 | .30 | .46 | |
| <u>IN CUES</u> | .05 | .10 | .06 | .08 | .02 | .04 | .03 | .05 | .04 | .08 | |
| <u>OUT KNOWLEDGE</u> | .07 | .06 | .07 | .10 | .08 | .10 | .12 | .09 | .07 | .09 | 6.48*** |
| Th Context | | | .09 | .29 | .09 | .29 | .30 | .47 | .11 | .31 | 4.93** |
| Gen Knowledge | .06 | .24 | .12 | .33 | .04 | .21 | .30 | .47 | .13 | .33 | 3.31* |
| Soc Realism | | | | | | | | | | | |
| Possible | .03 | .17 | .03 | .17 | .22 | .42 | .04 | .21 | .07 | .26 | 3.28* |
| Impossible | | | .03 | .17 | | | | | <.01 | .10 | |
| (Didn't ask) | .52 | .51 | .30 | .47 | .44 | .51 | .13 | .34 | .36 | .48 | 3.44* |

*p < .05 **p < .01 ***p < .001

As Table 6 shows, mention of live actors was fairly well distributed. Children, especially 6th graders, considered René's objective to become an artist to be "actually real" more than adults, $F(3,108) = 3.53, p < .05$. Sixth graders also pointed out factual aspects of René's childhood over others, $F(3,108) = 4.29, p < .05$; and fourth graders noted Mother's death over 2nd graders who hadn't received training on this fact, $F(3,108) = 2.69, p < .05$.

Visual and verbal cues held fairly equal importance among groups. Sixth graders focused most on social realistic actions over other age groups, $F(3,108) = 3.28, p < .05$, while adults took the theatre context and their general knowledge into greater account than did children (respectively, $F(3,108) = 4.93, p < .001$; $3.31, p < .05$). What follows is a detailed narrative report of how conventions were judged in various ways.

Those (8%) who perceived the whole play to be "actually real" used various meanings and bases of the term:

The story. Because they said it was. [2nd]

Because, at the beginning, [the Interlocutor] said-- like this was like kind of based on a true story about a guy that wanted to become an artist, and he ended up being an artist. [6th]

Well, I think the whole play was sort of real, because it could have happened, and it probably didn't, except they wouldn't have really--it probably didn't happen that quick. And, you know, in the parts where he was in a frenzy, it did happen like that. When his dad and the Teacher were running around, and that probably never happened. [6th]

The story of René's life and things he experienced. [How do you know this is "actually real"?] I don't. It was portrayed that way. [adult]

Actors or "the people" (with no mention of their actions) were considered "actually real" by 30% of the respondents. Acting or performing actions was cited by 5%, known primarily for its theatre context ($r = .30, p < .001$). Not until 4th grade did children appear to start differentiating actors from characters, made explicit in the play by the interlocutor's dialogue (p. 5), though both could be perceived as "actually real":

Well, dads are real and moms are real. [2nd]

The actors. . . . Because if they wasn't real, they wouldn't be walking. [4th]

His father, his mother Because they showed like realness, and they showed they were real people, and that it was a play. [4th]

The people. And the characters, like René, wasn't real, but the man who played René was real. René wasn't real. . . . See, it'd be like at that time, he wasn't real. Because if it said it was going to be a play, it had to be characters. That's what a play is all about. [4th]

The people were real but they weren't the real people that were in the play. [How do you know that?] Well, because I've heard about him [René] a little sometimes, and it just seemed real that he would be a painter since he painted and stuff like that. [4th]

Well, how they acted . . . [and] how they reacted. [4th]

And there weren't like a puppet playing there, so the people were real. [6th]

People. What they d'1 and stuff. Because you could see other people do it. And if you went home, then you could try it. You could follow it if you practiced. [6th]

The people were real only not the character they played. [adult]

The humans and the stage manager. She controlled the lighting and sound cues. [adult]

The juggler; the stage manager; the characters represented. There was no deception. [adult]

Actors performing a play [from] previous knowledge of theatre. [adult]

The actors were real people just like you and me. [How do you know this was "actually real"?] We don't, according to Magritte. [adult]

Included in acting conventions were metatheatrical actions cited by 11% of the respondents--some of which were perceived as "make-believe" or "realistic" above:

When he juggled? Because I've seen people do it before. [2nd]

One of the guys was juggling . . . He had strings on [the ball], so the ball wouldn't go off. . . . Because he looked like he was a professional. I didn't really think though he would be up there on stage where he messes up where you can see. . . . (Referring to Scene 4 when John 'broke character') They were trying to make it funny. . . . Because they made almost the whole audience start to crack up. They were actually smiling when they did it. They were smiling the whole play, so . . . [4th]

Some of the things they did real, like when that guy came up on that [box] and he pushed [the Interlocutor] to somersault. I think he like really pushed her. She felt the movement and she rolled off. [4th]

The juggler, his props, some of the other props. [Known from] Experience and help from the narrator. [adult]

An actor "really" had a flaming object on stage. Fire is difficult to simulate. [adult]

In terms of story conventions, many children (17%) found René's superobjective (i.e., wanting to become or becoming an artist) to be "actually real," especially in relationship to his Mother's death ($r = .28, p < .01$). Those who cited René's goal were less likely to cite live actors (or vice versa) as an "actually

real" aspect of the play ($r = -.24, p < .01$). There were significant relationships between his superobjective and knowing this from art training ($r = .36, p < .001$) and other characters' thoughts ($r = .22, p < .01$), though untrained 2nd graders also gleaned this information explicitly from the play:

When he wanted to be a artist. Because there is real artists. [2nd]

The part where the kid wanted to be an artist. By how he really--how he act when he wanted to be an artist and paint. [2nd]

Those (11%) who cited Father's superobjective (i.e., opposing René's career goal) also tended to cite Mother's death (9%) ($r = .32, p < .001$). Father's objective was known, in part, from his and René's thoughts ($r = .32, p < .001$; $r = .26, p < .01$ respectively); and Mother's death, an "actually real" and therefore true biographical fact, was known primarily from training ($r = .39, p < .001$). As discussed above, some respondents also viewed Father's objective as "realistic," but here it was considered "actually real":

Well, that sometimes your dad doesn't want you to be an artist. [2nd]

About his dad, you know, yelling at him, and his dad telling him like, "I'm the master of this house, and if I say this is this, this is what this is," and all that. Because . . . compared from his dreams, it had to be real, because his dreams weren't like that at all. [4th]

[His] mom really did die in the river. I thought that was true. . . . They kept on showing her, so I was thinking that . . . I think his father didn't want him to be a painter. I thought that was real, too. . . . He kept on saying like, "It's a pipe dream," and that's like a dream . . . and he kept on saying, "Don't be a painter." [4th]

Most of the things that were real were probably the things his father and mother said. Because the father was sort of angry, and that usually can happen to most fathers, and the mother was really kind and nice. She wanted her little boy to be a famous artist some day. [4th]

That he became an artist, because his mom wanted him to be a artist, and then she died. Because the art teacher told us that. Because I could understand why [the Mother] would do that--why she drowned herself. [Why?] Because she was so upset because--it's hard to explain--because she had a hard time in life. [4th]

René's childhood life was also perceived to be "actually real" by 8%; 3 of which were factual aspects of Magritte's story and 6 of which were fictional aspects from the play [more older than younger respondents ($r = .24, p < .01$)]. Two children knew the fact that René married Georgette from their art training ($r = .30, p < .001$), and one 2nd grader noted René's painting action. Four respondents also noted other characters' actions (e.g., Mother giving René a paintbrush) in relationship to others' dialogue ($r = .23, p < .01$), René's thoughts ($r = .42, p < .001$), and social realism ($r = .28, p < .01$):

Well, René Magritte's life, or most of it. They probably didn't tell everything. [How did you know that was real?] Well, I don't really, but I would think it was real, because it was the life of an artist, and people probably knew about it. He probably had some friends or something like that. [4th]

Well, let's see. When he went to school and stuff. . . . That was pretty real. . . . Because they did the same kind of school things, but a little different from what we do. [6th]

His mother and father, the life he led . . . Like his father bought him one of those little things that had the ball tied to it, and you throw it in the air and then catch the ball in it again. You know, he just did stuff any ordinary boys would do. . . . People had done

them before, and like, kids have played that kind of stuff before--like all the games he had played. [6th]

When his dad gave him that [toy] . . . [How do you know that was "actually real"?] Well, it was when he just woke up from some dreams . . . You knew what he was dreaming, and then everything went away when he stopped dreaming. [4th]

The way the father came in and told the son that the mother had died--that would usually happen. Because when a mother or somebody dies, the family--someone tells them, and they give maybe something to cheer them up a little. [6th]

The fact that René Magritte was an actual person and this was a portrayal of his past. [How do you know this is "actually real"?] Narrator comments. [adult]

The story of René's childhood--as far as the play is concerned. We were told that Magritte grew up to become a painter. [adult]

Spectacle conventions were noted frequently as "actually real" aspects, particularly scenery (e.g., the "wagon" or four-door cupboard on wheels) by 18% of the respondents, authentic props by 19%, and costumes by 12%. One adult mentioned lights and sound, and no inauthentic props were noted in this category. Those who cited authentic props also tended to cite costumes ($r = .33$, $p < .001$), and these props were known, in part, from others' actions in using them ($r = .28$, $p < .01$).

As some children noted, "The stage was real," [4th], "the sky" [6th], and "the scenery, background [because] it just looked real. It looked like the sort of house" [4th]. However, one 6th grader asked, "Was that supposed to be inside their house? . . . Because he slept there, and he seemed always [to] be in that area." Though the center box and side windows had been perceived

by some earlier as "make-believe" or "realistic" (from illusions created when actors entered and exited), others considered them "actually real" here, though the illusion was still questioned:

I don't know how they did that, when they put the people down in the box. . . . [How do you think they did that?] They probably had a big hole in the bottom or something and they had a ladder. [4th]

The projection screen area was "actually real," because as one 4th grader said, "We have one in our room and we show some slides on it." Magritte's paintings, projected as slides on the screen, were believed to be "actually real," because, as one adult wrote, "I have seen the paintings before;" though another adult claimed, "can't prove that the slides were real."

Authentic props cited by 19% of the respondents included: the smoking pipe, the handkerchiefs used to cover the lovers' faces, the tennis balls used in juggling, the paintings on the easel and the easel, the newspaper cut-out, the paintbrush, René's backpack, his toy, and "the painted picture with the rock inside" [4th]:

I think--this one might not be right--but I think about that [smoking] pipe. . . . Because it looks like it's real and how people talk about it. I think it was real. [2nd]

The pipes . . . the one he [Father] was smoking. Because it was made out of wood. [2nd]

The smoking pipe . . . looked pretty real, and they probably wouldn't need a prop for--I mean, they could have it be real. It wouldn't need to be fake. [6th]

The newspaper. He was cutting it up. It's because, if it was plastic, it couldn't cut it. [Were the scissors cutting the newspaper?] I don't know if they were. I think they were. [So he was using make-believe

scissors to cut real newspaper?] I think that's what was happening. [2nd]

Costumes and the bowler hats were also mentioned by 12%, though one 2nd grader differentiated between "clothes" and "costumes":

And they were dressed in sort of regular old clothes. That was real--the clothes. There weren't no costumes or anything. [They weren't wearing costumes?] Well, this one girl [René's Mother] might've been wearing a costume, I don't know. It might've been just an old-fashioned dress that she was wearing. . . . It looked like a pretty dress to me.

c. "Realistic" Aspects and How They Knew

When asked what was "realistic" or "seemed like it was real" in the play, respondents' interpretations of the word "realistic" covered a broad range of values and meanings. Fictional aspects of René's life story or the playwright's script, spectacle elements, and the acting were perceived as true to life in fairly equal proportions. Children focused most on judging the illusions, realism, and possibilities involved in spectacle and acting conventions, given the theatrical context. However, the fictive play world took on greater importance for fourth and sixth graders and adults, as viewers perceived René's life story to be socially realistic against their own personal experiences.

Therefore, while respondents focused most on metatheatrical actions (18%), answers covered a wide range of play aspects. When combined, story or playwriting conventions accounted for 40% of all responses, spectacle conventions 28%, and acting conventions 27%. Such fantasy conventions as Mother's ghost and

René's dreaming accounted for 6% of the responses. Some respondents (7%) found the whole play realistic, and 14% did not report any realistic aspects.

When asked how they knew these aspects were realistic, 44% of the total responses relied on visual cues, 16% used aural/verbal cues, and 13% involved social realism. Older respondents based their judgments on social realism more than younger ones ($r = .29, p < .001$).

Total spectacle conventions were deemed realistic from all visual cues ($r = .37, p < .001$), visual appearances in particular ($r = .55, p < .001$), and from hearing sounds effects ($r = .25, p < .01$). Total acting conventions were appraised from the theatre context ($r = .22, p < .01$) and from factors pertaining to social realism ($r = .33, p < .001$). Realistic fictional aspects of the play script were known from psychological cues ($r = .23, p < .01$), primarily René's thoughts ($r = .26, p < .01$), from respondents' own personal experiences ($r = .25, p < .01$), and from social realism ($r = .42, p < .001$). Though Mother's ghost and René's dreaming were fantastical conventions, they were judged to be realistic from Mother's actions ($r = .22, p < .01$) and her dialogue ($r = .32, p < .001$), and all psychological cues ($r = .29, p < .001$), primarily René's dream-like thoughts ($r = .28, p < .01$). Table 7 below shows significant age differences in how groups judged "realistic" aspects.

Table 7

Significant Mean Age Differences for "Realistic" Conventions and Cues

| | <u>2nd</u> | | <u>4th</u> | | <u>6th</u> | | <u>Adult</u> | | <u>X</u> | <u>SD</u> | <u>F(3,108)</u> |
|----------------------|------------|-----------|------------|-----------|------------|-----------|--------------|-----------|----------|-----------|-----------------|
| | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | | | |
| <u>SCRIPT</u> | .02 | .05 | .06 | .06 | .07 | .08 | .07 | .10 | .05 | .07 | |
| Whole Play | .03 | .17 | .03 | .17 | | | .26 | .45 | .07 | .26 | 5.96*** |
| <u>PRODUCTION</u> | .08 | .09 | .10 | .08 | .08 | .10 | .05 | .06 | .08 | .09 | |
| Live actors | .12 | .33 | | | | | | | .04 | .19 | 3.50* |
| Sound/Lights | .06 | .24 | .21 | .42 | | | .09 | .29 | .10 | .30 | 2.73* |
| <u>IN CUES</u> | .07 | .10 | .12 | .12 | .07 | .08 | .04 | .08 | .08 | .10 | 3.44* |
| Visual | .12 | .17 | .19 | .22 | .11 | .15 | .05 | .13 | .13 | .18 | 2.87* |
| <u>OUT KNOWLEDGE</u> | .05 | .09 | .08 | .11 | .08 | .12 | .11 | .10 | .08 | .11 | |
| Soc Realism | .03 | .17 | .06 | .24 | .26 | .45 | .26 | .45 | .13 | .34 | 3.91** |

*p < .05 **p < .01 ***p < .001

Because "realistic" aspects covered a wide range of conventions with few variances, few significant age differences arose as shown above. Adults found the whole play more "realistic" than children, $F(3,108) = 5.96$, $p < .001$. Second graders interpreted "realistic" to mean live actors, $F(3,108) = 3.50$, $p < .05$; and fourth graders found the sound and lighting effects to be more realistic than 6th graders who did not report these aspects, $F(3,108) = 2.73$, $p < .05$. Second graders differed most from fourth graders in not knowing or reporting "realistic" aspects and how they knew what they did report, [respectively $F(3,108) = 3.04$, 2.61 , $p < .05$].

Children continued to rely on all visual cues to judge Realism more than adults. Fourth graders differed most from adults in this regard, $F(3,108) = 2.87, p < .05$, largely because they also relied on René's actions and others' thoughts where others didn't, [respectively, $F(3,108) = 4.53, p < .01$; $2.54, p < .05$]. Sixth graders (and adults) differed from second and fourth graders in pointing out more socially realistic actions, $F(3,108) = 3.91, p < .01$. What follows is a more detailed report of these findings in the respondents' own words.

In terms of story conventions, René's fictional actions were perceived as realistic by 11% of the respondents (yet also considered make-believe by some above), known in part from general knowledge about objects ($r = .29, p < .01$):

When they [René] broke the egg, it seemed like that they really broke it. [2nd]

Well, when he cracked that egg on the thing [against the box], he thought a bird was about to come out. It was a pipe. Because I don't think some kind of bird would lay a pipe. It would have a baby bird. [4th]

Because he was crying . . . and he said he wanted his mother to come home. Because he was real sad, and he loved her very much, so he wanted her to come home. [2nd]

When he was painting, he wasn't making sketches. . . . There was no paint and his brush wasn't wet, and he had no paint or nothing to paint with. [4th]

That he was worried about his mother and he was trying to find her. [How do you know that was realistic?] Well, if my mother was lost and I couldn't find her, then I would be really worried, because I like her a lot. [4th]

When the mom was in the river, and then the boy went to look for her, and he couldn't find her. [How do you know that was realistic?] Because people could get lost in lakes or rivers. [6th]

When he was floating in the air. Because of--like if he did want to jump, if he had a umbrella, it really is like a parachute anyway. [2nd]

When he got on top of that window and saw the river. And when he got to the river, he started getting the water all over him. [How did you know that wasn't real?] Well, because when he was washing it on him, he didn't put his sleeves up at all. [4th]

Maybe the painting that he pretended to paint with the rock that he put in it? Because you can't really stick a rock onto a painting. [4th]

Other characters' actions also seemed realistic to 6% of the respondents:

When his teacher talked a little fast. Because it just seemed like teachers could talk really fast. [2nd]

Well, the way the dad acted. . . . when he gone off to work. [2nd]

That the father did not tell René that [his mother was dead], but he said she was gone. And somehow René knew his mother was dead. Because like he didn't want to hurt René too much, like say, "Your mother's dead," or "She won't be coming back," or something like that. [4th]

As implied above, Father's superobjective, in not wanting René to become an artist, was realistic to 9% of the respondents, more older than younger persons ($r = .24, p < .01$), and it was known primarily for its social realism ($r = .50, p < .001$):

When like his dad was talking to him all the time. . . . I'm sure it could've happened, because my dad would talk to me that way, so I'm sure it could happen. [2nd]

That his father could be really mean. [How do you know that was realistic?] Well, because, you know, I've heard a lot about kids' parents that, you know, aren't

too nice. [What was mean about René's father?] Well, he was kind of grouchy. He just didn't let him do things. He said, well, "This is a--if I say this isn't a pipe, then it's not. If I say, this is my underwear, it's my underwear. This is my house and my rules. You have to follow them." . . . Because usually some parents do that, you know. [4th]

[His father] was yelling at him which . . . seemed like he really hurt his feelings. . . . It seemed like he kind of like fake cried . . . He like faked he was like being scared and everything. [4th]

I could believe that sometimes his dad didn't want him to be the artist he wanted to be. I could see some parents, you know, wanting their kids to be what they are--what their job is. . . . I could believe that some parents could be upset that their kids wanted to be some weird job that, you know, wouldn't be very successful. [6th]

His father was really mean, I guess, and he just didn't want his son to do that. He had higher things that he wanted him to do, like be a businessman. Because all parents want their kids to make the highest things they can make--be the highest things they can be. [6th]

A lot of what his father said about his dream to be a painter--I can see it happening. It's happened to many people. [adult]

The idea that René wanted to be an artist; his harsh father. These things can happen in real life. [adult]

The text of René's parents. It corresponds with reality. [adult]

René's superobjective was realistic to 3%, as were his relationship with Georgette (4%) and the fact that his Mother died (5%):

He really did paint all that weird stuff. I know that because we have paintings up on the library wall that showed some of his paintings. [4th]

That girl wanted him to kiss her. Well, they would get lost . . . [What made you think that was realistic but not quite real?] Well, the music. . . . It just sounded like a lost feeling. [4th]

When they [René and Georgette] met at the circus . . . that was really realistic. Because I've been to circuses and that's what they do. [6th]

When the fair part. Because there was lots of people and it's like a real fair. [6th]

His mom falling into the river. Because people fall into rivers. [4th]

That his mother got lost, and it was like it happened, so it was realistic, but I'm not sure. [6th]

He really, actually did--was alive and he did become an artist. He might have really lost his mother. [How do you know that was realistic?] Because in the very end, [the Interlocutor] kind of told us. [How do you know it was realistic that he lost his mother?] Well, because usually--they might make it up, but they might not. I mean, they did say it was a true story, and I'm sure they'd included just more than he became an artist. They'd probably included some details. [6th]

In terms of acting conventions, metatheatrical actions were mentioned most as seeming realistic by 18% of the respondents, yet they were also cited as "make-believe" aspects above as well. For example, children especially recalled the introductory scene:

When the windows opened and no one was there. [2nd]

I like the part when they start getting scared, and then when they stick their hands out that window. And then my one friend was screaming. [2nd]

When they showed their heads up through the windows. . . . Sometimes they looked when like a picture . . . They look like they take a picture of you, and they put it on the poster board . . . [4th]

I like the beginning when they'd come up and they'd go down. It looked like they were going downstairs. . . . They looked like they were falling into a trap door or something. [6th]

The people that was coming out of the box. I think there was a hole on the side of it, that they were coming in. Because I saw people going in there. [2nd]

Hitting one another on the head with pipes also came up frequently, as did other Interlocutor actions and fire-eating:

When they hit her on the head, they made it look like it was real. Because they showed the sound effects person. [2nd]

[T]hey wouldn't hit each other on purpose in the play. They'd all have to go to the hospital. They ["bars"] would have been like something else and they made that noise. [2nd]

[I]t was styrofoam and it wouldn't have made that noise, . . . and they wouldn't fell down if they got hit with styrofoam. [4th]

When the girl [Interlocutor] rolled off [the box], when the guys were hitting each other, it kind of seemed-- the sounds and everything made it look real--sounded real like they actually fell down like it was real. [4th]

They actually hit them with the styrofoam thing--just a teensy-weensy bit, because they want the thing to bend so the audience would see that it wasn't real. [4th]

When the narrator was eating the apple and then when she was eating the rock, it looked like she actually was. Because it was pretty obvious because she said it was props. [4th]

It looked real when he put the fake fire in this mouth. [2nd]

Scene 4 was also cited by some:

I noticed when he [John] came out, he said, "Is this the right pages?" Is that why those lights go on? I didn't quite understand that part. [When that first happened, what did you think?] I thought it was part of the play. . . . [Why do you think it was written in the script?] I don't know. To confuse people? And get them to pay attention and stuff? [4th]

When the actors "broke" character to argue about the script. They walked, talked differently; the lighting changed. [adult]

The instance when they were talking about the lines, when we saw the stage manager. I saw a script. Lights came on that weren't on before showing a stage manager. [adult]

The acting itself, relating to the theatre context ($r = .28$, $p < .01$), was considered realistic by 8% of the respondents, more adults than children ($r = .24$, $p < .01$), and 4% (mostly 2nd graders $r = -.23$, $p < .01$) cited live actors:

The people. Because fake people can't walk. [2nd]

The people. Because usually plays don't have fake people. They have real people. [2nd]

It seemed like the woman [René's Mother] was really his mom. Because she act like she was really his mom. . . . Like when he was going to sleep, then she would come there and like tell him something. . . . [and] The man that act like his father. Because he's like treating him like a real son. . . . Like when--that time he said, "Don't say a peep," and then he said, "Pa--," and then he said, "I said, don't say a peep," like yelling at him. And sometimes my dad does that to me, so that's why I think that he was really act like a father. [2nd]

The actors acting. The emotions, actually. The actors' emotions. [How do you know that was realistic?] Well, theatres mostly try to put on a realistic play sometimes, so kids can see what life was like then or somebody's biography or something like that. [4th]

All the people . . . the things they did in the play, and the way they acted seemed realistic. . . . Like the stuff they wore, the way they talked to each other. They didn't like mess up all the time . . . They worked real well together. . . . They acted like they were people from back then, when he was young. [6th]

The emotions that the actors portrayed. Because they were convincing. [adult]

The way the actors represented the characters; made them seem real. Because I felt as if I was sitting by the narrator, looking in. [adult]

Turning to spectacle conventions, the scenery, including slide projections of Magritte's paintings, was realistic to 9% of the respondents for its visual appearance ($r = .42, p < .001$):

There was a big screen at the beginning of the big curtain. It kind of looked like it was really painted on there--is what it really looked like, but it wasn't. It was just the paintings put on back there. [How do you know that was realistic?] Well, because one reason was when the spotlights went across the area, it all disappeared. [6th]

The windows that were . . . in front. They looked real, but they weren't. Because you couldn't really see through them. [4th]

The name of it--"This is not a pipe." Because [the picture] was a pipe, and it said it was not a pipe. [2nd]

The photographs in the background. Because they looked like the real thing. [6th]

[The box] just seemed like a box, and then there was like stairs going down. [4th]

The coffin seemed realistic. . . . They were real things but not really what it was supposed to. [6th]

That one cupboard [with the four doors]. Because it had pictures on it and it looked real. [2nd]

As noted above in some instances, sound and special effects (i.e., film of running water projected from the house onto the entire setting) seemed realistic to 10% of the respondents, known in part from listening ($r = .54, p < .001$):

When like that rainfall. It seemed pretty real because you could see the box and a'l. That was pretty fake. . . . It wasn't real. [4th]

The rain. They showed pictures. The rain looked real, or the picture, but it really wasn't. [4th]

The lights and the story and pretty much everything seemed like it was real. The sound effects. Well, like you saw them practice at the beginning, and you

saw the lights. . . . [The sound effects seemed realistic] because they had them timed just right and they knew what to do. [4th]

The lights that were in the graveyard, because there wasn't a real graveyard. [4th]

The sound effects, because I could hear them--I mean, you could sort of tell it was coming from the speakers. [4th]

The lighting was really realistic. It gave the play a more realistic feeling. The sound, especially those of the rain, were another factor. [Known from] Experience of sight and sound. [adult]

I thought the sound of the river was very convincing. The gurgling instantly relaxed me; often you can hear a river without seeing it. [adult]

Both authentic and fake props were perceived as realistic, each by 5% of the respondents, and two children noted the costumes. Some of these props were also considered "make-believe," as noted above; and some props which were, in fact, authentic, were labeled "fake." Inauthentic props were determined as realistic by visual appearances ($r = .34, p < .001$), primarily by boys ($r = -.28, p < .01$):

Pants, shoes, shirts, and vests. Because they were wearing them. [2nd]

The dictionary, but it might not have any words in it, of course. [How do you know it was realistic?] Because it did say "dictionary." [2nd]

[The long, styrofoam pipes] looked kind of real, because you can see the holes in them. . . . It looked real from that distance. [2nd]

It seemed like the paintings that he was drawing [on the easel] while I was watching were real. Because the pictures were mostly realistic-looking--the texture. [4th]

You know that [smoking] pipe that René's dad was using? It looked plastic. It didn't look really real. It

looked kind of fake. It did. . . . And you know that picture [referring to a shiny, gesso-covered painting on the easel]? It looked like it was metal, but . . . I thought it was plastic. [4th]

That [smoking] pipe was real. He [Father] wasn't smoking it. Why wasn't he smoking it for real? [The interviewer suggested that perhaps the actor didn't want to smoke.] [6th]

Regarding fantasy conventions, 6 respondents (5%) thought that René's psychological dream-state seemed realistic, which was related to René's childhood and his Father's superobjective (respectively $r = .27$, $r = .24$, $p < .01$):

That it was really a dream. . . . The narrator was really in the play, and not just the narrator, because she kept talking to the boy . . . It didn't seem like she was the narrator. It seemed like she was really in the play. [What was she doing in the play?] Well, she kind of yelled at the dad, and she talked to the boy . . . [How do you know that the dream was realistic?] It was just--when you saw the dad in real life . . . he didn't yell at him so much . . . He was a little bit more calm than tense. . . . [How do you know which times dad was in his dream and in real life?] Well, the dad in his dreams usually was more harsh. . . . He said in real life--actually, he wanted the mom to die because he just stuck his pipe in his mouth and walked off, and it seemed like he wanted the mom to die, or that he killed her. [4th]

The person who played René's conscience and narrator, because everybody has a conscience. He made her up in his mind. [6th]

When he was dreaming about a whole bunch of other things. Then he went to class, and that he was always trying to think things over. [How do you know that was realistic?] Because his teacher didn't give him that much time, and he didn't have much time. [6th]

The relationships in René's family. René's struggle and coming to terms with his dream. These things can take place outside a theatre. [adult]

The father/son relationship. The home life. Finding a passion to satisfy an inner need. Because I have experienced it. [adult]

The emotions of René. Made me "feel" for him. I felt sorry, angry, confused. [adult]

In connection with this, 2 children found Mother's ghost somewhat realistic, for example:

Because just the way she mooooved and then throughout the picture. Sometimes you would see her on the pictures and stuff when he was imagining her, and then other times she would just disappear. [Which picture are you talking about?] Like when she was walking in and through, in and through, with the scarf over her head. (Child may be referring to "picture" of proscenium arch?) [Why was she doing that?] Because . . . he was all alone and he was thinking of her. [So, she seemed real--like she was what?] A ghost, but she was alive. [How do you know that was realistic?] . . . Well, just the way they acted and the way they were talking and her voice. It was kind of realistic.
[2nd]

When asked what was "realistic" in the play, 14% of the respondents did not know or answer the question. For example, one 4th grader said, "Nothin'!" and an adult wrote, "Not much." However, some respondents (7%), more older than younger persons ($r = .35, p < .001$), found the whole play realistic for various reasons:

I don't know, but it seemed like a book sort of. [2nd]

Storyline. Could happen in life. [adult]

Storyline. Magritte lived it. [adult]

The story--how you question the simple things that you wonder about as a child but take for granted as an adult. Because I have experienced those questions as a child. [adult]

René's life story and his ups and downs. The narrator made his life story seem very realistic. [adult]

What life was about; you could be what you want to be. People try to fend off what is the meaning of life.
[adult]

d. Summary of Perceived Reality in Script and Production

To determine how each age group perceived and judged reality in the script and production, responses to questions about "make-believe," "actually real," and "realistic" aspects in the play were combined. "Fact" responses about Magritte were analyzed separately (in the next section) because this question was limited to the script's factual and fictional content. Oneway ANOVAs revealed significant age differences in what and how audiences perceived reality in this play (see Tables 8a and 8b below).

Production values were fairly distributed among all age groups with few significant variances within discrete symbols. However, script values increased in importance for children as 4th and 6th graders focused more on the story than 2nd graders, $F(3,108) = 5.51, p < .01$. While 2nd graders were attending to more cues inside than outside the production, older groups were judging the play's realism more from their outside knowledge, $F(3,108) = 9.10, p < .001$. Fourth graders differed most from older viewers in attending to inside production cues, $F(3,108) = 5.72, p < .001$.

A closer look at how each age group perceived inside production cues and applied outside knowledge reveals how each judged the reality of symbol systems in significantly different ways. Second graders focused more on production than script values by attending to more inside than outside production cues. More than adults, for example, 2nd graders used more visual cues,

$F(3,108) = 4.55, p < .01$, to discern the authenticity of props, $F(3,108) = 3.24, p < .05$. Fourth graders, like second graders, also focused more on production than script values, but they relied more evenly on both inside cues and outside knowledge. They perceived more visual cues, $F(3,108) = 4.55, p < .01$, and made more inferences about characters' thoughts, $F(3,108) = 3.31, p < .05$, than older viewers, while pointing out more socially unrealistic or impossible actions, $F(3,108) = 6.97, p < .001$ than 2nd graders or adults. Unlike 2nd graders, 6th graders focused more evenly on both production and script values, while applying more outside than inside knowledge. They reflected most on the protagonist's objective to become an artist more than adults, $F(3,108) = 2.81, p < .05$, and they noted more socially possible and impossible actions than the youngest and oldest viewers, $F(3,108) = 5.48, p < .01$. Adults focused on more production than script values like 2nd and 4th graders, but they relied on more outside knowledge like 6th graders. In particular, adults judged the reality of the whole play by calling attention to the theatre context more than children, (respectively $F(3,108) = 9.17, p < .0001$; $7.00, p < .001$.) Unlike 4th and 6th graders, they were less concerned about socially unrealistic actions, $F(3,108) = 6.97, p < .001$, an unbelievable ghost, $F(3,108) = 3.11, p < .05$, or factual information about Magritte's story, $F(3,108) = 6.67, p < .001$.

Table 8a

Ranked Means for Symbol Systems of Reality by Age Group

| | <u>2nd</u> | | <u>4th</u> | | <u>6th</u> | | <u>Adult</u> | | <u>X</u> | <u>SD</u> | <u>F(3,108)</u> |
|-------------------|------------|-----------|------------|-----------|------------|-----------|--------------|-----------|----------|-----------|-----------------|
| | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | | | |
| <u>PRODUCTION</u> | .11 | .09 | .14 | .10 | .11 | .08 | .12 | .06 | .12 | .08 | |
| Acting | .13 | .10 | .15 | .12 | .10 | .11 | .14 | .10 | .13 | .10 | |
| Metatheatre | .20 | .26 | .24 | .29 | .12 | .16 | .16 | .17 | .19 | .24 | |
| Live Actors | .16 | .22 | .11 | .16 | .09 | .15 | .12 | .16 | .12 | .18 | |
| Perform Char | .01 | .06 | .10 | .20 | .10 | .16 | .13 | .19 | .08 | .16 | 3.27* |
| Spectacle | .11 | .11 | .14 | .12 | .12 | .11 | .10 | .09 | .12 | .11 | |
| Fake Props | .11 | .21 | .18 | .35 | .17 | .29 | .17 | .24 | .16 | .28 | |
| Scenery | .11 | .20 | .20 | .19 | .20 | .19 | .10 | .19 | .15 | .19 | |
| Sound/Light | .05 | .15 | .18 | .27 | .07 | .17 | .28 | .29 | .14 | .24 | 6.04*** |
| Auth Props | .18 | .25 | .09 | .17 | .10 | .16 | .03 | .10 | .11 | .19 | 3.24* |
| Costumes | .09 | .23 | .09 | .20 | .07 | .17 | | | .07 | .18 | |
| <u>SCRIPT</u> | .04 | .04 | .08 | .05 | .10 | .06 | .06 | .05 | .07 | .05 | 5.51** |
| R Objective | .09 | .20 | .09 | .20 | .20 | .29 | .02 | .10 | .10 | .21 | 2.81* |
| Fantasy | .08 | .11 | .10 | .11 | .14 | .13 | .06 | .11 | .10 | .12 | |
| Ghost | .18 | .24 | .23 | .25 | .26 | .26 | .07 | .17 | .19 | .24 | 3.11* |
| Dreams | .03 | .12 | .03 | .12 | .09 | .19 | .09 | .19 | .05 | .15 | |
| Fictive Play | .03 | .05 | .07 | .06 | .06 | .06 | .09 | .08 | .06 | .06 | 3.92** |
| Father Obj | .03 | .12 | .12 | .22 | .11 | .21 | .15 | .24 | .10 | .20 | |
| Whole Play | .03 | .10 | .06 | .18 | .03 | .10 | .25 | .27 | .08 | .19 | 9.17**** |
| R Traits | .07 | .14 | .09 | .15 | .12 | .19 | | | .07 | .14 | 2.95 |
| Char Acts | .04 | .11 | .07 | .14 | .03 | .10 | | | .04 | .11 | |
| R Child | | | .02 | .09 | .04 | .14 | .09 | .19 | .03 | .12 | 2.73* |
| R & G Scene | | | .06 | .24 | .09 | .29 | | | .04 | .19 | |
| Factual Story | | | .06 | .13 | .10 | .12 | .01 | .04 | .04 | .10 | 6.67*** |
| Mom Died | | | .12 | .25 | .13 | .22 | .02 | .10 | .07 | .18 | 4.12** |
| R Married G | | | .03 | .17 | .04 | .21 | | | .02 | .13 | |
| R Child | | | .02 | .09 | .09 | .19 | | | .02 | .10 | 4.23** |

*p <.05 **p <.01 ***p <.001 ****p <.0001

Table 8b

Ranked Means for Cues Used to Judge Reality by Age Group

| | <u>2nd</u> | | <u>4th</u> | | <u>6th</u> | | <u>Adult</u> | | <u>X</u> | <u>SD</u> | <u>F(3,108)</u> |
|---------------------|------------|-----------|------------|-----------|------------|-----------|--------------|-----------|----------|-----------|-----------------|
| | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | | | |
| <u>INSIDE PROD</u> | .08 | .06 | .10 | .08 | .05 | .04 | .04 | .05 | .07 | .07 | 5.72*** |
| Visual Cues | .12 | .11 | .15 | .14 | .08 | .08 | .05 | .07 | .11 | .12 | 4.55** |
| Appearances | .28 | .30 | .26 | .27 | .22 | .26 | .12 | .19 | .23 | .27 | |
| "they show" | .08 | .19 | .15 | .25 | .03 | .10 | .07 | .18 | .09 | .19 | |
| Others' Acts | .10 | .18 | .12 | .18 | .04 | .11 | .02 | .07 | .08 | .15 | |
| R Actions | .03 | .10 | .07 | .14 | .03 | .14 | | | .04 | .11 | |
| Verbal Cues | .05 | .06 | .06 | .08 | .03 | .05 | .04 | .06 | .05 | .07 | |
| "they said" | .08 | .17 | .14 | .25 | .07 | .17 | .12 | .19 | .10 | .20 | |
| Heard Sounds | .03 | .10 | .05 | .12 | .03 | .10 | .06 | .13 | .04 | .11 | |
| Others' Said | .06 | .13 | .04 | .11 | .02 | .07 | | | .03 | .10 | |
| R Said | .03 | .10 | .02 | .08 | | | | | .02 | .07 | |
| Psych Infer | .03 | .09 | .07 | .13 | .01 | .04 | | | .03 | .09 | 3.31* |
| Others th | .02 | .09 | .08 | .18 | | | | | .03 | .11 | 3.22* |
| R thought | .04 | .11 | .06 | .13 | .02 | .07 | | | .03 | .10 | |
| <u>OUTSIDE PROD</u> | .04 | .05 | .11 | .07 | .11 | .08 | .12 | .07 | .09 | .07 | 9.10*** |
| Social Realism | .07 | .12 | .14 | .14 | .20 | .16 | .07 | .12 | .12 | .14 | 5.48** |
| Possible | .03 | .12 | .05 | .15 | .24 | .30 | .15 | .24 | .10 | .21 | 6.40*** |
| Impossible | .10 | .16 | .20 | .20 | .17 | .17 | .02 | .07 | .13 | .18 | 6.97*** |
| Th Context | .02 | .08 | .11 | .18 | .09 | .18 | .23 | .23 | .10 | .18 | 7.00*** |
| Gen Knowledge | .03 | .13 | .12 | .20 | .10 | .19 | .15 | .24 | .10 | .19 | |
| Per Experience | .05 | .12 | .07 | .18 | .04 | .11 | .13 | .22 | .07 | .16 | |
| Training (stated) | | | .06 | .17 | .04 | .14 | .02 | .10 | .03 | .12 | |

*p <.05 **p <.01 ***p <.001 ****p <.0001

Respondents who reported fictional play content tended to infer characters' thoughts ($r = .35, p < .001$) and use social realism (i.e., possible events) ($r = .23, p < .01$) as bases for these judgments, particularly in regard to Father's superobjective, René's scene with Georgette, and other characters' actions. Respondents who reported factual content were less likely to base their judgments on visual cues ($r = -.22, p < .01$), and they tended to rely on social realism (i.e., possible events) ($r = .32, p < .001$) and their training ($r = .25, p < .01$), particularly in regard to Mother's death and Magritte's marriage to Georgette. Those who noted René's superobjective tended to rely on their training ($r = .24, p < .01$), and they tended to find his goal socially unrealistic ($r = .28, p < .01$). When combined, those who relied on visual cues also tended to use aural/verbal cues ($r = .31, p < .001$), and those who used aural/verbal cues were more likely to infer characters' thoughts ($r = .23, p < .01$).

e. "Facts" about René Magritte and How They Knew

When asked to cite some "facts about René Magritte," 64% of the respondents considered René's superobjective to become an artist a "fact." Other aspects taken to be facts included Mother's death (27%), René's other actions and traits (25%), Father's superobjective in not wanting René to be an artist (24%), René's meeting with or marriage to Georgette (16%), and other aspects of René's childhood (15%). When combined, 97% of the total responses involved aspects of René's story or

playwriting conventions known or assumed to be facts, as called for by the question. Eleven percent of the respondents (11 2nd graders and 1 4th grader) did not know or understand the meaning or definition of "fact" and gave no responses ($r = -.39, p < .001$).

Though respondents had been relying on visual cues to judge earlier perceived realities, they now used more verbal cues (36%) than visual cues (21%) to determine factual information.

However, 2nd graders used both sets of explicit perceptual cues in equal proportions. The theatre context and training accounted for 11% each of the responses, and many facts were known from explicit training on Magritte and his art ($r = .26, p < .01$).

(Note: Second graders received no training, and adults heard lectures on the play. Below, quotes will be noted as to which 4th and 6th graders received training from their art teachers.) Despite some pre-performance training, 43% of the respondents reported fictional aspects of the playwright's script as biographical facts as shown below.

Table 9a

Significant Means for "Facts about Magritte" by Age Group

| | <u>2nd</u> | | <u>4th</u> | | <u>6th</u> | | <u>Adult</u> | | <u>X</u> | <u>SD</u> | <u>F(3,108)</u> |
|---------------------|------------|------------|------------|-----------|------------|-----------|--------------|------------|----------------|------------|-----------------|
| | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | | | |
| (Didn't Know) | .33 | .48 | .03 | .17 | | | | | .11 | .31 | 10.46**** |
| RENÉ OBJECTIVE | .33 | .48 | .79 | .42 | .83 | .39 | .70 | .47 | .64 | .48 | 8.04*** |
| Mother died | | | .24 | .44 | .35 | .49 | .61 | .50 | .27 | .45 | 11.19*** |
| R married G | .03 | .17 | .18 | .39 | .17 | .39 | .30 | .47 | .16 | .37 | 2.70* |
| R childhood | | | .18 | .39 | .09 | .29 | .13 | .34 | .10 | .30 | |
| <u>R bio traits</u> | | | | | | | <u>.22</u> | <u>.42</u> | <u>.05</u> | <u>.21</u> | 7.95**** |
| FACTUAL STORY | .01 | .04 | .15 | .17 | .15 | .20 | .32 | .22 | .14 | .19 | 16.62**** |
| F objective | .06 | .24 | .30 | .47 | .30 | .47 | .35 | .49 | .24 | .43 | 2.96* |
| R acts/traits | .24 | .44 | .21 | .42 | .30 | .47 | .04 | .21 | .21 | .41 | |
| R childhood | | | .12 | .33 | .04 | .21 | .04 | .21 | .05 | .23 | |
| Char actions | .06 | .24 | | | .04 | .21 | | | .03 | .16 | |
| <u>Whole play</u> | <u>.03</u> | <u>.17</u> | | | | | | | <u><.01</u> | <u>.10</u> | |
| FICTIVE PLAY | .08 | .12 | .13 | .12 | .14 | .13 | .09 | .13 | .11 | .13 | |
| Dreams | .03 | .17 | | | .04 | .21 | | | .02 | .13 | |
| FANTASY | | | | | | | | | | | |

Table 9b

Means for Each Cue Used to Judge "Facts" by Age Group

| | <u>2nd</u> | | <u>4th</u> | | <u>6th</u> | | <u>Adult</u> | | <u>X</u> | <u>SD</u> | <u>F(3,108)</u> |
|-------------------|------------|-----------|------------|-----------|------------|-----------|--------------|-----------|----------|-----------|-----------------|
| | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | | | |
| TH CONTEXT | .03 | .17 | .15 | .36 | .04 | .21 | .26 | .45 | .12 | .32 | 3.01* |
| TRAINING (stated) | | | .15 | .36 | .17 | .39 | .17 | .39 | .12 | .32 | |
| VERBAL/AURAL | .05 | .10 | .11 | .17 | .14 | .18 | .11 | .13 | .10 | .15 | |
| GEN KNOWLEDGE | .03 | .17 | .03 | .17 | .17 | .39 | .09 | .29 | .07 | .26 | |
| SOCIAL REALISM | | | .12 | .36 | .13 | .34 | | | .06 | .24 | |
| VISUAL | .05 | .10 | .08 | .15 | .05 | .11 | .02 | .07 | .06 | .12 | |
| PSYCH INFER | .02 | .09 | .06 | .17 | .09 | .19 | | | .04 | .14 | |
| PER EXPERIENCE | | | .03 | .17 | | | .04 | .21 | .02 | .13 | |

*p < .05

**p < .01

***p < .001

****p < .0001

As shown above, respondents' pre-performance training carried some mediated influence. In addition, one-third of the 2nd graders did not know the meaning of "fact," $F(3,108) = 10.46$, $p < .0001$. Overall, adults reported facts more accurately than children, and they differed most from 2nd graders in pointing out the theatre context in this regard, $F(3,108) = 3.01$, $p < .05$.

René's superobjective to become an artist was considered a fact by 64% of the respondents, particularly by persons older than 2nd grade, $F(3,108) = 8.04$, $p < .0001$. Obviously, if René Magritte was, in fact, a famous artist, then by implication, one can assume that he wanted to become an artist at some time in his life. The playwright uses this implicit assumption as the basis upon which to create a play about Magritte's childhood and how he reached his career goal (Kornhauser, personal communication, 1991). This desire is also made explicit in the play's dialogue when René asks, "Mother, is it foolish of me to wish to become an artist?" (p. 7). This superobjective and "spine" of the whole play is triggered by the biographical fact that Magritte, as a 12-year-old child, watched an artist painting in an abandoned cemetery; and, according to Magritte himself (1938), "the art of painting seemed somehow magical, and the painter endowed with superior powers" (in Torczyner 1985, 118-19). The playwright dramatizes this cemetery scene, and René's recorded voice describes how, "the art of painting was somehow magical" (p. 6). (See Appendix for these and other biographical facts about Magritte.) Therefore, respondents had many explicit and

implicit, factual and fictional bases upon which to perceive René's superobjective as fact, though many used the Interlocutor's and René's dialogue or their art training to confirm this perception:

[What are some facts about René Magritte?] I don't know what that means. [Like things that you know were true about René Magritte.] The whole play. [So the whole play was a fact about him?] One loooong fact. [Like what were some of those facts inside that whole play about him?] He was a painter. [How do you know that was a fact?] Because they said it. [2nd]

Well, the real René Magritte really was a famous artist, and he did grow up wanting to be an artist. [How do you know that was a fact?] Well, at the end, [the Interlocutor] told that. So, I kind of figured it out. [2nd]

That like, he wanted to be an artist, and he wanted to paint. . . . He said so in the play. [2nd]

That he wanted to paint and in the end he did. . . . Because he actually was a famous artist. [2nd]

He was a painter, and probably that might of been the way that he did grow up. . . . Because our art teacher told us. [4th, trained]

He turned out to be an artist. . . . Because I saw them, and there was a narrator and they told you. [4th, trained]

That he wanted to be an artist. . . . Because he kepted on asking he wanted to be an artist. [4th, trained]

Well, I learned that he was a really famous artist, but . . . he didn't want to be called an artist, or something like that. They called him something--I don't remember . . . (Child may be referring to line in play in which Magritte preferred "thinker who communicates by means of paint." p. 15) [How do you know that was a fact?] Well, it's hard to say, but I knew that--well, the story was based on an artist, so that was kind of easy to figure out. [4th, untrained]

He wanted to be a artist. [How do you know that was a fact?] He had seen man painting, and he went to talk

to his mom and dad, and his mom said, "Yes" and his dad said, "No." [6th, trained]

He wanted to be a artist. [How do you know that was a fact?] Because he told his mother, and his father said, "This is not a pipe dream." [6th, trained]

He loved art and he was an artist, I guess. He painted really . . . weird things, like a dove made out of clouds, or a burning teapot. . . . [How do you know those were facts?] I took a guess. (Child laughs under his breath.) Our art teacher, and I guess that's it. [6th, trained]

That he wanted to become an artist. [How do you know that was a fact?] He did become an artist, and it's a fact. [6th, trained]

He was an artist. [How do you know that was a fact?] Well, I've seen pictures that he's drawn, his art (from art teacher). [6th, trained]

He wanted to be a artist. [How do you know that was a fact?] Well, they were telling about his life, and most of the play was about that he really wanted to be an artist, and his mother told him he could--you know, to try. But his father didn't want him to be one. [6th, untrained]

He wanted to be a painter. [Known from] (college theatre professor). [adult]

His desire was to be an artist. [Known because] He said this and this is what the play was based on. [adult]

He wanted to be an artist. [Known because] He expressed these feelings himself. [adult]

His mother died; he was an artist. [Known because] René told me so. [adult]

With René's superobjective or the "spine" of the play established, the playwright creates a central conflict or obstacle against which René struggles to become a artist: René's Father does not want his son to become an artist, and he calls it a "pipe dream." However, René's Mother sympathizes with her

son's dream, and she encourages him to become an artist by giving him a paintbrush. These parental objectives, actions, and motivations are purely fictional ideas created by the playwright to dramatize Magritte's childhood story, and they are not biographical facts (Kornhauser, personal communication, 1991). Biographers know very little about Magritte's parents, and even less about their feelings regarding their son's career goal during his childhood. Nevertheless, 24% of the respondents perceived his parent's objectives, actions, motivations, and personality traits as "facts" from their fictional portrayals in the play. Second graders did not find this fictional conflict as salient as older children, especially 4th graders, and adults, $F(3,108) = 2.96, p < .05$.

That he wanted to be an artist, but his dad wouldn't let him, and his mom wanted to help him out. [How do you know these were facts?] Because they wouldn't play them if they weren't real facts. [How do you know they wouldn't play them if they weren't real facts?] Because then it wouldn't be this true story. [4th, trained]

That he was very undecided about what he was going to do when he grew up, because his father kept saying, "No, no, no, you can't be an artist. I will not have it." And René really wanted to be an artist. [4th, trained]

He was a child. That he wanted to be an artist, and his dad wouldn't let him be an artist. . . . Because he kept looking at his paintings, and he asked his dad and his dad said, "No." [4th, trained]

His father wasn't very nice. His mother was nice. . . . Because his father yelled at him and wasn't happy about him wanting to be a painter. [4th, trained]

. . . His mom wanted him to become a artist, and he did die. [How do you know these were facts?] I think it's

true because it could happen to anybody. [4th, trained]

He seemed to be a little upset kind of . . . when his mom died, because his mom understood that he wanted to be an artist and kind of believed in him. . . . Because she was always, you know, understanding him and being real, you know, understanding. [6th, untrained]

He wanted to paint and his father didn't want him to. . . . [Known because] They were essential elements that could not be changed. [adult]

. . . Father did not believe in his ideas. . . . [Known from] Text of play. We must assume the text is true to his life. [adult]

His father was strict . . . [Known because] I assume there was some historical basis to the play. [adult]

. . . His father was dictative. . . . [adult]

His father was stern and inflexible. . . . [adult]

. . . His father was demanding. René was confused-- wanted something his father did not. . . . [Known because] They said so in the play. [adult]

. . . He didn't conform to the ideals of this father. . . . [Known because] His father told us. [adult]

That he had some problems as a child and had a strict upbringing. [Known because] I was told by the narrator. [adult]

One key biographical fact about Magritte's mother is that she committed suicide when Magritte was 12 years old. The playwright uses and extends this biographical fact as a central motivation for René's achieving his superobjective. Again, biographers know little of the actual extent to which Regina's death impacted Magritte as a child or as an adult artist, though speculations exist from diverse implications. In this regard, 27% of the respondents, more adults than children, $F(3,108) =$

11.19, $p < .0001$, found Mother's death to be a salient fact, primarily from their training ($r = .40$, $p < .001$). Second graders, who received no training, did not know, perceive, or report Mother's death here. Those who cited Mother's death as a fact also tended to cite Magritte's marriage to Georgette and Father's superobjective (both $r = .23$, $p < .01$):

And that was the way his mother did die. [How did his mother die?] I think she drowned herself or just threw herself in. [How do you know that was fact?] Because our art teacher told us. [4th, trained]

Well, his mom did jump into the river, and she did have something over her head. . . . Because our art teacher, she told us. [4th, trained]

Well, that his mother died in the river, fell in and died. . . . [How do you know that René's mother died at the river?] Well, when his dad came back, he said she died to the river, and she could have just fell in when she was getting water; and it was when she came back with that blanket thing over her head. [4th, untrained]

They didn't do something, that was really weird. They didn't have, his mother, René was there when they found his mother by the river. And they pull back the cover and her nightgown--she was just like (inaudible), so he draws she in some of his paintbooks. [4th, trained]

. . . And, I don't know if this was real or fiction, but that his mother got lost in the river. [How do you know that could be a fact?] Oh, just because it seemed that that could happen. [4th, untrained]

His mother got depressed, when she went into the river, she drowned, and then he decided to become a painter. [How do you know that was fact?] We seem pictures and stuff in art, and it seemed like it was the same thing in the play. [6th, trained]

. . . His mother drowned herself in a river when Magritte was 12, traumatizing the boy. [How do you know as fact?! I don't. [adult]

Mother died. Painter. [How do you know as fact?] I don't. [adult]

Mother died when young; painter. [Known because]
 Evolved in storyline. [adult]

His mom committed suicide by jumping in the river. He
 meets his wife at the fair. [Known] Because they are
 shown in the play. [adult]

His mother died. . . . [Known because] The sheet over
 his mother was the way she was drowned in the river or
 was thrown in the river. [adult]

His mother died. . . . [Known because] His mother's
 ghost appeared. [adult]

He was an artist and his mother died when he was young.
 He met a young girl who he married. [How do you know
 as facts?] The narrator seemed to give them sort of
 legitimacy. [adult]

Another biographical fact is that Magritte met Georgette at
 a fair and later married her. Here, 16% of the respondents noted
 this fact, known primarily from the visualized actions of this
 scene ($r = .38, p < .01$) and from the Interlocutor's dialogue ($r =$
 $.22, p < .01$). Again, this sexual relationship appeared more
 salient to older children and adults than 2nd graders, $F(3,108) =$
 $2.70, p < .05$) from training ($r = .23, p < .01$):

. . . Well, it was kind of funny because he met this
 girl and he didn't want to kiss her and then they got
 married. [How do you know those were facts?] Because
 I think they said it at the play. [2nd, female]

Well, he was kind of shy, like when he first met
 [Georgette] and she wanted to kiss him, and he was
 like, "No, I don't want to kiss you," and he like, "OK,
 I won't," and then he put a handkerchief over her head.
 "OK, I'll kiss you. No, I won't." [How do you know
 that was a fact?] Well, because plays probably
 wouldn't say things that weren't not true. Like they
 wouldn't say what's not really true. [4th, female,
 trained]

That he really wanted to paint, and his mother wanted
 him to, but his father said, "No." And he got married
 and lived happily ever after. [How do you know those
 were facts?] Because that's usually what happens in

life, like they go and do something and then everything's okay after then, but then there might be a few problems. [6th, female, untrained]

That he got married . . . [What made it seem like a fact--that he got married?] Well, that the voice-- where there wasn't anybody talking or anything. You couldn't see who was talking--made it, you know, like just made it real. [Which voice was that?] . . . I think it was a lady's voice that talked. . . . [6th, female, untrained]

. . . And he probably did fall in love with [Georgette]. [How do you know those were facts?] Well, because also the Interlocutor was kind of a story-teller, and she told all that stuff . . . [6th, female, untrained]

Who he met; who he married; his parents; his continuation of painting. [Known from] The girl [Interlocutor] explained to us as the play continued. [adult, female]

Other aspects about René's childhood were cited by 15% of the respondents, none of which were known, perceived, or reported by 2nd graders as salient facts. Of these 17 older respondents, 11 reported accurate facts of Magritte's story (e.g., "René was a child;" he was French from Belgium; he played in graveyards):

Like the things he did when he was little. He used to go play in the cemetery. [How do you know this was a fact?] Well, our art teacher, she told us some of it, that happened in his life. [4th, trained]

Well, he played in the graveyard and stuff. [How do you know that was a fact?] Because that's how he all started to want to be an artist, because he saw a ghost in the graveyard who was painting and if he didn't play in the graveyard or he didn't see the ghost, he probably wouldn't have been--this adventure probably wouldn't have been true. . . . They thought his paintings were so great that they made plays about his pictures and stuff. [4th, untrained]

He was French, and something about the language. I can't remember. Like he didn't speak that language or something like that? . . . [How do you know that was a fact?] Because that lady would come up and say

something, and so she said that he was French. [4th, untrained]

He was born a long time ago. . . . He used to like to do a lot of stuff with his friends. . . . [How do you know those were facts?] Well, back then . . . you would wear a wig . . . they wore wigs back then. [Was René wearing a wig in the play?] Yes. . . . [How'd you know he had a wig on?] Well, because it was white . . . and it was all put back in a pony tail, right back here. . . . [What year or time was it back then?] It was like in the 1900s? That's all I think. [You know which decade it might have been?] Uh-uh. (Note: The actor wore his natural, long, blond hair tied back in a pony-tail.) [6th, untrained]

From Belgium; married; found himself more thinker than a painter (Note: reference to Magritte's words used in dialogue). [Known] Because my parents who also saw the show told me a lot about his life and his work. [adult]

He was an artist, Frenchman, called himself a communicator, his mother died when he was a boy. [Known] Because we were told by the narrator. [adult]

That he was a boy in school with a mother and father; that he liked to go to the graveyard and paint. [Known because] Those are facts that were implied by the narrator and the play. [adult]

The remaining 6 discussed fictional or general aspects of René's children gleaned from the play. Note that earlier, two children perceived the fact that young Magritte played in graveyards as "make-believe;" and now it was cited by others as a fact, though its believability was still questioned by one trained 4th grader:

I think maybe, I don't know, maybe I just added this on, but I think that maybe that his mother wanted him to be an artist, but his father didn't want him to be an artist. [And] maybe that he played in the graveyard a lot? [How do you know these were facts?] Well, they said, and I think most of it was about . . . facts, and some they just made up. Maybe not in the graveyard, but maybe that he lost his mother and stuff. Maybe that was a fact. [4th, trained]

That he didn't look like a baby. His mom was calling him "baby," like I heard her voice while she was saying it. Well, he looked kind of big for his age--for a baby and all that, and he looked like his mom should call him more like . . . I don't really know. Some facts--and that how he had that toy? [How do you know that was a fact?] Because I knew that, like babies had toys . . . and they have, like little, like balls and all that. [4th, untrained]

Most other actions performed in the play by René and his personality traits as a child were created and fictionalized by the playwright. However, 25% of the respondents perceived or reported these particular actions or traits to be facts, known, in part, from inferring René's thoughts ($r = .23$, $p < .01$). As shown below, several children misinterpreted the meaning of "fact." Here, 22 children and 1 adult referred to fictional actions performed by René in the play; while 5 adults recalled, paraphrased, or accurately interpreted Magritte's past quotes as factual traits about him, as indicated above, $F(3,108) = 7.95$, $p < .0001$). Three children also included other fictional characters' actions as well:

Well, the facts is that he wanted to be a painter, and he knew that he could be whatever he wanted to. His mother said that he could be whatever he wanted to. And then he wanted to try to find his mother so everything would be okay. But he couldn't find it, and then he just--I don't know. . . . [2nd]

That guy [René's Father] was saying, "Not a peep." . . . [and he] gave him the pipe at the end. . . . He had fake scissors and the piece of paper he cut up, and he had the pack on his back. [2nd]

Like when he was crying, and he was screaming, and he was going like that. (Child hit desk several times.) [2nd]

When he heard something "tweeting." (Note: Child is referring to nightmare scene when René hears birds chirping from the birdcage and egg.) [2nd]

Like what he did. Like when he lied down on that bed. . . . He was really walking. [2nd]

Well, he wanted to get a paintbrush, and he wanted to have his mom back in the middle of the play. [2nd]

He was kind of shy. Because he acted like it. [2nd]

He kind of liked to just sit and think. [How do you know that was a fact?] Well, because he had lots of patience because he just--he did paintings, and so he has to sit and think. [4th, trained]

That he could make art even without a paintbrush. That he stood up for his wishes. And he really loved painting, but if he didn't have a paintbrush, he could get along without because he just wanted to make art. And he had a real different way of thinking from most people, kind of like Einstein or something. . . . Because he made snow flake things, and the way he thought was really different. And I think that play really wasn't the same, because I think he, as the little boy, didn't always think like that. I think he left out a lot of parts, because he was really a little boy. He wasn't just, oh, thinking so dramatically and stuff. I know he was more like a little boy, just thinking differently. . . . [4th, trained]

He said nothing was impossible. One thing, he makes really weird paintings, and they're not realistic. They couldn't happen. [How do you know those were facts?] It just the expression that he used. It seemed like it. And the way he said it, it just made you feel like it. [4th, trained]

That he broke that toy. . . . He stuck the rock on that picture. [How do you know, for example, when he stuck the rock on the picture that was a fact?] Well, because you could sort of see the velcro on the picture that he could stick the rock on to. [4th, untrained]

Well, he wanted to be a famous artist, and he was shy. And he got married when he grew up. He didn't have any children. He was happy. His parents were alright. [How do you know those were facts?] I don't really know. I just think that's what probably really happened. I haven't read any books about him or I don't know anything about him except for the play. And

from watching the play, I think that's what really happened. [4th, trained]

He was sort of shy. [How do you know he was shy?] You could sort of tell, and also what the lady said. [4th, untrained]

He didn't like school. [How do you know?] It didn't seem made up. [6th, trained]

He was pretty smart because he was always thinking so many things, I couldn't understand. At that school place, he was just thinking a lot of that stuff I don't understand. [How do you know those were facts about him?] Well, I don't think they'd have a lie in this play. [6th, untrained]

He wanted to be an artist, and he liked to draw and paint, and he didn't like his father a lot, but he loved his mom. [How do you know those were facts?] Because his dad was mean to him and his mom was real nice. [6th, untrained]

It seemed like he liked his mother a lot, but he didn't really like his father that much. [How do you know that was a fact?] Well, his mother was always real nice to him and his father wasn't really--whatever. [6th, untrained]

He was brave. He didn't really cry when his mom died. He should've like cried a lot when he was down every day, but he just seemed like he was crying. [How do you know that was a fact?] Because he should've cried a lot when his mom died. [6th, trained]

I don't know very much about the play. That was my first time hearing about when we went to art and all that. [Anything that was a fact that they talked about in the play? (Note: leading prompt)] That she had a son, but that wasn't her son though. [Wasn't her son?] No, but she had a son. Because she looked real, real young (Note: didn't ask "how do you know?") [6th, trained]

Three 2nd graders cited various aspects outside story or play conventions as "facts":

Pictures are flashing. His hair was braided. Because he looked like a man. [2nd]

She was telling about the people and what they do and stuff. [How do you know this was a fact?] Because if it wasn't, then it wouldn't be true. [2nd]

Two respondents considered René's dreaming to be a "fact":

When he was dreaming. . . . Because some more people came out of that box. [2nd]

Well, he liked to draw and I guess he liked to find out lots of things. Pretend with his imagination. [How do you know that was a fact?] Well, because they talked about it in the story. [6th, untrained]

In addition to these perceptions, three children volunteered additional interpretations about play and production values when asked about factual information:

I liked [the play]. . . . It was not an ordinary play, you know, like one of those plays like Winnie-the-Pooh or anything. That kind of a play was kind of like a grown-up play, like grown-ups go to. [Which play? This play?] Uh-huh. It was sort like a grown-up play more than it would be a kid's play. [Why is that?] Well, I don't know, it's just that it has lots of grown-up stuff in it. Like anything, it was just funny. Anything, it would be anything. It could be a grown-up play or it could be a kid's play. [Why do you think it could be a kid's play?] Well, it has a lot of funny stuff in it that kids would sit down and watch it. And it has a lot of stuff that grown-ups would sit down and watch, and kids wouldn't. Kids wouldn't want to sit down and watch it, because they think it would be too boring, and kids would like the funny part more than they would the boring stuff. And the parents might like the boring stuff better than the funny stuff maybe. [2nd]

I think that if I directed that play, I would probably make it different. [How would you make it different?] Well, I'd probably make it where like he really did, he played tricks and stuff, and he was really a little boy. He wasn't such an adult, thinking so weird. [So do you think he was too adult in the play? Is that what you're saying?] Yeah. [So he should have been more of a little boy?] Yeah, because he was always thinking so weird and always, you know, thinking back and everything. [How old do you think he was in the play?] Ten, eight. Something like that. [You think

he should have been younger?] . . . No, I think he probably should have acted younger. [4th]

Well, his mother died. And he married the lady that he met at the circus. And he went on to have a painting career. His dad didn't like the fact that he was painting. . . . [How do you know those were facts?] Because . . . they didn't act funny about it, or it wasn't like a supernatural. It wasn't any made up things. They said it pretty plainly. It wasn't--it was just pretty plain, that he did do that. And also anybody could have done that. Like the mother could have fallen in the river. They could have been a painter. [6th]

f. Metatheatrical Dialogue (Play not real life)

When asked what the Interlocutor meant when she said a play is not real life, 38% of the total responses involved acting conventions; that is, though actors are real live people, they play historical characters and perform rehearsed, and sometimes unrealistic, actions. Sixth graders discussed acting more than other groups, $F(3,108) = 5.63, p < .001$. Story conventions accounted for 29% of the responses; that is, respondents, more adults than children, explained that, though plays may be based on historical facts, a play is not real life because the whole story is fiction and therefore not true, $F(3,108) = 2.77, p < .05$. The 45 respondents who explained how the whole play was not true were less likely to discuss acting as an additional reason ($r = -.2796, p < .01$), particularly given the fact that 21 2nd graders and 15 4th graders did not mention any aspects of acting at all.

Children tended to use examples of other conventions to support their reasoning. Spectacle conventions (i.e., fake props and scenery) and social realism accounted for 14% each of the

total responses. The remaining 5% of the responses involved explanations of Mother's ghost or Rene's dreaming or fantasy conventions. Few respondents (8%) did not know or report an answer. Table 10 shows significant age differences in how respondents explained this question.

Table 10

Significant Means of Symbols Used to Explain Why Play is not Real Life

| | <u>2nd</u> | | <u>4th</u> | | <u>6th</u> | | <u>Adult</u> | | <u>X</u> | <u>SD</u> | <u>F(3,108)</u> |
|-------------------|------------|-----------|------------|-----------|------------|-----------|--------------|-----------|----------|-----------|-----------------|
| | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | | | |
| <u>SCRIPT</u> | .17 | .17 | .15 | .18 | .15 | .16 | .20 | .13 | .17 | .16 | |
| FICTIVE PLAY | .33 | .48 | .30 | .47 | .39 | .50 | .65 | .49 | .40 | .49 | 2.77* |
| SOCIAL REALISM | .21 | .42 | .21 | .42 | .17 | .39 | .13 | .34 | .19 | .39 | |
| FANTASY | .06 | .21 | .05 | .19 | .02 | .10 | | | .04 | .16 | |
| Ghost | .09 | .29 | .06 | .24 | .04 | .21 | | | .05 | .23 | |
| Dreams | .03 | .17 | .03 | .17 | | | | | .02 | .13 | |
| <u>PRODUCTION</u> | .11 | .13 | .16 | .14 | .20 | .12 | .10 | .13 | .14 | .14 | 3.20* |
| ACTING | .12 | .16 | .18 | .17 | .29 | .18 | .12 | .16 | .17 | .18 | 5.63*** |
| Perform Char | .21 | .42 | .30 | .47 | .61 | .50 | .30 | .47 | .34 | .48 | 3.59* |
| Metatheatre | .12 | .33 | .06 | .24 | .22 | .42 | | | .10 | .30 | |
| Live actors | .03 | .17 | .18 | .39 | .04 | .21 | .04 | .21 | .08 | .27 | |
| SPECTACLE | .11 | .21 | .14 | .26 | .07 | .17 | .07 | .23 | .10 | .22 | |
| Fake props | .12 | .33 | .24 | .44 | .04 | .21 | .09 | .29 | .13 | .34 | |
| Set/Costumes | .09 | .29 | .03 | .17 | .09 | .29 | .04 | .21 | .06 | .24 | |
| (Don't Know) | .09 | .29 | .09 | .29 | .09 | .29 | .09 | .29 | .09 | .29 | |

*p<.05 ***p<.001

[Note: Respondents were not asked "How do you know?" Oneway ANOVAs using Student-Newman-Keuls test significant at .05 level.]

Acting conventions accounted for 38% of the responses. A few respondents (8%) cited real live people or actors without mentioning the actions the actors performed. Many respondents

(34%), mostly 6th graders, explained how actors were acting or pretending to be historical characters. Some (10%) discussed how actors performed fake gestures (i.e., metatheatrical actions, such as actors hitting one another with pipes):

Because they're just like playing a play, and they ain't real. [2nd]

Well, it's just people acting. . . . This isn't a real family. It's just people pretending they're a family. [2nd]

Like how they [actors] moved. [2nd]

She meant that it was put together with actors, characters, just fake stuff. . . . [th]

She's right! They're fake actors. [4th]

They're just actors and they're just taking a part of a character. [4th]

Well, she means like the people who were in it were not real, and then in some plays, the story isn't real. Some plays really aren't real, except the people in it are real. [4th]

She meant that the actors weren't really the real René Magritte or his dad or his mom or anything like that. [4th]

Well, she meant that a play is nothing but actors, and it was a lot of actors and not the real thing. Not a true story. [4th]

Well, if someone pretends to get killed in a play, they're not really dead. They're just pretending to be dead. [4th]

Well, if it was real life, like when those people got hit in the head with the pipes, they'd be knocked out and killed. . . . Also they couldn't pick up that big boulder. [4th]

*Well, I think it means that it's just fake. I mean, some of it's true and some of it's not. [How do you know which parts are true . . . and which parts are not true?] It's the way they act. [. . . How do you know when it's real life and when it's not real life?] Well, maybe when it's life, they use more expression, they tell you more. And when it's not true, they use more acting than talking. [4th]

She meant that only actors that do things and sometimes they show that things happened in history, but it's really not acting real. [6th]

Well . . . if it was real life, it'd be happening right then. It wouldn't be a repeat, and there would be like real people, like René would really be there. It would really be him in real life, and they wouldn't be acting. [6th]

Well, it just was something on a script, and there were actors, and they weren't really those people. [6th]

Because when they jumping around, they might land on something soft like you can't see, and hit the wood, and their feet hit the wood. [6th]

People don't really get hurt in a play. They're just acting it out. Like they're doing it to show you what happened back in some time, some period of time, and what might happen in the future. So, they're saying it isn't--all of it didn't actually happen. They're just doing . . . some parts of the life they led. [6th]

Well, a play isn't . . . the actual people that actually lived together. It's just people that come together . . . they learn about the story . . . and then they try to act it out and make it as real as possible. [6th]

Actors are acting out a story, but the story itself, although based on fact, is not occurring here and now. [adult]

The people are only acting. They are doing what they have rehearsed. [adult]

Theatre is not real--it is acting. Sometimes some people might confuse reality and theatre. [adult]

Many respondents (40%) discussed how the whole play or story was "make-believe" or not true in various ways. Some used examples (i.e., other categories) to support their reasoning:

She meant like these [things in play] are not real, real, real, real scary. [2nd]

[The people] said things that wasn't true. So they said that like the Mother was dead, but the Mother wasn't really. It was just a play. [2nd]

They're just making it up. Those things were made up. I mean you can't do that at home. [Referring to the dialogue, "Don't try this at home!" (p. 3, 4, 14, 25)] [2nd]

That it's not really how [his life] went, but it was supposed to be like it. [2nd]

Because it's not really true. They just get it out of a book or something. [2nd]

Because there's a whole bunch of different things that are different in the world, and it was just a story that they made up. [2nd]

It's that it's not true, and also they're just trying to make you believe . . . They had to get idea from the other guy [René] . . . [2nd]

Well, it looks real, but it isn't because if it was, then somebody would die in the play or something. [2nd]

Well, because it's most of the time just talking about someone's life or making it up. . . . Or acting out their life. . . . Because in a real play, like at the movies, at the end, they wouldn't end up saying, they wouldn't show everybody backstage. [referring to curtain call when cast gestured to crew members who came out from backstage] [4th]

Because it's not the real people, and it's kind of real because they tell the story. [4th]

. . . It's all a trick and it's all trying to make you believe. [4th]

The play is just an act telling a story. [4th]

. . . because it took place a long time ago. . . .
[6th]

[I]t might be based on a true story. . . . It's
probably been changed around a little. . . . [6th]

Adults' responses, included in this category, reflected their
course training:

It's a fictive world in which the impossible (from real
life) becomes possible.

. . . To imitate real life.

What was happening was not a true story. It was
fictional.

It is only temporary; it is make-believe; it is turned
on when the play starts and turned off when the play is
over. The sets, props, etc. are not real.

It was going by at a sped-up time. The actions on
stage are really not taking place with full intensity.

That what is going on, on the stage, is just an act of
what might have actually happened.

A play focuses more on intentional communication where
as real life in the contrary.

That the play just displays a perception of life.

That it is rehearsed; it uses people pretending to be
others; and uses props and illusion.

Children, in particular, (20%) used examples of inauthentic
or fake props (sometimes in conjunction with the metatheatrical
action of hitting one another with fake pipes above), and scenery
or costumes to support their explanations--in part, because the
Interlocutor explained, demonstrated, and trained these concepts
explicitly throughout the play:

That the people just dressed up in clothes . . . [2nd]

Because it wouldn't have no microphone. [2nd]

. . . I guess she meant like--it wouldn't be--like it wasn't a real boring story or something, I guess. Then, she said that pipes--like this guy was hitting himself up with this styrofoam thing, and she said, "This isn't a pipe. It's styrofoam." . . . [2nd]

Well, the way that they bang peoples on the heads, like they're dead. . . . The weapons they used were not really. [2nd]

. . . It's not really real because those metal pipes were just styrofoam. So they weren't real at all. . . . Well, I thought they were real at first, because I watched 3-2-1 Contact [CTW program on PBS] one day and they were doing stuff like how you fake-paint, and I can do that real good. [2nd]

. . . This box right here [referring to center box in photo prompt] wasn't real . . . because it's not a regular box. [2nd]

It's just pretend, and that things aren't really happening. Like when [René's Father's] had the pipe in his mouth, he wasn't--if it was real . . . there would be smoke coming out, but there wasn't any. . . . It was fake. [4th]

. . . Everything is not real or like if you had a dog, I don't think they would really put a dog on stage. For a real dog, they'd probably just have a puppet. [4th]

Well, like it's not the real people, and it's on a stage, and it's not like at their real house. It's not like at the river really. Sort of like the pipe is not the pipe; it's just a drawing of a pipe. [4th]

Well, I think she meant that that did not happen really in real life. They're just playing it out in a play. These scenes never really happened. Like a pipe isn't really a pipe, and a play isn't really real, like she said. [6th]

. . . Like in real life, they'd probably have--I mean, this didn't have much as a prop set. I mean, it had all those things in the back, but like right there [pointing to photo prompt] was about the only actually thing that you could actually touch, plus that kind of prop set up in the back. . . . He'd probably have more in his room, and like they just kept that all the time, and like you probably wouldn't have the same piece of

furniture in your whole house and outside and everything. [6th]

Others (19%) used social realism, as explained by these respondents:

She meant that, like some of the things in the play can't happen; some of them can. [2nd]

She means like it didn't happen in real life, and most of it's not real but some of it is. It's like a puppet show. That's not real. [2nd]

Well, she meant that it really happened, or it could really happen, but they're acting it out. [4th]

That anything could happen in a play. [4th]

It means because it's not really happening. It's already happened and they're just re-showing it. [4th]

People are just acting, and when they're acting, it's not really--it just didn't really happen--all of it. Some of it might--some of it might have happened, but most of it didn't happen. [6th]

That this production was not what actually happened. [adult]

The play is not reality because sometimes things don't happen that way and things sometimes don't always turn out the way it's supposed to be. [adult]

Others cited Mother's ghost and the fact that people don't really die on stage (5%), and 2 children (2%) also included René's dreamy thoughts ($r = .57, p < .001$):

Well, she meant that like, how they, when they acted, and like how when the Mother died, that wasn't real. They just acted out that . . . that she was dead and about the dreams, and they weren't really dreams. [2nd]

Because it's not real to have a ghost in it or anything and the box with the lights on [inside] and people coming out the window, may not be nothing in the box. [2nd]

She meant that this was kind of an illusion thing, that René was just like a person, but was a little weird. . . . And that everything was like--that ghosts were walking around, and . . . René thought in a way that he saw everything, that he saw a rose and a big apple . . . He was just faking it . . . something that he had thought before. [4th]

Few respondents (9%) did not know what she meant (3), did not answer (2), or simply repeated the fact that the play "wasn't real" with no other reason (5 children). For example, 2 children answered:

Well, it's because it ain't a real play. A play's like if you go to a concert and like you sing and all that like that, then that's kinda like a real play. So how come did she say it wasn't a real play? [Right.] Yeah, that's what I wondered. [Do you have any ideas?] No. [4th] [Child could be referring to another local children's theatre moi=Ric Averill upbringing?]

Because this is not a pipe, a pipe dream. It's not a real play. [6th]

Theatre Conventions

Respondents were asked to explain reasons for eight specific and symbolic theatre conventions used in the play. Each convention was coded from emerging categories of responses which ranged from concrete to more abstract, artistic explanations for these symbol systems. Variables were then collapsed into accurate and inaccurate responses. The following sections report results for each theatre convention with selected narrative quotes. (See Appendix 6 for more complete tables.)

a. Costume (Rene's Jacket/Hat)

When asked what it meant when [the actor playing René] took off his jacket and bowler hat in the beginning of the play, 41% did not know. Only 13% (4th/6th graders and adults trained on this information) recognized this common convention as the actor's transformation into the character of young René (e.g., "changing into a boy" [4th]):

He was starting as an adult, but then they changed to a kid's point of view. [6th]

They were trying to make him be younger, and most young kids don't wear jackets. [6th]

Another 6% (all children) reported that it signaled the start of René's story. The remaining 39% either discussed immediate, observed actions (15%) (e.g., "He was just changing out of his clothes" [2nd] because he was hot), or they inferred (and sometimes confused) preceding or subsequent actions (24%) (e.g., coming home, going to bed, going to the cemetery).

In sum, 20% understood this convention as a transformation into René's character, 39% made other inaccurate inferences, and 41% did not know what it signified.

b. Vocal Recordings (Rene's Voice)

When asked whether they remembered hearing René's recorded voice over the loudspeakers, 81% recalled these sounds and 19% did not (mostly 2nd graders and adults with poor recall).

When asked what his recorded voice meant, 30% inferred that it signified René's thoughts or that "his mind was talking" [2nd]. As one 6th grader elaborated:

You wouldn't need to say anything if you were walking in a graveyard by yourself. That was what he was thinking . . . and the audience would have to know that.

Another 12% recognized it more specifically as his "conscience" [4th] or his past historical "memory" [6th], like a "narrator" [6th]:

The Interlocutor is kinda like his conscience, but it was also kinda like his conscience, I thoughⁿ. [6th]

[H]e was telling his story . . . of his life. (4th)

He could hear his old voice. [6th]

Though one 4th grader noticed that his recorded voice was "real deep" (to help signify quotations from his writings as an adult), she didn't believe it was René speaking in comparison to his "soft" voice used on stage as a young boy. Another 4th grader went so far as to believe "It was the real René Magritte that they had recorded when he was still alive."

Another 12% inferred these recordings further as René's feelings, "day-dreaming" [2nd], "imagination" [4th], or "spirit voice" [4th]:

"It seemed as though there was an authority over what was going on on stage. René's voice was the controller on stage--real life." [adult]

Of the remaining, 10% (all children) thought his voice was recorded so that audience members could hear it more loudly, or to signal the audience to "quiet down" [2nd] "because they wanted you to think that was important" [4th]; and 36% (mostly children) did not remember, know or answer what it meant.

In sum, 54% inferred these recordings of René's voice as his thought processes, 10% inferred other practical reasons, and 36% did not remember hearing his recorded voice or did not know or answer what this convention meant.

c. Lighting Effects (Flashing Lights in Classroom)

When asked why the lights flashed on and off during the classroom scene, 19% did not know or answer why, another 21% (all children) described the stage action during the flashing lights without inferring an aesthetic motive, and another 13% (all children) inferred unrelated aesthetic motives for visibility purposes, added special importance, or beauty in general (e.g., "So it can look pretty" [2nd]). One education major thought the flashing lights were "Emphasizing it was a classroom."

The remaining 47% inferred more accurate motives for the flashing lights: to heighten the mood of the argument and create additional "meaningful" chaos (13%), to express René's feelings

of frustration and confusion with words (25%), and to signify René's nightmarish dream (9%):

Because they were thinking so much and there was like, the feeling just wasn't enough for that part of the play, so they had to give it a little bit more gip, flash and step, or whatever. [2nd]

Well, so it'd make it look like that guy [was] getting like dizzy or all those names were calling in his head and he was getting real, real crazy. [4th]

Because he was thinking real strangely or . . . having a dream. [4th]

[I]t look like it was in his mind going around in circles. [6th]

[H]e felt like his head was going to split open and he couldn't take it any more. [6th]

To make it look kinda more scary or mysterious. Because they were driving him nuts. They usually do that--that's when the lights start flashing--and when someone's being driven nuts and everything. [6th]

[H]e was kind of like daydreaming . . . in his mind. . . [It was] not really happening. [6th]

One 4th grader recalled a similar lighting convention in another play she had seen:

Because . . . lots of people were talking. . . . whenever both of them talk and they're trying to get him all mixed up and confused . . . that's why they flash on and off, because I've seen that in other plays before. . . I think it was in 1st or 2nd grade and it was about monkeys with the big eye.

Indeed, in Monkey, Monkey, when the Monkey King approached Yama, a giant puppet eyeball, red lights flashed like lightening to confuse and frighten him away as Yama's voice bellowed over loudspeakers from a backstage microphone (Klein and Fitch, 1989).

In sum, 47% understood this lighting convention as heightening René's thought or dream processes, 34% inferred unrelated motives or gave no motive, and 19% didn't know.

d. Scenic Slide Projections (Magritte's Paintings)

When asked why Magritte's paintings were projected on the screen during the whole play, 16% did not know or give a reason (mostly 2nd graders). Some (11%) inferred literal technical or general aesthetic motives to the projections (e.g., to be able to see them):

Because they didn't want René to make a big mess on the stage . . . if he was using real paints. [2nd]

Another 33% (34 children and 3 adults) thought the slides provided information about Magritte as an artist and the quality of his paintings:

Because it was a play about him and in order to give it a little bit more know-how of him. [2nd]

To show us what his paintings would look like. . . . to want us to be a painter when we grow up. [2nd]

Maybe they wanted them to think that he used to maybe paint when he was little. [2nd]

To show some of his art and to show that, if it's painted, it's like not real. And it doesn't have to be exactly real. [6th]

Another 20% (21 children and 1 adult) recognized the playwright's and director's intentions in that the slides went along with particular moments in the story "like scenes," and some respondents provided specific examples of such:

Some children . . . can't understand. It might make them understand a little. . . . One of them were like the rock that was floating . . . maybe the rock that he gotted that was supposed to belong on a painting. [2nd]

Show . . . what they're talking about . . . They had a apple. [2nd]

Because so they can sit down and act like they're painting. [2nd]

[T]hey're doing the scene that was in the picture. [4th]

[The picture] fits in. . . . Because there was some people looking through the window. It had pretty much the same thing on. [4th]

Like one time, his mom was getting the stuff out of his ears, and he had just made a paper snowflake, and it had two snowflake figures taking potatoes out of their ears, and that's what his mom used to say that he had lots of stuff in his ears. They had potatoes. [6th]

Like when he was kissing the girl and he put the mask over his and her face, that picture popped up. [6th]

Some (8%) said the slides expressed René's thoughts or the inspiration for his paintings:

[H]e was trying to say that you didn't have to talk. You could just like show your words by painting. [4th]

It kind of showed his way of think--seeing things. . . . And when he had his thoughts, they showed them and they kind of explained his thoughts a little more. [4th]

We saw what René was thinking or imagining. [adult]

The remaining 12% explained how the slides expressed René's feelings or dreams:

They might've wanted you to see . . . his feelings or . . . what he felt like. [4th]

Showing . . . what he felt and what he was going through. [6th]

It was like a dream. [6th]

To express his feelings all through the play, his emotions, his sorrow, his anguish, his fears, etc. [adult]

In sum, 39% understood this convention as another means to further the play's action and to visualize René's thoughts and dreams, 45% viewed them as examples of Magritte's art or ascribed inaccurate aesthetic motives, and 16% did not know why the slides were projected.

e. Costume/Prop (Mother's Veil)

When asked why Rene's Mother wore a veil over her face, the majority (80%) understood this convention to symbolize that she had died or that she was a ghost or spirit, "kinda like just a voice" [4th]. Of these respondents, some (9%) inferred additional motives on the part of the Mother; 5% perceived this symbolic convention from René's psychological or dream perspective; and 5% knew from their training the biographical fact that René's dead Mother had been found in the river with a nightshirt over her head, and so it "symbolized her death and the representation of his paintings" [adult]. However, Father's dialogue confused some, as noted by this 2nd grader:

Because she was like a ghost. She's supposed to be like a ghost because she died at the river. I couldn't understand one thing about the play though. [What?] When they said they "lost" her. What do they mean by that? [Good point. What do they mean?] Do they mean she got lost and they couldn't find her and she couldn't find them? Or did she fall in the river and she died, or what? [So how did you decide it was the last one--she fell in the river and died?] Well, you see, when the two men [Father and René] came out and said, "You're not gonna find her, René." And then he said, "I klow." Then I said, "She's dead."

Therefore, some young children continued to have some confusion over Mother's death, in part, because she kept walking around

alive on stage--literally. Older children made more abstract inferences from available theatre cues:

Because she died, and she didn't want him to know if it was her. It was like she was alive, but he thinks she's dead. [2nd]

Because she was dead. She wanted to look like she was dead because . . . Well, she's either dead--I think she's dead because I heard him [Father] say she was "lost" in the river, so in the river she would be dead by then or a ghost because all ghosts look the same. [2nd]

Because . . . that was her spirit and it was just the way most people show a spirit. They don't show it with a face and the real person. Plus it had to be her spirit so it had to look different from the real part of the play. [4th]

[So how come you weren't sure if she was dead or not?] Because . . . first she would come out with her face? And then I would see her with this on? And I would think it was like something . . . that a bride would wear. . . . I still thought she was alive, because she kept walking, she kept coming out there any time. . . . I think he couldn't find his voice. . . . Like where the Mother's [recorded] voice was coming from. [4th]

That meant like she was a ghost or a spirit, and you couldn't completely see her face because she wasn't really there. [6th]

Some respondents added reasons for Mother wearing a veil from her death perspective, in part, from their training:

Because she was killed, so she might have had a scratched up face. . . . So that might have covered her face. [4th]

So he wouldn't have to see blood. [4th]

[S]he was haunting him. [4th]

So he wouldn't be able to see her face, because when she drowned, it would probably be pale. [6th]

Two 4th graders separated the meaning of Mother's identity in René's nightmare when she rose from the grave in his dream from later in the play:

[E]arlier in the very beginning of the play, she was coming out of this little grave thing? And it was her, but it wasn't supposed to be playing her. It was when she was still alive, though. And he was talking to her about it. And she said, "You must stand up to your Father and do your wishes. Bring your wishes and don't let your Father get in the way." . . . She wasn't dead then. It was supposed to be another person.

Because . . . she acted like she was a different person rising from the grave. . . . [T]hat was her but she just was rising up out of the grave because she was dead.

Some respondents recognized that her veil added to René's dream-like mental state from his perspective:

[I]t was just a dream. [2nd]

Because it's like a fairy tale . . . In the dreams, she says like, something like in the dreams. [2nd]

I think because they didn't want us to recognize her and she was dead. Plus . . . I think they're trying to make her in his mind. [2nd]

Because . . . he was just imagining that his mother was alive, but she wasn't. [4th]

[S]he was no longer in René's world but merely a remembrance. [adult]

[T]his just symbolized his memory of his mother. [adult]

As discussed above, another 13% (mostly 10 2nd graders) inferred her veil as a disguise so that René (and/or the audience) wouldn't see or recognize her, mainly because they seemed to take Father's word "lost" literally at face value:

Because . . . she doesn't want him to know who she is . . . [How come?] Because his Dad said . . . that they "lost" his mother . . . by the river? Maybe she's trying to be someone else so René won't see who she is. [Why is she trying to be someone else?] Because his Father said they "lost" her by the river. So she just keeps walking back and forth with that. [So how come she wants to be someone else instead of being René's Mom?] Because his Dad said-- [So is she walking around lost?] Like pretending like she's lost. [2nd]

Because his Dad told him, when he was having a dream, his dad told him that he lost her [his] mom at the river and he didn't want [René] to recognize her. . . . [So his Dad didn't want René to recognize her?] Uh-huh. Because they were acting. [2nd]

Well, because the Dad, I think sort of, tricked René that his Mother was dead and she got lost and so the Mother was trying to, every once in a while, . . . check on René and see how he was doing. . . . but she wasn't really lost. [2nd]

So everybody wouldn't know that she was really his mother. [2nd]

So that he wouldn't see her because she fell in the river and so . . . so he couldn't see his mother. [2nd]

In sum, 80% understood Mother's veil as a convention to signify her death as a spirit, 13% confused it as a disguise, and the remaining 7% did not know or give a reason as to why Mother wore a veil (2 confused her with Georgette).

f. Character's Objective or Movement (René at the River)

By asking what René was doing at the river, respondents could answer this question on many different levels, depending on their interpretation of its meaning. The majority (81%) connected the meaning of the river with René's Mother. Most respondents (65%) repeated his explicitly stated objective "to find his mother" because, as one 2nd grader put it, "in the play,

he said he would." [In the script, after his Father tells him that his mother is "lost," René says, "I must find her" (p. 17). He repeats this objective again shortly thereafter when he imagines and says, "The River. (pause) I will find her" (p. 18).] Twelve percent within the majority inferred that he was thinking about or remembering his mother at the place where she died or mourning her death:

[He was thinking of his mother, where his mother was missing at the river, and he washed off with it, maybe his mother would come back. [2nd]

[He might of wanted to hug her . . . or might of wanted to get a picture and look at it . . . so he can remember about his mother. [2nd]

Maybe the play means "whereever he goes, she goes." [2nd]

He was . . . remembering his mom and looking for her, even though he knew he couldn't find her after awhile. . . . And then when his Dad came in, he said, "René, . . . we're not going to be able to find your mom." He said he knew that, but he could find her in his heart still. [4th]

He was dreaming that he saw his mother. [4th]

He was trying to find the body of his mom and to find out how she would have drowned. [6th]

Some older respondents (4% of the total majority) went further by inferring his actions at the river with symbolic connections with the river water itself or with the slide of La Grande Famille--a large dove which could represent peace:

Washing himself . . . maybe because--I guess he thought it might unite him with his mother. [6th]

Washing himself and setting himself free. [adult]

A kind of baptism. Letting his inner urges guide his life from now on. [adult]

Looking for his mother and a little peace of mind.
[adult]

Another 13% (mostly 7 2nd graders and 6 4th graders) described the actor's movements literally as "washing," "rinsing," "drinking," "swimming," "dancing," or "singing":

Picking up water and putting it on him. [2nd]

He was looking pretty hard in the water and he just thought of everything that had happened in his life.
[4th]

He's drinking, washing himself. And he saw the texture in the [water?] because he's a artist and looking so he knows what to draw. [4th]

He might have been down to the river to play in the river like with a friend, to throw rocks in the river, something like that. [4th]

Again, as discussed above, one 6th grader still had difficulty knowing whether or not René's Mother had died, but she did know that René went to the river to find her:

I couldn't figure that out. . . . [It was like all these people started coming on and doing all this weird stuff. [So why did he even go there?] Maybe to find his mom, because that's where he lost her. . . . [So . . . you're just not sure what he was doing there?] Yeah, because I didn't even know if she died or not. [What makes you unsure about whether or not she died? What was confusing about that?] . . . [It was like he kept seeing her, and, I mean, he couldn't--maybe it was his imagination or something. But I don't know, because like, she'd come on the stage like she was a ghost or something. He'd see her . . . She was like scared that something--[But you're not sure that she died?] Yeah.

In sum, 81% understood what René was doing at the river, primarily from his previously stated objective to find his Mother, and they interpreted his actions symbolically as connections with his Mother. Another 13% described his physical

movements literally, and the remaining 6% did not know or could not recall this scene, even when prompted with a photo.

g. Prop/Character's Gesture (Father's Smoking Pipe)

When asked why René's Father gave René his smoking pipe, respondents came up with many diverse answers, though 22% did not know or could not recall a reason. Some (8%) children thought his Father simply did not want or need the pipe anymore, or that he thought René could smoke it:

So he can quit smoking maybe. . . . Or he was just giving it to him, because René might use it for something. . . . Maybe like René might grow up and smoke a pipe. [6th]

Some (6%) reported that his Father only exchanged or traded it for René's broken toy without further reasons. Other children and one adult (10%) attempted to make symbolic, though inaccurate, connections with the theme of "pipe dreams" or the title of the play:

He think he really didn't need that pipe because he wanted him to be a pipe dreamer and he didn't want to be. He wanted to be a painter. [His Father wanted him to be?] A pipe dream. Like he would collect pipes. [2nd]

Because his dad thought there was a pipe dream. [2nd]

To remind him that it's a pipe dream. [4th]

Well, because he had "This is not a pipe dream" and he wanted to give him a pipe instead of him painting the pipes. . . . I didn't get that, why he was giving him that stuff. [4th]

To show that that was a pipe and not his pictures. And that he was having pipe dreams. I don't remember it that well. [4th]

Well . . . there's a pipe and he drew a pipe and he wrote "This is not a pipe" and so he just gave him a real pipe. I just don't know. . . . [H]e always kept on smoking when he said, "pipe dream." [4th]

Some children (14%) focused on Father's feelings and motives for René's feelings:

I think it meant he really loved him. . . . He never let anybody even touch his pipe. [2nd]

Because he was proud of him. [2nd]

So he [René] can feel happy. . . . Because he wished he had a pipe before. [2nd]

Because he [René] was very good. [2nd]

Because he [Father] felt sorry for him, and he just wanted to give him some sort of present. [4th]

He may have felt sorry for him . . . but he just didn't want to show that, because he wanted to show René Magritte that he [Father] was strong and . . . he kind of wanted him to act like him. And he wasn't a painter, so he didn't want his son to be a painter. . . . He [Father] kind of felt that, inside . . . maybe he [Father] wants to be a painter but maybe he won't be good. [So Father felt?] "I don't want him to be a painter." [4th]

Maybe his father thought . . . it was important and he gave it to his son because he loved him. [4th]

Because after what René had already gone through, he thought he deserved his smoking pipe. [4th]

Because when Ray's [René] mother died, he was probably very, very sad and . . . he would like that pipe. [6th]

Another small group of children (12%) inferred that perhaps Father knew he was going to die some day, so he gave René his pipe to remember him by or simply as a family keepsake:

Probably because they think his mom died, so his toy broke, so he wanted him to have that in case he died probably. [2nd]

So he won't forget his mother. [2nd]

Because if he died the next day, then René could have a little thing to remember him. [4th]

I thought his dad was going to kill himself, because his wife got killed. [So then why do you think he gave the pipe to René?] So he wouldn't forget him. [4th]

[H]e wanted him to keep it, like when he died sort of, so it might be in the family. [4th]

I think because he is going to pass it on to his son. . . . I think he [René] was going to have it for until his kids grow up--[Oh, and then René could give it to his kids?] Uh-huh. [4th]

I didn't understand what was so special about the pipe. . . . The pipe was like passed down from generation or something like that. It's like been in the family for years or something. [4th]

Another small group (5%) (mostly 4 4th graders) inferred that René could paint pictures of his Father's pipe (e.g., to create "Ceci n'est pas une pipe" or The Betrayal of Images). Others (8%) recognized his Father's gesture as a sign of René's growing maturity into manhood:

Because he was gonna be a man pretty soon. [2nd]

So he can be the dad, so he can act like he can be the dad. [2nd]

Because he [René] handed back the toy, saying he wouldn't need it, because he was like growing up and he wouldn't need the toy anymore, and [Father] gave him the pipe because, you know, it would make him grown up. [6th]

Probably to say "You're a man now," I think. [6th]

It was probably to like signify he was grown up. . . . Like if you're an Indian, like in a town, your father might give you his watch or his pipe . . . like something down from the family. [6th white race]

Finally, the remaining 15% (mostly 11 adults) perceived it as a symbolic acceptance of René's pipe dream to become an artist, as the director and actors intended:

Because it wasn't a pipe dream. [2nd]

As an inspiration. . . . For maybe now he was approving of his wanting to paint. [4th]

I think he wanted him to think "This is not a pipe dream," and I think he changed his mind about wanting him to be an artist, for his son. [6th]

[To show?] That his father really cared for him instead of just being a mean guy . . . And that he thought that he changed his mind about René being a painter, and that that'd be okay. [6th]

Because René found out that if everything could happen, then there wasn't any dreams. [6th]

He had grown up, and his father wanted to apologize for what he said about pipe dreams. [adult]

It was a rite of acceptance. [adult]

To show him that he could fulfill his pipe dream. [adult]

He was giving him his dream. [adult]

To symbolize nothing is a pipe dream. [adult]

In sum, 28% interpreted Father's gesture as a sign that René could now paint the pipe and fulfill his pipe dream because he had grown up, as the director and actors intended. Another 26% focused on the characters' feelings and/or interpreted the pipe as a family remembrance. These two conceptual sets of responses were combined (54%) as accurate responses to this question. More literal and less accurate interpretations were inferred by 24% who thought Father simply didn't need the pipe anymore, exchanged

it for René's broken toy so he could make it, or they tried to connect the pipe inaccurately with pipe dreams. The remaining 22% did not know or could not recall a reason for Father's gesture.

h. Staging (Mother Behind René at Easel)

When asked why René's Mother was standing behind him when he was painting at the easel near the end of the play, some respondents inferred his Mother's motives from her perspective, as suggested by the wording of the question, while others answered it from René's dream perspective.

Many children (26%) (14 2nd graders, 8 4th graders, 7 6th graders) described immediate, observed actions by stating that his Mother was simply watching him paint. Their answers also imply their feelings when adults watch them paint:

Because she wanted to see if he would mess up. . . .
Because she was like a ghost, and he didn't know she was there. But it was just a play. [2nd]

She was watching how good he was painting, but he didn't know it. [2nd]

so she could see how much René learned when she was gone. [2nd]

Because like he was going to draw a picture of her . . .
. because he missed her. . . . Also, she was just watching him paint. [4th]

Maybe to see how talented he is? [4th]

She just wanted to be higher just to see how he was doing, I guess. [6th]

Others (28%) inferred his Mother's objective that she wanted him to become an artist and so she was watching him achieve his

dream. Some connected his recent discovery that she had given him a paintbrush, left in his backpack earlier before she died:

Because like when she gave him that paintbrush, and so like whenever he painted, his mom would be there because that paintbrush was so special because his mom gave it to him. [2nd]

Watching him become an artist. Watching him do his dreams. I guess it was kind of supposed to be her watching down on him in heaven. [4th]

Because she [René] thought that the paintbrush was a sign that his mother loved him, so her ghost came to watch him. [4th]

Because she wanted to see if his dream really happened. And it did. [4th]

Because she knew that was his dream. . . . I think she was standing there watching him paint . . . I don't know really. . . . Like most of the movies, that's what they have. I don't know why. [4th]

Because at last he get to do what he wanted to do and do what she wanted him to do, but his dad forbidden him to do it. So then she wanted to see what a good job he was doing and how his dad was raising him after she died. . . . just to visit anyway. [6th]

[At the beginning, he walked up and said to her, "Would it be foolish to be a painter?" And she said that, "It'd be foolish not to be--not reach your dreams." And so she wanted him to, and his father didn't. So I guess she was just kind of watching him reach his dreams, which is good. [6th]

To overwatch him even though she was dead. To stand as a sort of guardian. [adult]

Again, one 6th grader was still confused about whether or not his mother was dead at this late point in the play:

Because she was the one that had faith in him, and like since she had lost him--I mean, well, both--he lost her, actually. He was painting and she like--I don't know if she was dead or not, but she like was right there watching him. She was probably kind of happy. [So, tell me again why you're not sure if she's dead or not.] Because he kept seeing her. I didn't know if it

was imagination or not. [So you weren't sure if he was imagining it?] Yeah. [What would have helped you to be sure if it was his imagination or not?] If like his father said, "We lost her"--if like he actually said that--like actually what happened, like she drowned or something, then we'd know if she was dead or not. All he said was, "We lost her." I mean, she could have like been kidnapped or something. [6th; untrained about Mother's death in art class]

Some (13%) recalled René's explicit dialogue and gesture to his heart to infer that she would always be with him. [When René's Father said, "You won't find her, René," René replied, "I know that. Not here. But here. (Touching his heart.) Maybe in here." A few moments later, René discovers the paintbrush left in his backpack by his mother before she died. At the moment of this cued question, René says, "I've missed you, Mama. But now I have this [the paintbrush] to keep you with me. I won't be lonely when I'm painting" (script, p. 26).] From this dialogue, others (18%) answered the question from René's perspective by inferring that René was thinking of her, imagining, feeling, or remembering her spirit or inspiration:

Because he was imagining her again. [2nd]

Because I think maybe he's remembering about her, maybe being a artist and painting a picture what he's thinking. [2nd]

I think they're trying to make her in his mind. [2nd]

Maybe because her spirit was with him. [2nd]

To see what his art work was because she knew he could do it, and she was like trying to comfort him, and he was kind of imagining that she wasn't there. . . [4th]

[H]e was just imagining that his mother was saying, kept saying, "I want you to paint," and that he was just pretending she was there and he was talking to her as if she was there. [4th]

Probably because he was remembering her when he was painting with that paintbrush. [6th]

Her standing behind the easel shows her inspiration for his work. [adult]

She was his driving influence towards artistic expression. [adult]

She symbolized hopes and dreams that he was following. [adult]

The remaining respondents either did not know or answer the question (9%), or they recalled inaccurate or unrelated ideas (6%, mostly 4 2nd graders).

In sum, 31% understood this staging convention from René's explicit dialogue and gesture to his heart and/or from his dream perspective. Another 28% cited Mother's motives from her perspective, as implied by the question of why she was standing behind him at the easel. These two conceptual sets of responses were combined (59%) as accurate interpretations. Less accurate responses (32%) involved describing Mother's immediate, observed actions of simply watching him paint (26%) and inaccurate or unrelated guesses (6%). The remaining 9% did not know or recall a reason.

1. Summary of Theatre Convention Understanding

Oneway ANOVAs revealed significant age differences in how audiences interpreted and explained the symbolic meanings behind each theatre convention, as shown in Table 11 and explained further below. When combining all conventions for accurate interpretations, 2nd graders differed significantly from 4th and 6th graders and adults in their more concrete or literal explanations, $F(3,108) = 9.05, p < .0001$.

Table 11

Means of Uncollapsed and Collapsed Theatre Convention Explanations by Grade

| | <u>2nd</u> | | <u>4th</u> | | <u>6th</u> | | <u>Adult</u> | | <u>Total</u> | | <u>F(3,108)</u> |
|-----------------------|------------|-----------|------------|-----------|------------|-----------|--------------|-----------|--------------|-----------|-----------------|
| | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | |
| Jacket/Hat (R=0-4) | .73 | .91 | 1.55 | 1.37 | 1.57 | 1.53 | 1.78 | 1.70 | 1.36 | 1.41 | 3.46* |
| Rem Voice (R=1-2) | 1.79 | .42 | 1.91 | .29 | 1.91 | .29 | 1.61 | .50 | 1.81 | .39 | 3.51* |
| R's Voice (R=0-4) | .97 | 1.36 | 1.76 | 1.39 | 2.00 | 1.21 | 1.61 | 1.47 | 1.55 | 1.40 | 3.10* |
| (R=0-2) | .74 | .88 | 1.33 | .89 | 1.57 | .79 | 1.22 | 1.00 | 1.18 | .93 | 4.63** |
| Projection (R=0-5) | 1.24 | 1.06 | 2.30 | 1.24 | 2.30 | 1.26 | 3.65 | 1.56 | 2.27 | 1.51 | 16.40**** |
| (R=0-2) | .79 | .65 | 1.33 | .65 | 1.26 | .69 | 1.70 | .56 | 1.23 | .71 | 9.63**** |
| R at River (R=0-4) | 1.79 | .74 | 1.88 | .65 | 1.78 | .90 | 2.35 | .89 | 1.93 | .80 | 2.87* |
| F's Pipe (R=0-8) | 2.64 | 2.29 | 3.49 | 2.40 | 4.09 | 2.73 | 5.13 | 3.64 | 3.70 | 2.84 | 3.99** |
| M at Easel (R=0-5) | 2.18 | 1.49 | 3.00 | 1.15 | 3.00 | 1.09 | 3.39 | 1.88 | 2.84 | 1.47 | 3.78* |
| (R=0-2) | 1.15 | .67 | 1.67 | .54 | 1.65 | .49 | 1.61 | .78 | 1.50 | .66 | 4.88** |
| ALL CONV (R=0-2) | 1.06 | .35 | 1.45 | .37 | 1.48 | .32 | 1.46 | .42 | 1.35 | .40 | 9.05**** |

*p < .05 **p < .01 ****p < .0001

When the actor who played René removed his jacket and bowler hat, only 20% understood this convention as a transformation from playing a metatheatrical actor to playing René's character, while 39% made inaccurate inferences, and 41% did not know what this costume change signified. Second graders differed significantly from fourth graders and adults by providing more concrete reasons based on immediately observable actions, $F(3,108) = 3.46, p < .05$.

When asked about the audio recordings of René's voice, 81% recalled hearing these sounds and 19% did not (mostly 2nd graders and adults with poor recall), with a total of 36% who did not remember, did not know, or did not answer what this convention meant. Adults differed significantly from 4th and 6th graders in their ability to remember hearing these vocal recordings several days after seeing the production, $F(3,108) = 3.51, p < .05$. Those who remembered these recordings were more likely to interpret accurately the artistic reasons behind this convention ($r = .61, p < .001$). Of those who remembered hearing his recorded voice, over half (54%) inferred these recordings as René's thought processes and 10% inferred technical or practical reasons (e.g., made louder so the audience could hear better or as a signal for the audience to quiet down because it was important information). Second graders differed significantly from sixth graders by reasoning that the recordings were for volume purposes, and their less symbolically accurate explanations differed most from all age groups, [respectively, $F(3,108) = 3.10, p < .05; 4.63, p < .01$].

The convention of flashing lights during the classroom scene proved troublesome for over half the respondents (53%) who inferred unrelated aesthetic motives (13%) (e.g., visibility or beauty), gave no motive (21%), or didn't know (19%). Under half (47%) understood this lighting convention as heightening René's thought processes or dream perspective. There were no significant age differences here.

Attributing reasons for the scenic use of Magritte's paintings projected as slides throughout the play resulted in a three-way split. Over one-third (39%) understood this convention as an aesthetic means to further the play's action and to visualize René's thoughts, imagination, and dream-like or surreal mental state. One-third (33%) viewed these projections only as showing Magritte's artistic work, and 28% either ascribed literal, technical reasons (12%) (e.g., to see them) or did not know why the slides were projected (16%). Second graders' and adults' responses differed significantly from each other and those of fourth and sixth graders', $F(3,108) = 16.40, p < .0001$. Adults interpreted more "surrealistic," artistic motives connected with the play's actions, while 2nd graders reasoned that projections were primarily for visibility or general aesthetic beauty. Thus, older age groups were more accurate in their interpretations than 2nd graders, and 4th graders differed most from adults as well in terms of accuracy, $F(3,108) = 9.63, p < .0001$.

Despite the fact that Father's dialogue about Mother's death was taken literally by some [i.e., "René, your mother is lost. We've lost her at the river." (script, p. 17)], the majority (80%) understood Mother's veil over her head as a convention to signify her death as a ghost. A few (13%) confused her veil as a disguise (e.g., so René or the audience wouldn't recognize her), and the remaining 7% did not know or give a reason. There were no significant developmental age differences.

A similar majority (81%) understood what René was doing at the river, primarily from his previously stated objective to find his Mother (script, pp. 17-18), and they interpreted his actions and physical movements symbolically as metaphoric connections with his Mother. Another 13% described his immediate, physical movements literally (e.g., washing, drinking, dancing), and 6% did not know or could not recall this climatic scene. Adults differed significantly from 2nd and 4th graders by interpreting more metaphoric and psychological reasons for René's actions, $F(3,108) = 2.87, p < .05$.

When asked why René's Father gave René his smoking pipe, responses resulted in a four-way split. Over a quarter (28%) interpreted Father's gesture as a sign that René could now paint the pipe, for example, and fulfill his pipe dream of becoming an artist because René had grown up and matured--the director's and actors' artistic intentions. Another 26% focused on the characters' feelings with sympathy or empathy and/or interpreted the pipe as a family remembrance. More literal and less

accurate interpretations were inferred by 24% who thought Father simply didn't need the pipe anymore, exchanged it for René's broken toy so he could smoke it, or they tried to connect the pipe inaccurately with pipe dreams. The remaining 22% did not know or could not recall a reason for Father's gesture. Again, more symbolic responses came from adults who differed significantly from 2nd graders, $F(3,108) = 3.99, p < .01$.

When asked why René's Mother was standing behind him at the easel near the end of the play, almost one-third (31%) understood this staging convention from René's surreal, dream-like perspective and/or his explicit dialogue and previous gesture to his heart [i.e., "I've missed you, Mama. But now I have this [paintbrush] to keep you with me. I won't be lonely when I'm painting" (script, p. 26)]. Another 28% inferred Mother's motives from her perspective, as implied by the wording of the question; that is, she left him a paintbrush in his backpack before she died because she wanted him to be an artist and to achieve his dream. Another 26% described Mother's immediate, observed actions of simply watching him paint, and the remaining 15% either did not know or recall a reason (9%) or they reported inaccurate guesses (6%). Again, older age groups reported more accurate symbolic concepts than 2nd graders, $F(3,108) = 4.88, p < .01$, who tended to explain that Mother was simply watching René paint more than 4th graders and adults, $F(3,108) = 3.78, p < .05$.

Thematic Understanding of the Play

Respondents were asked to infer the theme of the whole play in three ways by: 1) identifying the "main idea" or theme in general, 2) identifying more specifically what René learned, and 3) explaining the meaning of René's explicit dialogue about the theme itself. Ten individual types of answers, ranging from simple to more complex concepts, emerged and clustered from these three questions, as discussed in detail below. In further analysis, these responses were grouped into four main categories: 1) following one's dreams (director's/playwright's intention and main metaphoric theme or application to life; 2) repeating or paraphrasing René's thematic dialogue; 3) René's life (aspects dealing within the script's content); and, 4) incidental or unrelated ideas. (See Tables in Appendix.) Before turning to these results, audiences' understanding of the term "pipe dream" will be discussed first because this term was integral to the theme.

a. Defining "Pipe Dream"

When asked to define the cliché term "pipe dream," 26% did not know or give any definition (e.g., "I don't know. I've never had one before." [4th]). Correct definitions were provided by 35% and incorrect definitions were given by 39%, as shown in Table 12 below. Older and trained respondents answered the definition correctly more than younger, untrained respondents ($r = .48, p < .001$; $r = .36, p < .001$ respectively). A oneway ANOVA revealed that means for 2nd graders ($X = 1.03, SD = 1.19$)

differed significantly from 4th graders ($X = 2.03$, $SD = 1.98$), 6th graders ($X = 2.78$, $SD = 1.81$), and adults ($X = 3.43$, $SD = 1.47$); and 4th graders also differed significantly from adults, $F(3,108) = 11.06$, $p < .0001$.

Table 12

Number and Percent of Respondents Who Explained Definition of "Pipe Dream" by Grade

| | <u>2nd</u> | <u>4th</u> | <u>6th</u> | <u>Adult</u> | <u>Total</u> |
|--------------|------------|------------|------------|--------------|--------------|
| ACCURATE: | 2 (6%) | 9 (27%) | 10 (44%) | 18 (78%) | 39 (35%) |
| INACCURATE: | 18 (55%) | 15 (46%) | 9 (39%) | 2 (9%) | 44 (39%) |
| DIDN'T KNOW: | 13 (39%) | 9 (27%) | 4 (17%) | 3 (13%) | 29 (26%) |

Of the incorrect answers, 23% defined the term literally as a dream about pipes. Their answers were confused largely from the Interlocutor's explanations of Magritte's pipe image, Ceci n'est pas une pipe, and Father's use of his smoking pipe:

A pipe dream is like just an example of a pipe. You know that the plastic pipes--they were just showing that it's just a pipe. They're pipes. It's not like an ordinary pipe like you smoke it. It's just like a pipe. This dream was like a pipe dream, a smoking pipe dream (pointing to Magritte's pipe image in photo prompt) [2nd]

Well, it's sort of like a fake pipe. [4th]

A dream about a pipe--a picture of a pipe. [4th]

It's like a play with like a pipe way up there (referring to Magritte's pipe image painted above window unit), and it's like when your father gives you a old pipe that he don't want no more, and he [René] learned how to smoke a pipe. [2nd]

This was something that's made up. Like I had one before that. That my dad, you know? He was filling a pipe--he had a pipe that was gold, and he wish he had [inaudible]. It's a dream about pipes. [2nd]

A pipe dream is like when somebody smokes it. . . . If they're watching them smoke a pipe and they have dreams of it. [2nd]

When you want to smoke a pipe. [2nd]

It's when you can't stop smoking and you try. [4th]

Dream with a pipe in it, and it's real long. Like he dreams it a lot of the nights when he's in his bed. [6th]

Some (12%) defined "pipe dream" incorrectly as a "weird" or unreal day dream in very general terms; while a few (4%) perceived it was not a dream at all, but "like a play" [2nd] or in a humorous sense "Life!" [adult]:

Well, I don't know. I've never seen one. That's the first time I've seen one. . . . At first I thought, before I saw it I thought that it was a pipe that met a dream and it was a pipe dream. [And then after you saw it?] Then I knew what a pipe dream was. [And what's that?] Well, it's a play, and it's e--I don't know what it is. I mean . . . pipe dreams can be all different . . . [2nd]

It's sort of like a day dream. It's longer than a day dream. [What's a day dream?] It's shorter than a pipe dream. [2nd]

It's just a plain dream. [2nd]

I think that you have a dream about something real weird. [4th]

It's something that you really want to dream about. [4th]

A bad vision of what you want to be when you grow up, I think. [4th]

That it's not real. [6th]

I guess when you dream of something that's not really what it really is. [6th]

Dreaming about something that's different, like different from any other dream or something. Because he always had those weird paintings. So he's probably dreaming something weird. [6th]

Of the correct interpretations, most (26%) defined it as an impossible wish or fictional dream that doesn't come true or isn't going to happen according to social realism. The Interlocutor defined it explicitly in the play as "a wish that could never come true" (p. 7). Below are selected examples of how children and adults defined this cliché and their interpretations of social realism:

A pipe dream is a realistic thing that might never happen to you. That can never happen. But he did become an artist. So he wasn't having pipe dreams--at all. That's why he made a big speech about "There isn't such a thing as a pipe dream." [2nd]

A pipe dream is a dream that's not really realistic. It's a dream that you think of, not when you're asleep or anything, but that you think you can do, but you really can't. [4th]

Maybe it's just a way of saying, "That's nonsense. Don't be--don't really have anything to do with that." [4th]

Something that isn't possible. [6th]

It's like something--a dream that can never come true . . . Perhaps what his father said it was . . . [6th]

It's a dream that's fiction. [What do you mean by "fiction"?] Not true. [6th]

A make-believe dream {fantasizing}. [adult]

An illusory, fantastic hope. [adult]

A silly notion or a fantasy which is not wise to pursue. [adult]

Crazy notion that one can rarely achieve. [adult]

A false dream, a wishful thought. [adult]

A dream that is irrational or ridiculous. (adult)

A tiresome illusion. (adult)

A falsehood, a misguided notion, an innovative alternative. (adult)

Three children (3%) explained the term in its metaphorical sense:

It was a dream that would not happen. Like it would go up in smoke. (4th)

It's like it's never happen. . . . And it's like you're up in the clouds. That's what his dad thought you know, so it's kind of like when the pipe float--you know, when you burn a pipe, it's gonna come out. It's kind of like that. (4th)

It's kind of like, you know, you smoke a pipe and the smoke comes up, you know it's gonna go away. It's kind of what his dad was thinking or something. (6th)

The remaining 6% included the play's theme or actions by defining it as a real, possible dream that does come true, though others disagree or it appears socially unrealistic:

I think it's something like made up or something. It will never come true. Like pretend some day, like a machine will turn you into a frog. That's sort of a pipe dream. It could happen though, but it's not very likely. (6th)

b. Main Idea and How They Knew

When asked to identify the main idea of the whole play, 30% (4 2nd, 7 4th, 7 6th graders, and 15 adults) inferred the more global, metaphoric application to the human condition that one should follow one's dreams in life no matter what others say; 46% (11 2nd, 23 4th, 12 6th graders, and 6 adults) discussed the play's content dealing with René's life, art, superobjective, and feelings; 11% (all children) reported incidental notions; and the remaining 13% didn't know or report a main idea. Thus, older

respondents were more likely to infer more abstract, metaphoric ideas than younger ones ($r = .46, p < .001$), especially if they knew the correct definition of "pipe dream" ($r = .33, p < .001$). A oneway ANOVA indicated that means for 2nd graders ($X = 3.09, SD = 3.23$) differed significantly from 4th graders ($X = 4.82, SD = 2.85$), 6th graders ($X = 5.30, SD = 3.11$), and adults ($X = 7.52, SD = 2.54$); and adults also differed significantly from 4th and 6th graders, $F(3,108) = 10.26, p < .0001$). Grade differences also arose in how respondents used modal cues to infer the main idea as shown below:

Table 13

Means for Cues Used to Infer Main Idea by Age Group

| | <u>2nd</u> | | <u>4th</u> | | <u>6th</u> | | <u>Adult</u> | | <u>Total</u> | | <u>F(3,108)</u> |
|---------------------|------------|-----------|------------|-----------|------------|-----------|--------------|-----------|--------------|-----------|-----------------|
| | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | |
| <u>INSIDE CUES</u> | .06 | .08 | .10 | .09 | .16 | .18 | .07 | .07 | .09 | .11 | 4.15** |
| <u>VISUAL</u> | .01 | .04 | .08 | .13 | .14 | .22 | .05 | .13 | .07 | .15 | 4.28** |
| R's actions | | | .12 | .33 | .26 | .45 | .04 | .21 | .10 | .30 | 4.10** |
| <u>VERBAL</u> | .11 | .18 | .11 | .16 | .22 | .28 | .09 | .15 | .13 | .20 | 2.15* |
| <u>PSYCH INFER</u> | .09 | .20 | .15 | .23 | .09 | .19 | .07 | .17 | .10 | .20 | |
| <u>OUTSIDE CUES</u> | .04 | .09 | .08 | .12 | .07 | .11 | .04 | .10 | .06 | .11 | |
| <u>TRAINING</u> | | | .09 | .29 | | | | | .03 | .16 | 2.53* |

* $p < .05$ ** $p < .01$

[Oneway ANOVA using Student-Newman-Keuls test significant at .05]

Verbal cues were used more frequently (36%) than visual cues (24%) or psychological cues (19%), largely because the play's main idea was made more explicit in the dialogue than in dramatic

actions. As shown in Table 13 above, 6th graders differed significantly from 2nd graders and adults by attending more to René's actions to infer the main idea, $F(3,108) = 4.10, p < .01$. They differed most from 2nd graders in their use of all visual cues, $F(3,108) = 4.28, p < .01$, while differing most from 4th graders in their use of all verbal cues, $F(3,108) = 2.15, p < .05$.

The main idea was known primarily from all verbal cues totalled ($r = .24, p < .01$) and all characters' thoughts ($r = .22, p < .01$). Respondents were more likely to know or report a main idea if they used René's or the Interlocutor's dialogue (both $r = -.25, p < .01$) or the theatre context ($r = -.27, p < .01$). Individual modal cues related to one another in various ways (see Table 38 matrix in Appendix). What follows are individual responses grouped in the original ten categorical concepts and how respondents knew these ideas.

Some children (11%) related various ideas incidental to the play's major theme. Of these, 5% offered somewhat vague answers repeated only from the play's title or theatre context. Their metacognitive responses offer clues about how they perceived and processed the play's intentions:

That this is not a pipe dream. Because they kept saying that in the story. . . . [2nd]

They're trying to tell you that this play is probably a pipe dream play. Because they could have named the play after the boy instead of saying, "This Is Not a Pipe Dream." [4th]

That it's not a pipe dream. Because it's the title of the story. [6th]

The pipe. Because at the end of the play, the dad gave him the smoking pipe. [6th]

Good. Liked it. Because they acting good. [2nd]

Acting. Because it ain't real. [2nd]

Six 2nd graders (5%) discussed scenes unrelated to the play's major theme:

When his dad and that one man [Teacher] who tried to fight him and then they had to run after him. . . . (Child pointed to classroom photo prompt and interviewer confirmed that child meant this scene.) I think they were trying to hurt him. Because his mom ain't there, they can hurt him. [2nd]

When his father gave him a pipe. (Pointing to last photo prompt) So he won't forget his dad or his mother. [Essentially, child repeated her response to previous question.] [2nd]

Not to go looking for his mother. [Did not know how she knew.] [2nd]

Never try this at home. . . . You really shouldn't try it at home. You really shouldn't run off and go into the river, and you really shouldn't even "oooh," like when he was (Child mimed screaming and falling over). That's silly. [2nd]

They kept saying, "Don't try this at home." (Stated with same inflection as actors) Because I think it was true, whatever they do, like if there was dangers, they say, "Don't try this at home." [2nd]

Another group of respondents (46%) focused on the content given within the play as the main idea. Of these, 14% (particularly 4th graders) discussed how the play was about René's life in general terms:

His life. They said it was. [2nd]

I think to make people happy and kind of sad. [Child went on to discuss various scenes from the play relating to René's life.] It's because it made me happy and sad, so I thought it would make other people happy and sad. [What parts made you happy?] The part

that his father said that, "When I say this is underwear, then this is underwear," and then when he wore that bowl on his head, and he said, "Pa," and then he said, "I don't want to hear a word, peep." And then he said something else, and then said, "Here's your underwear." [What parts made you sad?] The part when he lost his mother. [2nd]

That it was just that some parts they found out that they were true in real life and sometimes they were just fake. Because they kind of wanted, had to make into a kind of like tall tale. [2nd]

Showing how that like artist was growing up and how that boy was going through. Because it like started out when he was a kid and at the end he like got married. [2nd]

To show mostly how René lived. . . . [4th]

The main idea was to let us know what René Magritte was like. Because you can't go back to the past. People yet can't go back in time to see what people's lives were, so it's a problem. So people can know what his life was instead of like sitting, just showing you paintings. They just showed you his life. [4th]

René's mom died. Because it was kind of like at the end and main ideas are like at the end. [4th]

René's paintings and his life. . . . When our [art teacher] said, "about a painter," it sort of meant like about his life. [4th]

Well, they wanted to tell . . . what was his life like, because he had an unusual life. . . . [4th]

. . . Because he was the main character . . . that was mostly in the movie. . . . [4th]

To tell us how it was back then in the olden days. . . . How the stars were raised, not raised actually, how they were treated and all the rest. . . . Because it wasn't a lot of, like regular plays we go up to. [Why was it different from normal plays you've seen?] Because the other plays we see, like bears [referring to Winnie-the-Pooh seen last year] and all the rest of them stupid stuff. These were like real actual plays like, this was like a family, like they was raised up. But all the rest of the plays were like they was playing and all the rest. [4th]

Other respondents (11%) were more specific by inferring how the main idea was about René's art and how he became an artist against his father's wishes:

Making him grow up to be an artist. Because his father didn't want him to and his mother did, and he finally did grow up. [2nd]

How Magritte became an artist, and that the main idea is giving him that pipe. Because it says, "This is not a dream pipe," and he has a picture of a pipe, and then they just give it to him. That kind of gives you an idea that the main idea was to become a artist and get that pipe. [4th]

To learn about René Magritte and like his life and how he became a painter. . . . He just liked to paint and he ended up painting. That's pretty much all he did. [4th]

To show the audience that was there a lot about, to know a lot about René Magritte, what the paintings he did and what happened in his social life and what happened in his normal life. Because that's my opinion, and I think that's probably mostly what I think happened. [4th]

Just telling René's life, about his paintings. Because it just seemed like the play was how it was when he was growing up, I think. [6th]

Another 10% were even more specific by inferring René's superobjective in wanting to become an artist and by citing the play's major conflict:

. . . He always wants to be a artist, and his dad didn't want him to be a artist and his mom did, and he did. Because he told his dad, and his dad said no. [2nd]

When René's father was like yelling all the time, being mean to him. . . . Because he wanted to be a painter, and he didn't want him to be a painter. Because [his father] was afraid he would like mess up. [2nd]

. . . René's dad didn't want him to be an artist but his mother did. Because he was saying, . . . "Mom, can I be an artist?" [2nd]

When he was a kid, and he wanted to grow up and be a painter. Like what he was like when he was just like me. Because of the play. He was in almost every scene from the beginning. [6th]

That René, when he was a boy, he wanted to become a painter, and his father wouldn't let him. . . . Because that could happen in real life, and it would seem that way. [6th]

A few respondents (4%) focused most on René's feelings and thoughts in more abstract ways as the play's main idea:

Well, I think the main idea is about living and dying and having feelings . . . Well, you see, through and throughout the play, there was a lot of feelings. And then, the living and dying--You see, René is like, part of his heart was living because his mother is still in his heart; and then another part is dead because his mother is dead, and he'll never be able to see her again--only in his mind. He will be able to feel her, in his heart. [2nd]

To show that Magritte had an unusual way of--Well, he thought of himself as a thinker [referring to interlocutor's dialogue] and he played tricks on your mind and stuff. And he really wanted you to think about what the paintings he made, and how he became a painter, too. [How do you know those were main ideas?] Well, they talked about it a lot. [4th, trained]

René wants to prove to his father that he's really a good artist. . . . His mother died, and he was kind of on his own with his father, and so it was his chance to prove to his father that he could really be an artist. [6th]

A few respondents (7%) (mostly 6 adults) offered other abstract and equally valid main ideas, not necessarily related to the director's primary intentions:

Probably about families and stuff. . . . Maybe because they just want families to stay together or something like that. [2nd]

To show René Magritte's life and to show that things aren't always what they seem. [How do you know that was the main idea?] Well, basically that was all they showed through the show. [4th]

Do words/life and ideas/dreams go together? It was what René was searching for. [adult]

To evaluate what things really are. [How do you know this was a main idea?] I don't. (*Note that this concept of not knowing artists' intentions for sure is taught explicitly in this college course.) [adult]

Things are how we perceive them. Not sure.* His paintings? [adult]

The play tries to show that real life and theatre are different as well as creativity is not a bad trait. They show the non-creative person "father" as a bad figure. [adult]

Anything imaginable thru a creative display can be real. [How do you know?] I said so. [adult]

Through difference between people. [How do you know?] You never know.* [adult]

Older respondents (30%) (more than 2nd graders) continued to delve more deeply by inferring metaphoric ideas, beyond aspects tied to René, with applications to the world at large. Of these, 6% drew from René's explicit thematic dialogue to infer the play's main idea:

To explain his life, and maybe to get people to believe that everything's possible. (Didn't know how she knew) [6th]

"Everything is possible, there are no pipe dreams." The narrator quoted this line [Note that René says this, not Interlocutor], and it links up with the title. [adult]

Since nothing is impossible, if René can paint any reality, there can be no such thing as a pipe dream. Magritte said it himself. [adult]

The impossible is possible. The actor told us in the play when he was talking to the audience. [Note that the actor did not tell the audience directly, but merely faced the audience when he said it.] [adult]

Anything is possible. It was repeated several times during the play. [adult]

Another 13% went beyond this notion to explain how the main idea was to use your imagination and to follow your dreams. Again, use of modal cues and inferences illustrate viewers' perceptions of reality, illusion, and dreams:

Any dream can come true. Because he kept dreaming all these things and then they ended up happening. . . .
[4th]

Just use your imagination. Because it was just that he painted some imaginary pictures and the pictures were shining up. They were pretending all that we see.
[4th]

Well, the mother sort of said it. She said, "If you have a dream, it can come true." If you really want to do something, it will happen. Anything's possible. They kept on saying that. . . . If anything's possible, then there's nothing such as pipe dreams. That was the theme of the play. [6th]

Main idea was about a dream, and he found out that there wasn't dreams, because everything could happen. Because they kept saying it, "It's not a pipe dream."
[6th]

Go through with your dreams. Because, I mean, he didn't give up, even though how mean his father was to him . . . [6th]

Anything is possible, so do what you feel. [How do you know?] The discussion of pipe dreams and how there really aren't any. [adult]

To follow your dreams and don't be wrongly influenced by other people. [adult]

To listen to your dreams--follow them; don't let others rule your life. . . . [adult]

The human mind is the only limiting element in life, but the human mind is potentially limitless. . . .
[adult]

The remaining 10% of this group went further still, as implied in some responses above, to explain how people can do anything:

To be what you want to be when you grow up. . . . [2nd]

Always let your kids be what they want to be. . . .
[4th]

The main idea is to show that René Magritte and the other kids should stand up for what they want, . . . and the way [René] thought, the different ways, because some kids [in the audience] would probably misjudge it. . . . Because he stood up for what he wanted and he became an artist. But he didn't consider himself an artist. He considered himself a thinker. (Referring to Interlocutor's dialogue). [4th]

To show that whatever you--If you have a dream, just keep on trying for it. Because it was telling you all the way through to like never give up on your dreams. . . [4th]

To show people that they can do things that they want to do, and probably won't try to stop them. . . . [6th]

That you can do anything you really want to do even if there are people who don't want you to. Because that was shown between René and his dad. [adult]

c. What René Learned and How They Knew

Respondents were asked to infer what René learned by the end of the play in the hopes that this differently worded and more highly cued question would elicit more metaphoric themes inferred directly from René's superobjective and spine of the whole play. It was hoped that any general ideas given in the previous question would be processed more deeply in greater detail toward the director's and playwright's intentions.

So, when asked what René learned at the end of the play, 39% focused on the intended metaphoric application of following one's dreams; 38% discussed René's life, art, superobjective, feelings, and additional abstract notions; 3% related incidental notions; and the remaining 20% did not know or report anything.

Again, older more than younger respondents tended to infer the play's metaphoric theme ($r = .32, p < .001$), especially if they knew the correct definition of "pipe dream" ($r = .36, p < .001$). A oneway ANOVA revealed that the means of 2nd graders ($X = 3.42, SD = 2.98$) differed again from 4th graders ($X = 5.94, SD = 4.07$), 6th graders ($X = 7.44, SD = 2.45$), and adults ($X = 6.13, SD = 3.42$), $F(3,108) = 7.29, p < .001$. There was a significant relationship between responses for main idea and what René learned ($r = .31, p < .001$). Few significant age differences arose in using cues to infer what René learned as shown below:

Table 14

Means for Cues Used to Infer What René Learned by Age Group

| | <u>2nd</u> | | <u>4th</u> | | <u>6th</u> | | <u>Adult</u> | | <u>Total</u> | | <u>F(3,108)</u> |
|---------------------|------------|-----------|------------|-----------|------------|-----------|--------------|-----------|--------------|-----------|-----------------|
| | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | |
| <u>INSIDE CUES</u> | .12 | .11 | .17 | .14 | .17 | .09 | .10 | .10 | .14 | .12 | |
| VISUAL | .11 | .18 | .14 | .19 | .16 | .17 | .07 | .14 | .12 | .17 | |
| VERBAL | .16 | .24 | .16 | .21 | .17 | .20 | .13 | .17 | .16 | .21 | |
| PSYCH INFER | .08 | .18 | .23 | .33 | .17 | .24 | .09 | .19 | .14 | .26 | |
| Others' think | | | .15 | .36 | .17 | .39 | | | .08 | .27 | 3.48* |
| <u>OUTSIDE CUES</u> | | | .02 | .09 | .07 | .17 | | | .02 | .09 | 2.80* |
| GEN KNOWLEDGE | | | | | .09 | .29 | | | .02 | .13 | 2.73* |

*p < .05

[Oneway ANOVA using Student-Newman-Keuls test significant at .05]

Again, verbal cues were used more frequently (41%) than visual cues (32%) or psychological cues (25%). As shown in Table 14 above, 4th graders differed significantly from adults by

inferring others' thoughts, $F(3,108) = 3.48, p < .05$; while 6th graders used more outside cues than other age groups, $F(3,108) = 2.80, p < .05$, particularly in their use of general knowledge about Magritte, $F(3,108) = 2.73, p < .05$.

Respondents knew what René learned primarily from his dialogue ($r = .35, p < .001$) and thoughts ($r = .27, p < .01$) and from others' dialogue ($r = .26, p < .01$) and thoughts ($r = .22, p < .01$). The only significant interrelationship between individual modal cues was between what the play showed and told in general ($r = .32, p < .001$). When combined, respondents inferred René's learning most from all verbal cues ($r = .43, p < .001$), all characters' thoughts ($r = .33, p < .001$), and also all visual cues ($r = .27, p < .01$). In fact, those who used verbal cues here were also likely to have used verbal cues when inferring the main idea ($r = .34, p < .001$), and they were less likely to have used visual cues when inferring the main idea ($r = -.27, p < .01$). What follows is a detailed report of what concepts were inferred about René's learning.

Two 2nd graders and one adult (3%) cited incidental notions. One 2nd grader, who had noted the play's conflict as a main idea, now noted that René learned about the story, and more specifically "about a pipe," from the Interlocutor. The other 2nd grader, who had not known a main idea, reported that René "learned not to go to the cemetery because he got all dirty." The adult, who had not reported a main idea, now wrote that René "learned of his mom's death."

Many respondents (38%) discussed the play's content. Of these, 5 children (4%) noted various aspects about René's life:

That his mother died. Because at the end he stopped looking for her. [2nd]

That he was on his own without his mother. He was supposed to do his own life with his wife. . . . [4th]

Probably learned that he can do lots of things. [6th]

Well, he married Georgette, and he was just growing up. . . . [6th]

More respondents (16%), especially 11 2nd graders, inferred aspects about René's art, particularly how he learned how to paint:

How to paint. . . . His mom was painting and she let him have a brush to paint. [2nd]

To be an artist. Because he wanted to be one when he was a little kid. [2nd]

That he could paint. Because he was painting. [2nd]

He learned how to draw, and he learned where the river was, and he learned that his mom died, and then he learned about how to get on top of the roof, and he learned how to go to the graveyard, and he learned how to cry (Child giggled here), and he learned how to run, and he learned how to take off his jacket. . . . [2nd]

That he could probably be an artist. Because when he leaves, his dad can't do anything about it. [When he grows up?] Yeah, he was like 18, 19. [4th]

That he was gonna grow up and be a painter, I guess? I don't know. I wasn't paying a whole lot of attention to it. . . . Because he got the paintbrush and at the end he was painting. . . . [6th]

A few (4%) focused more specifically on René's superobjective:

That he needed to--he loved painting, and that he wanted to do that, and that he wanted to get married and have kids, and have a good career, and have a good life. . . . He wanted to get a job and then paint later. Because see, his father never let him paint,

and his mother was the only one supporting him. So when she died, he felt like . . . "Well, I shouldn't do this anymore," and his father just gave him his pipe, and then at the end, he got married and had no kids. . . [4th]

That painting was an art. That's what he wanted to do and he was sure of it. [How do you know?] Well, that would probably happen right after the main idea. It'd seem possible that way. [6th]

A few more (10%) focused on René's feelings, particularly about having his mother in his heart (from the dialogue):

He learned that even though his mother is dead, he still has her deep down inside. Because he said, "There's no such thing as a pipe dream." . . . [2nd]

That if somebody's dead and you can't find them, then you can always remember them somehow. Because they were saying it on the play. [2nd]

That he just liked to talk to his paintings kind of. . . [2nd]

How to be happy. . . . Because he got married, and then the ending, it was a very nice ending. [What made him happy?] I think it was when his mother gave him the paintbrush. Because he act like he was happy in the end. [2nd]

That he really couldn't find his mom. That he could find her in his heart. And that he did, and that he could paint and he could be a painter, and he could answer questions, and he talked about missing his mom. [How do you know?] It was just his feeling . . . Because he loved her a lot . . . and he missed her . . . [4th]

That he was born to be a painter, and he wouldn't be lonely if he painted. Because he said it at the end of the play. [4th]

He learned that his mother really was dead and he couldn't find her . . . and he could remember his mother by that paintbrush that he found. Because he was saying that he would always remember her with the paintbrush. . . . [6th]

He could be happy with art. [adult]

That he could be happy doing what he wanted to do. Because he was painting in the last scene and not worrying about "words." [adult]

He found comfort in painting (as well as his mom). Because he told us he would never be alone painting. [adult]

Other abstract notions were inferred by 6 older respondents (5%):

That life has to go on. Because his father told him she ain't gonna come back and he can't find her. [6th]

Well, words can be expressed through pictures, and that he wanted to be an artist. [How do you know?] Well, he said it, and he also kind of showed it in a way. [6th]

That your life (words) and dreams (ideas) can go together. [How do you know?] Marriage and being successful. [adult]

That words aren't everything; you can also use pictures. [adult]

Life is meaningful, and not to worry about dying; enjoy life. He said this. [adult]

That all is real in art. He said so. [adult]

A few more respondents (39%) focused in on the play's metaphoric applications to life by going beyond play content to apply René's life story to the human condition. Of these, 9% used René's explicit thematic dialogue to make this point:

That there as probably no such thing as a pipe dream, and he knew that there was such thing as a painter. He knew that he could be a painter if he would really want to be one and if he took time to paint that stuff. He took time off to paint. [How do you know?] . . . I guess he just didn't want to have dreams about a pipe dream. He didn't want to collect them and stuff. [2nd]

. . . His father said, "You're just dreaming," and then his father said, . . . "You're not dreaming." I mean, "You're dreaming, but you're painting your dreams." . . . He said, "This is a pipe dream," and then maybe that's why--and he handed him his pipe. . . . because

then at the end, René said, "This is not a pipe dream. (Child stated with same inflection as actor) I am gonna paint." [4th]

Well, nothing's impossible. . . . Because he just experienced a lot of things that were unusual and that's why he said, "Nothing's impossible." [What kinds of unusual things did he experience?] Well, one thing . . . he said "the door" and he put scissors in there, and like a book, he put in it, and it said "the wind" and some other things. I thought that was unusual and so he said, "Nothing's impossible." . . . [4th]

The world ain't a pipe dream. . . . He just said it at the end of the play. [6th]

That anything was possible. Because people said it. [6th]

That the impossible is possible. Because he stated it. [adult]

More and older respondents (12%) honed in on the notion of following one's dreams:

That some dreams can come true and anything can happen. Because at the end of the story he had a wife and he was married, and he was really got into painting a lot and he painted a lot of pictures and he was happily married. [4th, female]

He learned that he should have faith in himself and not to be so shy and, you know, people make mistakes and you shouldn't be embarrassed if you try and you get the wrong answer because you can always do better the next time. Because he didn't give up. He was still trying to, you know, convince his father that he could be an artist and draw. [6th]

He learned . . . that everything could come true. . . . Because he said that there wasn't dreams . . . [6th]

To follow his dreams. . . . Because he became an artist. . . . [6th]

To go through with your dreams. . . . Because, I mean, he didn't really want to do anything else, and it was practically his only choice, and he found out that he actually could if he wanted to bad enough. So he did

go through with his dreams, or at least tried, and he succeeded. [6th]

He could make impossible things reality. He became what he wanted to be. [adult]

You must follow your dreams and think the things your mind wants to think. [How do you know?] He seemed content. [adult]

That pipe dreams could be achieved. . . . [adult]

The remaining 19%, particularly 12 4th graders, took these notions even further by discussing how perseverance helps dreams come true:

He learned that he can do anything if he really hopes he can. . . . [2nd]

That it's okay to be anything you want, I guess, because he asks if it's silly to be a painter. . . . Because, you know, when he kept on painting and he didn't mind his dad . . . He just did what he wanted to. [2nd]

That he can do what he wants, what he dreams about. But if he's not very good at it, he can quit. . . . [4th]

He learned that if you dream a lot and really love it and you want to do it, then you'll probably get your dream. . . . [4th]

Life can sometimes be measurable and sometimes it can't. That you can be what you want to be if only-- whatever you want to be, you can be. Don't let people stop you in life. Because all through his life, his mother said that if he dreamed what you want to be, you can be. And that all through his life, he's been trying to and saying he wants to and everything. He never gave up his dream to paint. [4th]

That even if someone dies, or even if someone gets in your way, you can't let them get in your way. You have to do what you want to do. . . . [4th]

Well, patience. Because he waited all that time to become an artist. [4th]

That if you want to be anything you want, don't let it fall behind you. Just keep on trying to do it. . . . [4th]

That he could never given up and just kept on trying. . . . [4th]

Well, I guess if he take the responsibility, he can do things he want to do. . . . [6th]

He learned that he could do it. . . . Anything is possible. That's sort of how I knew that that was the point of the play, because at the end, they usually have a moral in it or something. . . . [6th]

He learned that if you concentrate on one thing and if you work hard at it, you can be whatever you want to be. . . . [6th]

To follow his intuitions and to try anything, because you can accomplish anything you want. . . . [adult]

That there are no pipe dreams and you can do anything you really want to accomplish. Because he began painting. [adult]

d. What René Meant by Thematic Dialogue

Because René states the play's main metaphoric theme, respondents were asked to interpret the meaning of this explicit dialogue to see how they would make sense of this complex, propositional, counter-factual sentence. However, when asked what René meant when he said, "If everything is possible, there are no pipe dreams" (p. 26), answers often depended on whether they understood the cliché, "pipe dream" (see respondents' definitions above). In fact, respondents were much more likely to interpret this dialogue more accurately if they understood the meaning of "pipe dream" ($r = .61, p < .001$).

Here, 40% gave accurate interpretations (2 2nd graders, 11 4th graders, 10 6th graders, and 20 adults); 14% (all children)

repeated ideas within the dialogue, often in a circular fashion, without actually interpreting it; 10% (all children) discussed aspects in the play's content; 18% (all children) cited incidental or inaccurate notions; and, the remaining 18% did not know or answer what René meant. Those who interpreted the dialogue's meaning most accurately also were more likely to have inferred more metaphoric concepts about dreams when identifying a main idea ($r = .31, p < .001$) and what René learned ($r = .53, p < .001$). Again, older respondents gave more accurate interpretations about this thematic dialogue than younger children ($r = .45, p < .001$). A oneway ANOVA revealed again that the means of 2nd graders ($M = 3.06, SD = 3.46$) differed significantly from 4th graders ($M = 5.82, SD = 3.84$), 6th graders ($M = 6.52, SD = 3.68$), and adults ($M = 8.09, SD = 3.23$), $F(3,108) = 9.78, p < .0001$. Those who understood the dialogue's meaning were less likely to use visual cues when identifying the play's main idea ($r = -.31, p < .001$) and more likely to use verbal cues when inferring what René learned ($r = .24, p < .01$).

For many children, 2nd graders in particular, the hypothetical proposition of this dialogue proved too cognitively challenging even when the interviewer broke the proposition down into its two parts in order to have children interpret each phrase separately one at a time. As French and Nelson (1985, 38-46) explain, understanding if sentences (If A then B) implies and requires higher-order, hypothetical, formal logic, especially when given probabilistic propositions or conditional syllogisms

such as this one, and especially when listeners must interpret another speaker's presuppositional framework rather than their own. Some Piagetian researchers have debated whether this ability occurs before the age of 12, while others point to studies which show that preschoolers are capable of formal hypothetical thought.

In order to interpret this proposition accurately, listeners were required to consider both halves simultaneously, rather than as sequential, relational "events." However, many children appear to have considered only one half of the proposition. Their interpretations often depended on which half of the proposition took focus for them, and whether they interpreted each half as a positive or negative "truth." In addition, an If A clause suggests that then B may be an optional or obligatory negative conclusion or not-A. In fact, some children interpreted the negative statement, then "there are no pipe dreams," as meaning that pipe dreams are not possible--the opposite meaning of René's intention. From a subjective standpoint, it appeared that younger 2nd grade children focused primarily on the second half of the proposition by interpreting the consequences of then "there are no pipe dreams" as a negative statement. Older children appeared to focus on the causal, first half of the proposition, "if everything is possible," by trying to come to grips with this conditional and counter-factual statement. For older 4th and 6th graders steeped in literal realism, the possibility or plausibility of this "impossible" statement alone

may have proved too overwhelming to digest. Other children who accepted this "possibility" strove to connect the meaning of if with then, sometimes in inaccurate or circular ways.

In contrast, 28% of the children were able to decipher this proposition accurately in more abstract ways. Their ability to do so may have been assisted by the context of René's actions throughout the play (cf., French and Nelson 1985, 86-95). What follows is a detailed report of children's language.

Fifteen second graders, in particular, and a few fourth (3) and sixth (2) graders (18%) offered the following inaccurate notions, largely because they did not understand the meaning of "pipe dream":

Probably because . . . [a dream about pipes] might be true. [2nd]

You can't dream of a pipe. [2nd]

Then he never saw one, dreamed of a pipe dream. [2nd]

Well, if he doesn't want a pipe dream, then he doesn't have to do it. [2nd]

He probably meant that a pipe isn't a pipe? [2nd]

There're no pipes? No real good pipes. [4th]

Like he didn't have a pipe dream to smoke, because he didn't have pipe dreams about his dad's pipe. But he had [thoughts] . . . about what his dad said . . . about being a pipe dream or being an artist. [4th]

That it could be one. It could be a pipe dream and it cou'd not be [a pipe dream]. [6th]

Some children reported René's actions at the time that he spoke this dialogue:

The pipe was in his bag. [2nd]

That he got his paintbrush and his mother, and he probably thinks in his pipe dream that his mother got lost, but his mother's there, and he got the paintbrush and his mother. [2nd]

Some focused mostly on the second half of the proposition to conclude that pipe dreams don't exist:

He means that there was no such thing [as] a pipe dream. [2nd]

Maybe he meant there's art dreams and not too many pipe dreams. [2nd]

Well, because he got a paintbrush, he probably thought his mother wanted him to be an artist, too, so he doesn't think there was any pipe dreams possible. [2nd]

I guess that he's just talking about there are not really any pipe dreams. So I think they are. [2nd]

He's right. There is no pipe dream. [4th]

Some interpreted the word "possible" as meaning "real" to conclude that pipe dreams aren't real:

He means everything is real . . . because he said there's no dreams. [2nd]

Because he thought [the pipe dream] wasn't real. . . . He didn't believe. [2nd]

Because it's probably not real. [2nd]

One 6th grader noted that this dialogue "seemed pretty advanced. I don't think anyone in my class understood much of it." When asked to interpret the counter-factual clause, "If everything is possible," she replied, "Like if you jumped off the Empire State Building, some way you could live. . . . I just still don't understand what 'pipe dream' means."

Rather than interpret the dialogue at a higher abstract level, especially if they did not know the meaning of "pipe dream," 10% of the children focused on René's objective to become an artist, his art, or feelings by the actions of this scene:

His wishes. . . . He was making a wish for his mom. . .
 . So he can paint. [2nd]

He meant that he didn't want to have a pipe dream because his mother put that paintbrush in his bag. Now he can really be a painter now. He could buy paints and stuff, and paint lots of pictures. [2nd]

He can be a artist. [2nd]

I think he always wished to have a paintbrush so he could be an artist, and I think that came true. [2nd]

He must not have believed in pipes? . . . And also he said at the last, he wants to be a painter. . . . [4th]

Like he didn't have a pipe dream to smoke, because he didn't have pipe dreams about his dad's pipe. . . . [But he had] thoughts about what his dad said. . . . About being a pipe dream or being an artist. [4th]

. . . Like when his dad said his hat was his underwear, that it was really his hat, but he was just saying that. . . . He was just trying to make him think that, because he wanted René to think that everything his father said was real . . . was true. [4th]

Because his father just wanted him to be, not painting, and . . . he thought that painting was something you, like a painting was a thing that you thought about and thought about. . . . So he thought, "It's not a pipe dream, because I want to do what, I want to do this, because I would like to do this." [4th]

That he believes that he can become an artist. [4th]

Because his mother told him he would grow up to be a artist. His dad told him it was just gonna be a pipe dream. [6th]

He meant that . . . if his mom came back, that he didn't need anything like that, so he could just draw. [6th]

Because when he thought that his dead mother brought him the paintbrush, but she gave it to him before she died. [6th]

Other children (14%) worked hard to make sense of this propositional sentence, but their efforts resulted in essentially repeating or paraphrasing the same notions embedded in the sentence. Again, some children misunderstood the meaning of "pipe dream," which affected their interpretations, while again others interpreted "possible" as meaning "real" or "true":

If pipe dreams means like that you shouldn't do that and that it's nonsense, then if everything is possible, then nothing can be nonsense like a pipe dream. [4th]

Because if it was a pipe dream, this wouldn't be possible. If it was, it would be possible. It's kind of confusing. . . . If the pipe is not real, it would be a pipe dream. If it wasn't, it would be a pipe dream. . . . [4th]

He meant that if everything is possible, then pipe dreams don't really exist. That pipe dreams are real, too. [4th]

He means that if everything is possible, then there would be no pipe dreams; [no? or know?] like nothing like this could never happen. [4th]

. . . It's always possible to get something that's not really a pipe dream. [4th]

Then there couldn't be anything that's not possible, because everything is possible. [6th]

Like a pipe dream is something that isn't possible, and if everything is possible, then there isn't any pipe dreams. Because if pipe dreams aren't possible, and if everything's possible, then there can't be any pipe dreams. [6th]

Like he meant that if everything's real, or if everything's possible, then nothing can be a dream. [6th]

. . . There couldn't be a pipe dream if everything was possible because a pipe dream is something that you can't have, and if everything is possible, then you can't have a pipe dream. [6th]

At the end of one interview, a 2nd grader asked the interviewer to define "pipe dream." After the interviewer's explanation, he had little trouble interpreting René's thematic dialogue, "that the dream could really come true."

Though this sentence was difficult for children to interpret, 12% of the 2nd graders, 33% of the 4th graders, 44% of the 6th graders, and nearly all of the adults (87%) were able to extrapolate the counter-factual argument in this proposition. Here, 40% of the respondents abstracted this sentence to mean an application or prescription for people's lives--that people should follow their dreams and/or do whatever they desire to do in life:

Well he meant like, if yooou think you can do something, you can do it. You just gotta have the know-how, but you do because you want to do that something. And you've got the know-how, so you can do it--very, very, very, very well. Do it. So easy to do. [2nd]

He could do anything if he wanted to. [2nd]

He means you can do anything. [2nd]

He meant like that anything could be, anything could happen. [2nd]

That he doesn't have to dream about painting. He just knows it's possible that he can paint. He doesn't have to dream about it. He was holding his mom's paintbrush. [4th]

He meant like, if you could paint anything, you don't have to dream that you can paint it. [4th]

He meant that he could pursue what he wanted. [4th]

He meant that, in his paintings, in painting, anything could happen, and pipe dreams couldn't. [4th]

. . . If he could get what he wanted, then what he dreamed was true--came true. He got a brush . . . after he wanted to become an artist. [4th]

. . . He probably meant that . . . nothing is make-believe. [4th]

. . . Everything is possible if you really believe and want to do it bad and you work at it. . . . [4th]

Well, everything was possible . . . There wasn't a dream that couldn't come true. [4th]

That anybody's dream can come true. [4th]

If everything's possible, there can't be any pipe dreams because nothing can't be fiction, so there's nothing to dream about that's not true. . . . Because you couldn't dream about something that couldn't happen, because if everything was possible, you couldn't dream about something that couldn't happen. [6th]

He meant that--His dad was telling him that things are like gonna go up in smoke, but his dad in a way was also saying that everything is possible. . . . But he finally realized that . . . if everything can happen, then when everybody says it's not gonna happen, it can. [6th]

Like everything can be real. He said he can be what he wants to be. [6th]

. . . Nothing is impossible. [6th]

. . . You don't have to dream about what you want to do when everything's possible. [6th]

Well, like the saying, "There's a will, there's a way." [6th]

He meant that you can do everything. Like there isn't any restrictions on what you can do. The opposite of what his father said, like "You can't do that." [6th]

The following adults elaborated on these notions in other ways:

Not everything is possible or else no one would have dreams.

No fantasies are too wild; there are no silly notions.

No idea is too crazy if anything can be attempted.

If anything can be done, there are no thoughts or ideas that are empty/hopeless.

Nothing is unreachable if everything is possible.

Don't set limits on yourself or others.

That all dreams can come true.

That no dreams are unattainable, if everything is possible.

That nothing is ridiculous and anything is possible.

He could paint everything, thus everything existed; everything was possible and if anything is possible, the impossible doesn't exist (pipe dream).

The realm of possibility negates a pipe dream.

If everything is possible, then there is nothing you can't achieve.

One man's creation, aspiration may be another's idea of a pipe dream, but it is still possible.

He meant if everything can be done, then one cannot dream about it but can accomplish it.

Because he thought a pipe dream could be achievable by some select few, but not by anyone yearning something but only by those who chose to devote most of their time for it.

Everything you want, you can make reality.

You can do anything you set your mind to.

e. Summary of Thematic Understanding

Developmental age differences arose in how audiences understood and interpreted the theme of the play, as summarized in Table 15 below. Older age groups differed significantly from 2nd graders in their ability to abstract main ideas, what René learned, and René's thematic dialogue, $F(3,108) = 13.15, p < .0001$, especially if they were able to define the meaning of "pipe dream" accurately ($r = .51, p < .001$).

Table 15

Means of Conceptual Responses to Thematic Questions

| | <u>2nd</u> | | <u>4th</u> | | <u>6th</u> | | <u>Adult</u> | | <u>Total</u> | | <u>F(3,108)</u> |
|-----|-------------|-----------|-------------|-----------|-------------|-----------|--------------|-----------|--------------|-----------|-----------------|
| | <u>Mean</u> | <u>SD</u> | <u>Mean</u> | <u>SD</u> | <u>Mean</u> | <u>SD</u> | <u>Mean</u> | <u>SD</u> | <u>Mean</u> | <u>SD</u> | |
| PD | .67 | .60 | 1.00 | .75 | 1.26 | .75 | 1.65 | .78 | 1.09 | .78 | 9.60**** |
| | 1.03 | 1.19 | 2.03 | 1.98 | 2.78 | 1.81 | 3.44 | 1.47 | 2.18 | 1.85 | 11.06**** |
| MI | 1.42 | 1.25 | 2.24 | 1.00 | 2.30 | 1.22 | 2.91 | 1.24 | 2.15 | 1.28 | 7.65**** |
| | 3.09 | 3.23 | 4.81 | 2.85 | 5.30 | 3.11 | 7.52 | 2.54 | 4.96 | 3.31 | 10.26**** |
| RL | 1.52 | 1.18 | 2.42 | 1.62 | 3.09 | .95 | 2.35 | 1.43 | 2.28 | 1.44 | 6.53*** |
| | 3.42 | 2.98 | 5.94 | 4.07 | 7.44 | 2.45 | 6.13 | 3.42 | 5.55 | 3.61 | 7.29*** |
| RM | 1.45 | 1.28 | 2.39 | 1.56 | 2.74 | 1.45 | 3.48 | 1.38 | 2.41 | 1.58 | 9.71**** |
| | 3.06 | 3.46 | 5.82 | 3.84 | 6.52 | 3.68 | 8.09 | 3.23 | 5.62 | 3.98 | 9.78**** |
| ALL | 1.46 | .91 | 2.35 | 1.06 | 2.71 | .87 | 2.91 | .92 | 2.28 | 1.10 | 13.15**** |

p < .001 *p < .0001

PD = Definition of "Pipe Dream"

RM = What René Meant by thematic dialogue

ALL = (MI+RL+RM)/3.

MI = Main Idea

RL = What René Learned

[Note: 1st row PD means are collapsed as correct (2) to don't know (0), and 2nd row means are uncollapsed scores (range=0-4). 1st row means of MI, RL, and RM are collapsed scores (range=0-4), and 2nd row means are uncollapsed scores (range=0-10). See corresponding numbers of concepts in Table 16 below. Oneway ANOVA Student-Newman-Keuls test significant at .05 level.]

Because René's explicit thematic dialogue proved troublesome for many children, conceptual responses to questions regarding the play's main idea, what René learned, and the meaning of René's dialogue were collapsed to determine which question afforded the most abstract thematic concept by grade level as shown below:

Table 16

Number of Respondents Who Inferred Most Abstract Concept per Thematic Question by Grade

| | <u>2nd</u> (N=33) | | | <u>4th</u> (N=33) | | | <u>6th</u> (N=23) | | | <u>Adult</u> (N=23) | | | <u>Total</u> (N=112) | |
|----------------------|----------------------|-----------------|---------------|----------------------|----------------|------------------|----------------------|---------------|------------------|------------------------|---------------|----------------|-------------------------|--------|
| | <u>MI</u> | <u>RL</u> | <u>RM</u> | <u>MI</u> | <u>RL</u> | <u>RM</u> | <u>MI</u> | <u>RL</u> | <u>RM</u> | <u>MI</u> | <u>RL</u> | <u>RM</u> | | |
| 1. Title | | | 1 | | | | | | | | | | | |
| 2. Unrelated | $\frac{1}{1}$ | $\frac{1}{1}$ | $\frac{1}{1}$ | | | | | | | | | | 3 | 3% |
| 3. R's Life | 1 | 2 | | 1 | | | | | 1 | | | | | |
| 4. R's Art | 1 | 6 | | 2 | 2 | | 1 | 1 | | | | | | |
| 5. R's Objective | 2 | | | 2 | 3 | | 1 | | | | | | | |
| 6. R's Feelings | | 2 | 1 | 1 | | | | | | | | | | |
| 7. Other Ideas | $\frac{1}{5}$ | $\frac{10}{10}$ | $\frac{1}{1}$ | $\frac{49\%}{6}$ | $\frac{5}{5}$ | $\frac{33\%}{3}$ | $\frac{2}{2}$ | $\frac{1}{3}$ | $\frac{22\%}{1}$ | $\frac{1}{1}$ | | | 4% | 33 29% |
| 8. R's Dialogue | | 2 | | 6% | 2 | | 6% | 1 | 2 | 13% | | | 7 | 6% |
| 9. Follow Dreams | | | 1 | 1 | 2 | 1 | 3 | | 2 | 7 | | 8 | | |
| 10. Do Anything | $\frac{4}{4}$ | $\frac{2}{2}$ | $\frac{1}{2}$ | $\frac{24\%}{5}$ | $\frac{9}{11}$ | $\frac{2}{3}$ | $\frac{58\%}{5}$ | $\frac{5}{5}$ | $\frac{3}{5}$ | $\frac{65\%}{8}$ | $\frac{1}{1}$ | $\frac{5}{13}$ | 96% | 64 57% |
| <u>Column Totals</u> | 10 | 15 | 4 | 11 | 18 | 3 | 8 | 10 | 5 | 9 | 1 | 13 | | |
| | 30% | 46% | 12% | 33% | 55% | 9% | 35% | 43% | 22% | 39% | 4% | 57% | | |
| (Don't Know) | 4 | | | 12% | 1 | | | | | | | | 5 | 5% |

[Note: Those children whose "highest" concept occurred when they repeated notions while explaining René's dialogue are not reported here. Instead, their other "highest" abstract notions are shown.]

As shown above, there was a developmental trend in the ability of respondents to infer and apply more abstract thematic concepts to people at large. Older respondents increasingly noted the play's thematic prescription that people should follow their dreams and do whatever they desire for personal fulfillment, while decreasingly focusing on René's objective, feelings, art, and life within the script itself. In other words, almost half (49%) of the 2nd graders tended to infer ideas strictly within the play's content, almost one-quarter (24%) went beyond the script by applying René's actions to people as a whole, and 21% either reported unrelated and inaccurate ideas or didn't know an answer to all three questions. On the other hand, the majority of the 4th (58%) and 6th (65%) graders thought more globally about the abstract applications outside the play's content, and fewer remained within the script's confines (33% and 22% respectively). All but one adult (96%) inferred global applications about the play's theme. Thirteen percent of the 6th graders referred to René's explicit thematic dialogue to infer what he learned against 6% each of the 2nd and 4th graders. When combined, 57% of all respondents interpreted the play's theme metaphorically as following one's dreams, 6% paraphrased René's explicit thematic dialogue (i.e., "If everything is possible, there are no pipe dreams"), 29% discussed René's artistic life within the script's confines, and 3% did not know thematic ideas.

From Table 16 above, it also appears that asking children to infer what René learned increased the abstractness and thematic

applicability of their responses over asking for the play's main idea. When comparing responses between the three questions, 47% of the respondents' answers rated higher from main idea to what René learned, 29% of their answers rated lower, and 24% of the answers did not change. This improvement did not hold true for children when asked to explain René's thematic dialogue. Here, 52% of the respondents' answers, primarily childrens', decreased in abstractness, 26% of their answers improved, and 23% did not change.

Roughly one-third of the children (30% 2nd, 33% 4th, and 35% 6th) were able to infer their most abstract responses from the main idea question, while more children were better able to infer more abstract ideas about what René learned (46% 2nd, 55% 4th, 43% 6th). A minority of children (12% 2nd, 9% 4th, 22% 6th) were able to extrapolate an applied meaning of René's thematic dialogue as their most abstract answer from all three questions. Conversely, adults were better able than children to explain René's thematic dialogue (57%) or to infer abstract main ideas at the outset (39%). Asking adults to identify what René learned often resulted in lower responses (48%). The counter-factual, propositional nature of René's thematic dialogue appeared cognitively challenging for many children. Almost one-quarter of the 4th and 6th graders in particular (9% 2nd, 24% 4th, 22% 6th), tended to repeat the concept rather than to interpret this complex sentence. These findings have implications for the wording of thematic questions in future studies.

Summary of Developmental Findings

General opinions about the production appeared quite mixed as might be expected from a non-traditional children's play about Magritte's surrealism. More older than younger respondents received some form of pre-performance training about Magritte [39 4th and 6th graders and all 23 adults (55%) against all 33 2nd graders and 17 4th and 6th graders (45%)], which may confound some results of this study as noted below. Although this training did not affect every response, those who received training tended to rate higher peer enjoyment and greater ease of understanding. Though the play was produced for intermediate grade levels, over half of the 2nd graders (52%) and adults (65%) rated their peers' enjoyment of the play as "a lot" against 4th (55%) and 6th graders (78%) who rated it as "a little bit."

Children were more divided about the ease (36% to 46%) or difficulty (30% to 48%) in understanding this play than adults who tended more often to rate the play as "easy" to understand (74%). Most reasons for understanding were attributed to the script (60%) over production values (40%). Qualitatively, attributions helped to explain children's sometimes conflicting ratings. For example, some children equated their confusion with René's confusion and struggle to become an artist. More older than younger respondents attributed their ease or difficulty in understanding to vocabulary words, ideas about art, or the play's symbolic meanings, but with no significant relationship to training. Adults differed significantly from children by

attributing more production elements than 4th and 6th graders and more script values than 2nd graders.

When asked to identify any aspects in the play which were "make-believe," "actually real," and "realistic," and how they knew these "levels" of reality, significant developmental age differences arose in which symbol systems took focus and how audiences perceived and judged these symbolic realities. While production elements were recalled more often than script content for all age groups, production values were fairly distributed among groups with few significant variances within discrete symbols. However, script values increased in importance for children as 4th and 6th graders focused more on the story than 2nd graders. While 2nd graders were attending to more cues inside than outside the production, older groups were judging the play's realism more from their outside knowledge. Fourth graders differed most from older viewers in attending to inside production cues.

Each age group judged the reality of symbol systems by perceiving inside production cues and applying outside knowledge in significantly different ways. Second graders focused more on production than script values by attending to more inside than outside production cues. More than adults, for example, 2nd graders used more visual cues to discern the authenticity of props. Fourth graders, like second graders, also focused more on production than script values, but they relied more evenly on both inside cues and outside knowledge. They perceived more

visual cues and made more inferences about characters' thoughts than older viewers, while pointing out more socially unrealistic or impossible actions than 2nd graders or adults. Unlike 2nd graders, 6th graders focused more evenly on both production and script values, while applying more outside than inside knowledge. They reflected most on the protagonist's objective to become an artist more than adults, and they noted more socially possible and impossible actions than the youngest and oldest viewers. Adults focused on more production than script values like 2nd and 4th graders, but they relied on more outside knowledge like 6th graders. In particular, adults judged the reality of the whole play by calling attention to the theatre context more than children. Unlike 4th and 6th graders, they were less concerned about socially unrealistic actions, an unbelievable ghost, or factual information about Magritte's story.

These results may be explained, in part, by how audiences evaluated the "factual" content of the script when asked to cite some "facts about René Magritte." Older respondents' pre-performance training influenced their reports, and over one-third of the 2nd graders did not know the meaning of "fact." However, despite training, 43% of the respondents interpreted fictional aspects of the playwright's script as biographical facts. For example, though little is known about Magritte's father, over half of these respondents (24%) perceived that René's Father did not want his son to become an artist as a biographical fact. Older viewers more than 2nd graders considered René's

superobjective to become an artist a "fact" (as implied by the text and explicit factual knowledge). Overall, adults reported more accurate facts than children, and they differed most from 2nd graders in pointing out the theatre context. Though respondents had been relying on visual cues to judge earlier perceived realities, they now used more verbal cues (36%) than visual cues (21%) to determine factual information. However, 2nd graders used both sets of explicit perceptual cues in equal proportions.

When asked what the Interlocutor meant when she said a play is not real life, 6th graders discussed acting more than other groups (38% of the total responses); that is, though actors are real live people, they play historical characters and perform rehearsed, and sometimes unrealistic, actions. Adults more than children tended to explain how a play is fiction and therefore not true, while children used other conventions as specific examples to support their reasoning. Those who explained that a fictive play is not true (40%) were less likely to discuss acting particularly given the fact that many 2nd (64%) and 4th graders (46%) did not mention any aspects of acting at all.

Significant age differences also arose in how audiences interpreted and explained the symbolic meanings behind eight common theatre conventions used in the play. When combined, older audiences more than 2nd graders provided more accurate, abstract and artistic interpretations, as intended by the production's artists, for six of the eight conventions regarding

a costume change, the use of vocal recordings and scenic projections, and the staging of characters' actions and gestures.

When the actor who played René removed his jacket and bowler hat, only 20% understood this common children's theatre convention as a transformation from playing a metatheatrical actor to playing René's character; while 39% made inaccurate inferences, and 41% did not know what this costume change signified. Second graders differed significantly from fourth graders and adults by providing more concrete reasons based on immediately observable actions.

When asked about the audio recordings of René's voice, 81% recalled hearing these sounds and 19% did not (mostly 2nd graders and adults with poor recall), with a total of 36% who did not remember, did not know, or did not answer what this convention meant. Adults differed significantly from 4th and 6th graders in their lower ability to recall hearing these vocal recordings several days after seeing the production. Those who remembered these recordings were more likely to interpret accurately the artistic reasons behind this convention by inferring these recordings to mean René's present or past thoughts, imagination, or dreams (54% of the total responses). Second graders differed significantly from sixth graders by reasoning that the recordings were for technical or practical reasons (10%) (e.g., made louder so the audience could hear better or as a signal for the audience to quiet down because it was important information).

The convention of flashing lights during the classroom scene proved troublesome for over half the respondents (53%) who inferred unrelated aesthetic motives (13%) (e.g., visibility or beauty), gave no motive (21%), or didn't know (19%), but with no significant age differences. Under half (47%) understood this lighting convention as heightening René's thought processes or dream perspective.

Attributing reasons for the scenic use of Magritte's paintings projected as slides throughout the play resulted in a three-way split. Over one-third (39%) understood this convention as an aesthetic means to further the play's action and to visualize René's thoughts, imagination, and dream-like or surreal mental state. One-third (33%) viewed these projections only as showing Magritte's artistic work, and 28% either ascribed literal, technical reasons (12%) (e.g., to see them) or did not know why the slides were projected (16%). Second graders' and adults' responses differed significantly from each other and from those of fourth and sixth graders'. Adults interpreted more "surrealistic," artistic motives connected with the play's actions, while 2nd graders reasoned that projections were primarily for visibility or general aesthetic beauty. Thus, older age groups were more accurate in their interpretations than 2nd graders, and 4th graders differed most from adults as well in terms of accuracy.

Despite the fact that Father's dialogue about Mother's death was taken literally by some (i.e., "René, your mother is lost.

We've lost her at the river." (script, p. 17)], the majority (80%) understood Mother's veil over her head as a convention to signify her death as a ghost. A few (13%) confused her veil as a disguise (e.g., so René or the audience wouldn't recognize her), and the remaining 7% did not know or give a reason with no significant age differences.

A similar majority (81%) understood what René was doing at the river, primarily from his previously stated objective to find his Mother (script, pp. 17-18), and they interpreted his actions and physical movements symbolically as metaphoric connections with his Mother. Another 13% described his immediate, physical movements literally (e.g., washing, drinking, dancing), and 6% did not know or could not recall this climatic scene. Adults differed significantly from 2nd and 4th graders by interpreting more metaphoric and psychological reasons for René's actions.

When asked why René's Father gave René his smoking pipe, responses resulted in a four-way split. Over a quarter (28%) interpreted Father's gesture as a sign that René could now paint the pipe, for example, and fulfill his pipe dream of becoming an artist because René had grown up and matured--the director's and actors' artistic intentions. Another 26% focused on the characters' feelings with sympathy or empathy and/or interpreted the pipe as a family remembrance. More literal and less accurate interpretations were inferred by 24% who thought Father simply didn't need the pipe anymore, exchanged it for René's broken toy so he could smoke it, or they tried to connect the

pipe inaccurately with pipe dreams. The remaining 22% did not know or could not recall a reason for Father's gesture. Again, more symbolic responses came from adults who differed significantly from 2nd graders.

When asked why René's Mother was standing behind him at the easel near the end of the play, almost one-third (31%) understood this staging convention from René's surreal, dream-like perspective and/or his explicit dialogue and previous gesture to his heart (i.e., "I've missed you, Mama. But now I have this [paintbrush] to keep you with me. I won't be lonely when I'm painting" (script, p. 26)). Another 28% inferred Mother's motives from her perspective, as implied by the wording of the question; that is, she left him a paintbrush in his backpack before she died because she wanted him to be an artist and to achieve his dream. Another 26% described Mother's immediate, observed actions of simply watching him paint, and the remaining 15% reported inaccurate guesses or they did not know or recall a reason. Again, older age groups reported more accurate symbolic concepts than 2nd graders who tended to explain that Mother was simply watching René paint more than 4th graders and adults.

Developmental age differences arose in how audiences understood and interpreted the play's major theme, as intended by the playwright and director. Older age groups differed significantly from 2nd graders in their ability to abstract main ideas, interpret what René learned, and explain René's thematic dialogue (i.e., "If everything is possible, there are no pipe

dreams"); especially if they were able to define the meaning of "pipe dream" accurately. From the first to the last thematic question, older viewers increasingly inferred the play's theme as a prescription by applying it to people's lives outside the play's confines--that people should follow their dreams and do whatever they desire for personal fulfillment no matter what others say. Older viewers decreasingly focused on René's objective, feelings, art, and life within the script itself. Sixth graders differed significantly from 2nd graders and adults in relying on visual cues to infer themes, particularly René's actions; while 4th graders differed from 2nd graders by inferring more characters' thoughts. When combined, 4th and 6th graders used more inside production cues than 2nd graders or adults.

When combining thematic responses, over half (63%) of all respondents interpreted the play's theme metaphorically as following one's dreams (57%), or they paraphrased René's explicit thematic dialogue (6%); 29% discussed René's artistic life within the script's confines, and 3% did not know thematic ideas. When analyzing each age group separately, almost half (49%) of the 2nd graders tended to infer ideas strictly within the play's content, almost one-quarter (24%) went beyond the script by applying René's actions to people as a whole, and 21% either reported unrelated and inaccurate ideas or didn't know an answer to all three questions. On the other hand, the majority of the 4th (58%) and 6th (65%) graders thought more globally about the abstract applications outside the play's content, and fewer

remained within the script's confines (33% and 22% respectively). All but one adult (96%) inferred global applications about the play's theme. A few children (6% each of the 2nd and 4th graders and 13% of the 6th graders) paraphrased René's explicit thematic dialogue to infer what he learned.

The nature and wording of each successive thematic question affected responses to some degree. It appears that asking children to infer what René learned more specifically increased the abstractness and thematic applicability of their responses over asking for the play's main idea in a more global way. Roughly one-third of the children (30% 2nd, 33% 4th, and 35% 6th) were able to infer their most abstract responses from the main idea question, while more children were better able to infer more abstract ideas about what René learned (46% 2nd, 55% 4th, 43% 6th). A minority of children (12% 2nd, 9% 4th, 22% 6th) were able to extrapolate an applied meaning of René's thematic dialogue as their most abstract answer from all three questions. Conversely, adults were better able than children to explain René's thematic dialogue (57%) or to infer abstract main ideas at the outset (39%). The counter-factual, conditional nature of René's thematic, hypothetical proposition appeared cognitively challenging for most children. Roughly one-quarter of the 4th and 6th graders in particular (9% 2nd, 24% 4th, 22% 6th) tended to repeat the concept rather than to interpret this complex sentence.

All variables of all questions asked throughout the interview were collapsed for final analysis (see Coding in Appendix 4). Table 17 below summarizes mean scores for general comprehension (i.e., all production and script symbols, theme, and conventions) and cognitive processing (i.e., all inside production cues and outside knowledge) by grade level:

Table 17

Means for Comprehension and Cognitive Processing by Grade

| | <u>2nd</u> | | <u>4th</u> | | <u>6th</u> | | <u>Adult</u> | | <u>Total</u> | | <u>F(3,108)</u> |
|---------------------|------------|-----------|------------|-----------|------------|-----------|--------------|-----------|--------------|-----------|-----------------|
| | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | |
| COMPREHEND: | .69 | .27 | 1.02 | .33 | 1.12 | .28 | 1.17 | .30 | .97 | .35 | 15.78**** |
| Fict Play | .06 | .07 | .10 | .09 | .09 | .08 | .10 | .06 | .09 | .08 | |
| Fact Story | .01 | .02 | .11 | .12 | .12 | .14 | .16 | .11 | .09 | .12 | 12.60**** |
| Fantasy | .05 | .08 | .10 | .15 | .14 | .13 | .06 | .10 | .08 | .12 | 2.78* |
| R Objective | .13 | .17 | .28 | .15 | .32 | .19 | .20 | .15 | .23 | .18 | 7.66**** |
| SCRIPT | .10 | .07 | .15 | .07 | .17 | .09 | .16 | .06 | .14 | .08 | 5.07** |
| Acting | .14 | .12 | .15 | .10 | .20 | .11 | .16 | .12 | .16 | .11 | |
| Spectacle | .09 | .10 | .10 | .12 | .08 | .08 | .13 | .13 | .10 | .11 | |
| PRODUCTION | .11 | .08 | .13 | .08 | .14 | .07 | .14 | .09 | .13 | .08 | |
| THEME | 1.46 | .91 | 2.35 | 1.06 | 2.71 | .87 | 2.91 | .92 | 2.28 | 1.10 | 13.15**** |
| CONVENTIONS | 1.06 | .35 | 1.45 | .37 | 1.48 | .32 | 1.46 | .42 | 1.35 | .40 | 9.05**** |
| COG PROCESS: | .05 | .03 | .10 | .04 | .10 | .03 | .07 | .03 | .08 | .04 | 15.78**** |
| Visual | .08 | .06 | .11 | .07 | .09 | .08 | .05 | .06 | .08 | .07 | 5.25** |
| Aural | .08 | .08 | .10 | .08 | .12 | .11 | .09 | .07 | .10 | .08 | |
| Psych | .04 | .06 | .11 | .12 | .08 | .10 | .03 | .05 | .06 | .09 | 4.65** |
| INSIDE CUES | .07 | .04 | .11 | .06 | .10 | .06 | .06 | .04 | .09 | .05 | 6.24*** |
| Soc Realism | .10 | .16 | .12 | .16 | .13 | .16 | .07 | .14 | .11 | .15 | |
| Th Context | .04 | .09 | .11 | .12 | .11 | .14 | .16 | .16 | .10 | .13 | 4.34** |
| Experience | .05 | .12 | .07 | .18 | .04 | .11 | .13 | .22 | .07 | .16 | |
| Gen Know | .02 | .07 | .06 | .10 | .09 | .18 | .07 | .12 | .06 | .12 | |
| Training | | | .08 | .18 | .02 | .07 | .01 | .05 | .03 | .11 | 3.17* |
| OUT KNOW | .03 | .03 | .09 | .06 | .09 | .05 | .09 | .05 | .07 | .06 | 11.94**** |

*p <.05 **p <.01 ***p <.001 ****p <.0001

Second graders differed significantly from older age groups in their comprehension of the whole play, $F(3,108) = 15.84$, $p < .0001$; particularly in regard to their ability to abstract themes, $F(3,108) = 13.15$, $p < .0001$, to decode the symbolic meanings of conventions, $F(3,108) = 9.05$, $p < .0001$, and to perceive and interpret script values, $F(3,108) = 5.07$, $p < .01$. In regard to script values, 2nd graders focused far less on the factual story than older, pre-trained groups (who may have been looking for factual information), $F(3,108) = 12.60$, $p < .0001$, and less on fantasy aspects than 6th graders, $F(3,108) = 2.78$, $p < .05$. Fourth and sixth graders tended to infer or focus on René's superobjective to become an artist more than second graders, and sixth graders also differed from adults in this regard, $F(3,108) = 7.66$, $p < .0001$. There were no significant age differences in regard to perceiving acting and spectacle as production values.

When combining all cues and knowledge used to interpret all questions throughout the entire interview, 4th and 6th graders differed significantly from 2nd graders and adults by using more inside production cues and outside knowledge to process the whole play cognitively, and 2nd graders also differed significantly from adults in this respect, $F(3,108) = 15.78$, $p < .0001$. Fourth and sixth graders relied on more visual cues than adults, $F(3,108) = 5.25$, $p < .01$; and fourth graders inferred characters' thoughts psychologically more than second graders and adults, $F(3,108) = 4.65$, $p < .01$. There were no significant age differences in noting social realism or applying general

knowledge or personal experience. However, older groups cited the theatre context more often than 2nd graders, $F(3,108) = 4.34$, $p < .01$, and 4th graders specified their art training more than 2nd graders who received no training, $F(3,108) = 3.17$, $p < .05$.

Overall, the more respondents used more production cues and outside knowledge, the more they comprehended the whole play ($r = .58$, $p < .0001$), though there was no significant relationship to their ratings of enjoyment or understanding. However, pre-performance training affected overall comprehension, and interpretation should be cautious here because older grade levels received more training which may confound these results. College lectures and elementary art training assisted comprehension, $F(2,109) = 8.26$, $p < .001$, especially in the increased availability of outside knowledge (e.g., about Magritte and theatre), $F(2,109) = 10.23$, $p < .0001$. However, despite the fact that college students in an introductory theatre course heard lectures on the play before attendance, they relied on less inside production cues than those children with art training or no training, $F(2,109) = 4.04$, $p < .02$. Those children who had art training on Magritte focused on more inside production cues and applied more outside knowledge when combined than those children with no training and college students, $F(2,109) = 6.23$, $p < .003$. College students' comprehension also differed significantly from that of children from two lower and middle class elementary schools, $F(3,108) = 3.86$, $p < .01$, particularly in regard to abstracting the play's themes, $F(3,108) = 4.60$, $p < .01$.

Comprehension levels were enhanced the more respondents used verbal cues ($r = .39, p < .0001$), psychological cues ($r = .30, p < .001$), visual cues ($r = .21, p < .01$) [total inside cues $r = .45, p < .0001$], general knowledge ($r = .29, p < .001$), and the theatre context ($r = .19, p < .05$) [total outside knowledge $r = .36, p < .0001$]. For example, those who interpreted the theme most abstractly also tended to rely on more verbal cues ($r = .35, p < .0001$), psychological cues ($r = .28, p < .01$), visual cues ($r = .21, p < .05$) [total inside cues $r = .41, p < .0001$], and general knowledge ($r = .26, p < .01$) [total outside cues $r = .31, p < .0001$] in their cognitive processing ($r = .51, p < .0001$). Those who noted René's objective, also the play's spine, used more verbal cues ($r = .18, p < .05$) (because he stated his intentions explicitly), and they cited social realism ($r = .34, p < .0001$) and general knowledge about Magritte ($r = .26, p < .01$) to a greater extent. More outside knowledge was applied to production ($r = .17, p < .05$) and script values ($r = .40, p < .0001$).

Likewise, those who interpreted theatre conventions most accurately tended to use more verbal cues ($r = .40, p < .0001$), psychological cues ($r = .28, p < .01$) [total inside cues $r = .41, p < .0001$], general knowledge ($r = .22, p < .01$), and the theatre context ($r = .17, p < .05$) [total outside cues $r = .31, p < .0001$] in their cognitive processing ($r = .52, p < .0001$). Those who used more verbal cues tended to explain more accurately the artistic reasons behind the actor's costume transformation into character ($r = .16, p < .05$), vocal recordings ($r = .41, p < .0001$), lighting

effects ($r = .40, p < .0001$), projections ($r = .18, p < .05$), René's actions at the river ($r = .19, p < .05$), and Mother's reasons for standing at the easel ($r = .17, p < .05$); perhaps because artistic motives for these could be gleaned from explicit dialogue. Those who inferred more characters' thoughts also tended to interpret more accurately the vocal recordings ($r = .24, p < .01$), lighting effects ($r = .22, p < .01$), projections ($r = .23, p < .01$), Mother's veil ($r = .20, p < .05$), and her staging at the easel ($r = .17, p < .05$)--all necessary to explain these particular conventions.

The director had hoped that audiences would perceive and interpret the play from René's "surrealistic" dream-like and imaginary perspective. However, only 19 respondents (17%) (4 2nd graders, 3 4th graders, 6 6th graders, and 6 adults) appeared to do so given their spontaneous answers to various questions. Moreover, these respondents were more likely to infer characters' thoughts ($r = .23, p < .01$), to abstract conventions more accurately and to cite René's superobjective (both $r = .18, p < .05$), and to perceive and interpret more script values ($r = .31, p < .0001$) in their overall comprehension ($r = .16, p < .05$).

The ability to make psychological inferences appeared to enhance comprehension of this particular play ($r = .30, p < .001$). Those who made more inferences tended to use more visual ($r = .22, p < .01$) and verbal cues ($r = .19, p < .05$). [The relationship between visual and verbal cues approached significance ($r = .14, p = .065$).] Those who used more verbal cues also cited social realism more frequently ($r = .21, p < .05$); and those who used more

visual cues also relied on more general knowledge ($r = .22$, $p < .01$).

There were very few significant gender differences in perceiving, interpreting, and comprehending this play which revolved around a male protagonist with a female narrator. Females more than males inferred more characters' thoughts ($r = .24$, $p < .01$), and they interpreted more abstract concepts regarding what René learned ($r = .19$, $p < .05$) and the use of slide projections somewhat ($r = .15$, $p = .056$) with slightly more inside production cues ($r = .16$, $p = .052$). On the other hand, when asked about aspects of reality in the play, males focused on more production values ($r = -.27$, $p < .01$), particularly in regard to more spectacle elements ($r = -.31$, $p < .0001$), more than females.

The play was rated easier to understand by those respondents (primarily adults) who knew the definition of "pipe dream" ($r = -.18$, $p < .05$), considered the theatre context ($r = -.24$, $p < .01$), and abstracted aesthetic meanings behind the slide projections ($r = -.32$, $p < .0001$). Those respondents (primarily children) who noted socially realistic or unrealistic actions tended to rate this play harder to understand ($r = .20$, $p < .05$). Finally, those who rated peer enjoyment of the play high tended to perceive and interpret more script values ($r = .19$, $p < .05$) and to grasp the abstract meanings of theatre conventions ($r = .16$, $p < .05$).

These summarized results have practical and theoretical applications for developmental psychologists, theatre artists, and educators, as discussed in the next section.

Discussion

Applications to Developmental Psychology

Both qualitative and quantitative methods were employed to explore developmental perceptions and interpretations of theatrical reality, theatre conventions, and dramatic themes in a university production of Kornhauser's This Is Not a Pipe Dream. Results which emerged from this data indicated how four age groups perceived, interpreted, evaluated, and comprehended this performance text in significantly different ways.

Second graders seemed to focus their attention primarily on the physical reality or actuality of the staged production. At this concrete stage of development, they processed dramatic actions and events in literal ways by observing and describing what they saw and heard characters do and say and by pointing out the authenticity of props, scenery, sound and lighting effects, and live actors. Though most did not know or understand the meaning of "facts," in part from their lack of pre-performance training, they appeared to accept more readily the play's fantasy aspects (e.g., Mother's ghost) than older children. However, their literal cognitive processing within the confines of production cues inhibited their ability to abstract the underlying symbolic meanings behind theatre conventions and the metaphoric themes of the play. For them, lighting and scenic effects and vocal recordings were provided for general beauty or for practical purposes (e.g., to see and hear better). They seemed to interpret characters' actions from their own personal

experiences: René took off a jacket because he was going to or coming from somewhere, and Mother stood at the easel to watch René paint. Rather than interpret some actions, they described what characters did visually: René was washing, drinking, or dancing at the river, and Father gave René his pipe in exchange for a broken toy. Thus, when asked to infer the play's theme, 2nd graders tended to describe what they saw and heard explicitly within the production: René wanted to paint and become an artist. Despite their lack of training and life experience from which to draw more outside knowledge, 2nd graders appeared to enjoy and understand the play's major ideas by comprehending René's explicitly stated and enacted superobjective.

Fourth graders began a developmental shift from focusing solely on production values to acknowledging and judging the playwright's text with a new psychological perspective. While observing more dramatic actions and listening more to characters' dialogue than older viewers, they made more inferences about characters' internal thinking processes. They began to apply more outside knowledge by judging the realism or logical possibility of characters' dramatic actions, especially those actions which departed from reality in unrealistic or impossible ways. With greater attention focused on social realism, they appeared to rate this expressionistic play more difficult to understand and less enjoyable for their peers. Perhaps as a result of some pre-performance art training, they noted René's superobjective to become an artist as a "fact," and they

interpreted slide projections of his paintings as a helpful means to show or express his art work. With greater integration of explicit visual and verbal cues, they (more girls than boys) inferred more characters' thoughts and feelings when interpreting characters' actions, gestures, staging, and the theme of the play. They began to decode more symbolic meanings and artistic intentions underlying theatrical reality and theatre conventions. For example, most knew that René's vocal recordings indicated his thoughts, dreams, or imagination. Essentially, by shifting toward a greater focus on script values, they began a developmental progression toward applying René's dreams and ambitions in the play to people in society, as the playwright and director intended.

Sixth graders continued this developmental progression with even greater attention to script values by abstracting more symbolic meanings from the play's theme and theatre conventions. Unlike 4th graders, their dramatic judgments about social realism considered the plausibility of characters' actions. By applying outside knowledge and perhaps some pre-performance art training, they questioned the believability of the ghost and the possibility of other actions and events on stage within the context of acting conventions. While still tied to explicit visual and verbal cues, they focused most on René's visualized actions, particularly his superobjective as a "fact," and they applied his admonition to follow one's dreams to others. More than 4th graders, they rated their peers' enjoyment of the play

as "a little bit," perhaps indicating more distaste for non-realistic theatre, and they appeared divided in rating their understanding of the whole play.

College respondents in this study appeared to apply their initial learning in an introductory theatre course (about five weeks' worth) to their ease in comprehending the play. They searched for and interpreted expressionistic production cues and integrated these critical judgments with their more abstract interpretations of the playwright's symbolic text by calling more attention to the theatre context (and production style). More than children, they understood the definition of the cliché term, "pipe dream," which aided their comprehension considerably. Knowing that a play is not real life because fiction is not true, they reported factual information about Magritte more accurately than children, and they indicated less concern about unbelievable or fantastic aspects of the play. They decoded theatre conventions, characters' dramatic actions, and the play's theme more abstractly and metaphorically with more "surrealistic" artistic motives and more global applications than younger children, especially 2nd graders. For example, they recognized that the slide projections were an aesthetic means to further the play's dramatic action and to visualize René's "surrealistic" dream perspective. Unlike children, adults had less difficulty inferring the play's "main idea" or interpreting René's counterfactual, conditional, propositional statement, "If everything is possible, there are no pipe dreams." However, adults shared some

modes of interpretation with 2nd graders. Like these youngest viewers, they used less inside production cues, especially visual and psychological cues, and less outside knowledge than 4th and 6th graders when answering their analogous questionnaires; and they appeared to rate their peers' enjoyment of the play higher. Older children's art training may have induced these intermediate grade levels to attend to more explicit production cues and outside general knowledge, especially to compare factual information learned about Magritte.

In summary, this study confirms the findings of other narrative, visual art, and television studies (e.g., Landry, Kelly, & Gardner, 1982; Parsons, 1987; Dorr, 1983). While focused primarily on production values, children increasingly judge a playwright's text for its social believability with greater use of their personal intelligences. When viewing theatre, second graders rely on explicit visual and verbal cues to perceive the actuality or authenticity of theatrical reality and to interpret the dramatic actions involved in dramatic themes and theatre conventions. Fourth graders begin a developmental shift by inferring more characters' thoughts, abstracting more symbolic interpretations and artistic motives for theatre conventions, and applying more outside knowledge to scrutinize the possibility of thematic dramatic actions. Sixth graders consider the plausibility of a protagonist's superobjective or spine of a play by recognizing acting as a key theatre convention as they abstract global applications from a play's themes.

Unlike children, adults appear to suspend their disbelief more willingly by judging production and script values from within the theatre context and style, while abstracting more metaphoric, and in this case "surrealistic," thematic concepts from language, dramatic actions, and theatre conventions.

Though some audience members received pre-performance training, none of the respondents in this study could be considered "experts" in theatre's symbol systems. All were "novice" theatre audiences (rather than intrinsic dramatic players) who reflected on their theatre experiences by relying on perceptual visual and verbal cues and outside general knowledge to perceive and interpret a production of this text. As Gardner (1991, 177-178) points out and as this study confirms, novice artists and audiences tend to focus on the subject matter of the content (e.g., the script) and the overt features of the art form (e.g., the production), and "There is little tolerance for work that is abstract, irregular, or experimental . . ." Indeed, though this production's artists intended viewers to perceive and experience the play through the protagonist's "surrealistic" dream perspective, only 17% of the respondents reported doing so spontaneously. Admittedly, these findings may result from limited, discursive questioning methods, and asking "How do you know?" is an empirical question which may force more visual and verbal responses. However, the qualitative results of this study in particular suggest important practical applications for theatre artists and educators.

Applications for Theatre Producers

(Unlike most children's plays, the performance text in this study entailed a metatheatrical framework in which many basic theatre conventions were explained and demonstrated in explicit ways. This discussion is also limited by a specific treatment of an early, unpublished manuscript version of this play.)

Contrary to children's theatre producers' frequent assumption that one play is "suitable" or "recommended for grades 1 through 6," one play does not necessarily "fit" all elementary students in terms of levels of understanding and appreciation. By virtue of their cognitive development and greater experience analyzing stories in school and attending theatre, children in the intermediate grades are better able to abstract theatre's symbol systems than those in the primary grades.

This study also challenges other assumptions held by producers. Regardless of age, children do not necessarily "suspend their disbelief willingly" while watching theatre, especially if they are searching for and finding illogical actions which counter their rules of physical and social reality. It is not known whether children come to theatre expecting realism (from television?), and/or whether theatre artists' delusion of realism induces this type of critical perceptual search. Whether or not theatre artists can break children of their stereotypical preferences for realism with experimental theatre styles is a question for future artistic research.

Though theatre's aesthetic value lies in its live presentation of universal themes about the human condition, many children in the concrete stage of development may not grasp and apply these metaphoric notions from the performance text to their own lives. Children's narratives in this study suggest that those who do already know or have experienced such concepts in their lives. Theatre may not necessarily change or awaken new social awarenesses; rather, it may reinforce and confirm the attitudes, opinions, and perspectives of what the child already knows as "truth." Some producers argue that analogical comprehension is not the primary issue in theatre for young audiences, but rather entertainment, enjoyment, and aesthetic pleasure should be the sole artistic goals. But what is aesthetic appreciation without comprehension of meaningful metaphoric ideas? How are audiences entertained by "emotional truths" without grasping the underlying relevance and psychology of characters' dramatic actions from which emotions result? Theatre as a art form ought to be a distinctive, and perhaps more meaningful and worthwhile, form of entertainment than network television, movies, video games, and spectator sports.

At the other extreme of this debate, other producers argue that theatre should challenge critical thinking skills so that young audiences will rise to artist's higher expectations. Indeed, there are countless narrative examples from this study to prove this point. Several 2nd graders had little difficulty abstracting theatre conventions and dramatic themes in this play.

By contrast, some 6th graders appeared "stuck" in concrete thinking patterns by their strict or literal rules of social realism (e.g., "A conscience (the play's narrator) isn't a person"). Individual differences and approaches to critical thinking and problem-solving appeared more striking in some narrative cases than age differences. An individual's amount of mental investment and effort brought to bear on the theatre experience may be the more critical factor than grade levels. Essentially, the debate between entertainment and comprehension may boil down to the total number of young audience members who have a positive experience in theatre. But how is this figure and quality of experience to be determined--and by whom?

Artists tend to have a disdain for quantitative analysis, and many would argue that numbers bear no relationship to art. Most producers are satisfied by positive and general anecdotal responses to "prove" a production's qualitative "success" with audiences. What matters most to them is that one child out of 600 has a deeply moving, worthwhile theatre experience (e.g., Corey, 1991). However, children's theatre producers have an ethical responsibility to nurture present audiences and to keep them coming back to live theatre as adult patrons. When a plurality of children leave a theatre bewildered by meaningless ideas, artists may be creating future audiences who only want to attend theatre for "light, escapist entertainment" with little or no mental investment or stretch of the imagination.

The balance between what children bring to theatre and what theatre brings to audiences is a critical issue for further investigation. Essentially, theatre producers need to be cognizant of children's intuitive perspectives and how they process plays from the "child gaze." Armed with this knowledge, each artist working in theatre may create performance texts more conducive to children's tacit knowledge and learning.

Playwrights, in particular, might find important clues to more successful and effective playwriting techniques, especially given that older children focus increasingly on script values. One notable implication lies in the ethical considerations of writing biographical or historical texts. Similar to television and film, audiences assume that, although a text may be "based on" an actual person's past or present life, the playwright has researched these events thoroughly for factual information. It might seem harmless that many respondents in this study believed that Magritte's father did not want his son to become an artist as a false biographical fact. After all, playwrights are granted poetic license when creating fictional accounts. What damage can be done by a false impression of an artist's upbringing? More serious distortions of facts elicit debates over perceived reality and whether art imitates life or life imitates art, especially in the mass media when social, political, and educational issues are at stake.

For youngsters learning how to abstract themes from plays, playwrights may want to consider including thematic statements as

explicit dialogue to assist comprehension efforts. Contrary to past studies (Klein, 1987; Klein & Fitch, 1989, 1990), children used more verbal than visual cues to infer this play's thematic ideas, largely because the protagonist stated his objective explicitly. Children at all age levels appeared to listen attentively, and they incorporated critical dialogue into their inferences about the protagonist's objective, themes, and staging conventions. They knew that René wanted to become an artist--the spine of the play--because he said so. He stated his intention to find his mother at the river explicitly, so children repeated his motive for his actions there. He told his mother she would remain in his heart while painting, so older children knew why her ghostly figure was standing behind him at the easel. Audiences made judgments about perceived reality in the play, in part, because the Interlocutor explained the nature of theatrical and painterly reality in this "surrealistic" context--repeatedly (and perhaps too often). However, philosophical or propositional statements may confuse children, unless such abstract concepts are also dramatized with significant actions in concrete, visual ways, as was done in this performance text.

The issue of planting "educational messages" in dialogue raises the ire of many who believe that theatre should not teach or preach to audiences (e.g., Zeder, 1988). Showing rather than telling dramatic actions explicitly by what characters do is the most effective and more artistic way a playwright can communicate and represent themes. However, as this study confirms, explicit

dialogue reinforces visual actions which, in turn, induces more critical inference-making on the part of young audiences. For youngsters learning to infer motives, critical dialogue and where it is placed in the text before, during and/or after respective actions makes a major difference in their overall comprehension.

Playwrights make choices about words at their artistic discretion. As shown repeatedly throughout children's narratives, there was considerable confusion and debate over whether or not Mother was dead because Father said, "René, your mother is lost. We've lost her at the river." Literal-minded children took "lost" to mean that she wasn't dead, especially given that she was roaming the stage apparently "lost" because "dead people can't walk and come back to life." While the majority of children (79%) understood that Mother's veil over her head signified her role as a dead person or ghost, the remaining (21%, mostly 2nd graders) missed this significant implication. Choosing more subtle words, such as "lost," over more frank words, such as "dead," risks losing almost one-quarter of an audience on a critical dramatic point for artistic effect. More concrete word choices enable literal-minded, primary grade audiences to share visualized meanings with older interpreters.

The use of vocal recordings to imply characters' thoughts proved to be an effective playwriting tactic. This common convention may have helped to induce young audiences to experience the play from the protagonist's dream consciousness. Children may be learning to interpret this convention from their

more frequent viewing of television and film. For example, an older, unseen, male narrator voices the thoughts of his younger self in "The Wonder Years," a popular situation comedy on network television. Though younger children may not always grasp the symbolism behind this convention, they do use vocal recordings as an attention device to signal important verbal information.

Directors and actors may also benefit from the narratives quoted in this study, especially children's idiosyncratic perceptions about how theatre "ought" to be done. As implied above, directors may want to consider recording selected character speeches in plays where a character's imagination is crucial to the themes of a fantasy text. Likewise, the use of music to underscore characters' actions and emotions also heightens and focuses attention on key dramatic actions to promote understanding and aesthetic enjoyment.

One of the primary responsibilities of a director is to focus viewers' attention to specific dramatic actions moment by moment throughout a performance. Actors become the "camera's eye" through which audiences view characters' experiences on the "wide lens" of a proscenium stage picture. Visualizing the actions of a playwright's text with staging choices is the most crucial means of communication with young audiences. Though many directors assume that visual pictures and actors' movements must change as rapidly as television cuts "to hold children's weak attention spans," fast rhythms can distract or destroy critical information for verbal comprehension.

Based on the results of this study, the director's staging choices here may have affected some critical responses. Two examples discussed here indicate how silent pauses and salient aural cues before, during or after critical dialogue signal important information as vital contrasts when pacing and staging actions. First, though the Interlocutor defined the cliché term, "pipe dream," explicitly in the text as "a wish that could never come true," most children (76%--94% 2nd, 73% 4th, 57% 6th graders) missed this crucial definition to help them interpret the play's theme. She stated this definition quickly and off-handedly on top of the center box during a heated argument between René and his parents. The director chose to ignore the playwright's stage directions here by continuing Father's throughline of action, rather than having him pause (an interruption to the fight) while the Interlocutor moved a painting (not used in this production) and stated the definition. While viewers focused on Father's argument over René's dream to become an artist, they missed the Interlocutor's definition of "pipe dream" because the tempo and lack of a significant pause before and after may have impinged upon it.

Second, respondents may have missed the meaning of the actor's costume change into René's character because the director chose again to alter the playwright's stage directions at this metatheatrical moment. The Interlocutor explains, "This actor will portray the aforementioned artist, René Magritte, or rather

Magritte as a youth, or rather yet, our interpretation of that youth. . . ." The playwright's stage directions were as follows:

(During the above lines, Anonymous Man 3 begins his conversion to childhood both through various physical manifestations and by the removal of his topcoat and bowler-hat . . . As the Interlocutor approaches her last few words, he hands her the discarded garments. At her finish, the two cross one another's paths with a broad motion, a sound-effect--a chime perhaps--underscoring the move and conveying its special magic. . . .) (text, p. 5)

As staged in this production, the ensemble gathered closely around the actor playing René as the Interlocutor spoke her dialogue and referred to him. The actress who played his Mother removed his jacket and bowler hat and assisted him in putting on his backpack. When the Interlocutor said, "Magritte as a youth," the actor behaved like a stereotypical, babyish child and the ensemble confronted him with dirty looks about his foolish acting interpretation and paused. He questioned them in return with a nonverbal look and changed his behavior to a more realistic portrayal of a child. This nonverbal, adult-inside "joke" about acting style may have been too subtle for young audiences. Another possibility is that the actor may have been too crowded by the ensemble, rather than standing separately from them with the Interlocutor to garner more focus. The frozen pause in activity used here failed to communicate his transformation. Even more importantly, there was no chime or other sound effect to signal his "magical" transformation--a critical aural factor which could have called far more salient attention to the symbolic meaning behind this costume and acting convention.

In this production, the director and actors also added a significant nonverbal gesture to the playwright's text (p. 26). After René handed his Father the broken toy, Father paused, then gave his smoking pipe to René as a sign that he had finally accepted René's career goal and recognized his son's maturity. Few children (18%) interpreted this gesture as intended here, perhaps because this concept deals with an adolescent's "rite of passage" and separation from his parents--goals hardly significant to children at this stage in life. Nevertheless, this gesture triggered many other possible interpretations and readings. For example, when taken literally, it became an opportunity for René to paint a picture of the pipe--a concept reinforced by the projection of Ceci n'est pas une pipe.

Designers might glean practical applications from this study, especially because young audiences rely so heavily on visual and aural production cues. Though there were few significant age differences in how audiences perceived spectacle elements, production values received a great deal of reported attention. Many children noted "magical" scenic aspects, special lighting, sound, and film effects, and inauthentic props as they worked to figure out how each illusory trick was executed.

Scenic designs in children's theatre often employ "simplified realism" or minimalist, expressionistic elements, in part, because producers assume that children enjoy using their imaginations. In this study, older children, in particular, indicated their disdain for this "static," minimalist setting

which had no major physical scene changes, as some children have come to expect from this producing company. Some were bothered by a large, singular box used to represent a couch, a bed, a crypt, a classroom desk, and a trap. Though they used their imaginations and knew when settings changed (to or from a graveyard, René's house or bedroom, a classroom, a fair, the river, etc.), they voiced their stylistic preferences for realism quite strongly. Few children discussed costumes in particular, unless to point out the "long ago" period which they signaled.

The lighting design and the use of 107 slide projections of Magritte's paintings (over the course of a 48-minute play) may have reinforced the characters' dialogue moment by moment, while inducing audiences to view the play from René's artistic imagination, dream perspective, and emotional moods. It is not known to what extent lighting and projections may have assisted or distracted from the play's actions--an issue beyond the discursive methods of this study. Under half of the children (31% to 44%) but over half of the adults (74% to 61%) articulated the artistic intentions behind the projections and flashing lights in one scene. Some narratives hinted that similar lighting and scenic conventions may be learned and applied from previous experiences with theatre and, possibly, television.

Theatre artists need to make production styles more explicit so that metaphoric themes become more recognizably visible and audible to predominately novice audiences. Educators can also assist in these goals as they prepare audiences for theatre.

Applications for Educators

This study calls into question several assumptions held by elementary teachers about their intermediate students' understanding and appreciation of this production.

Contrary to some teachers' evaluations (see Appendix 8), the 4th and 6th graders who participated in this study did comprehend the main ideas and themes of this play quite well. Over half (55% of 4th and 70% of 6th graders) interpreted the theme metaphorically by recognizing that people should follow their dreams, while roughly one-third (39% of 4th and 30% of 6th graders) grasped the protagonist's explicit superobjective to become an artist, the play's spine (for a total of 94% of 4th and 100% of 6th graders). However, on a scale of 1-7, a little over half (54%) of the responding teachers rated their students' understanding high (5 or 6), and their mean ratings (4) indicated their wide disagreement. Teachers attributed their students' lack of understanding primarily to the playwright's non-linear text (e.g., use of a narrator who interrupted René's story, Scene 4 where actors "forgot" their lines, and Mother's ghost).

Essentially, teachers appeared to confuse students' school-taught preferences for linear stories with their actual understanding of this non-linear, non-realistic play. Likewise, it appears that they gave their students little credit for tackling this unfamiliar dramatic structure with such success. For example, some teachers who specified that their students understood the metaphoric theme or superobjective rated their

students' understanding of the play low (2-4). One possibility is that teachers may be assuming that if students (all of them?) fail to make metaphoric connections like adults at formal levels of hypothetical thinking, then their students haven't "understood" the play. In addition, it may be, as this study revealed, that students need alternative questioning methods to draw such metaphoric connections from their intuitive knowledge. Asking students what the protagonist learned and how this knowledge applies directly to their own lives may be a more effective, reflective means for discussion than asking them to abstract "main ideas" in global ways. In addition, teachers need to be aware that theatre offers multiple readings or interpretations, rather than singular "right or wrong answers," as is frequently assumed in our educational culture. These various possibilities may explain teachers' tendencies to rate their students' understanding low.

Teachers also rated their students' attention levels in a similar, though slightly higher, fashion ($X = 4.8$) with a wide range of attributions. In their view, for example, "talking without actions reinforcing it" or "a lot of talk about the characters' feelings" caused students' attention to waver. While the findings of this study and audiences' behavioral responses (Appendix 7) confirm these teachers' perceptions about verbal and visual attention, some teachers' comments seem to suggest that plays should be entirely nonverbal with constant frenetic activity and little or no dialogue! Contrary to their views

about dialogue, intermediate students in this study did listen attentively to much of the dialogue in this play by relying on verbal cues almost as much as visual cues (25% to 31% of the time), and their narrative quotes reveal their frequent paraphrasing of characters' dialogue. Perhaps teachers expect students to sit absolutely quietly in their loge seats with little or no shifting during a play like adults--an expectation beyond the physical endurance of children who are primed with 12-minute commercial breaks during television programs!

Children's comments overheard by teachers during or after the performance reflect similar evaluations found in this study's narratives. Contrary to one view that, "The children were confused about what is real and not real in [the] play," young audiences, including 2nd graders, had little trouble perceiving or defining the distinctions between "make-believe" and "actually real." They knew that this play was "not real life" by the Interlocutor's frequent explanations and by the fact that theatre entails live actors performing characters in fictive situations. Like their intermediate students, teachers may be confusing children's preferences and expectations for social realism and causal linearity with the context of theatrical reality and symbol systems.

Just as the intermediate students in this study indicated their peer's mixed enjoyment of this play, teachers, too, appeared exceedingly divided on the meaningfulness or relevance of this play to children's lives or education ($X = 3.9$). Their

comments ranged from, "Enjoyed it immensely--thought provoking," to "[not] at all applicable to 4th and 5th graders. My students could not distinguish a main idea and they were so confused by all of the abstract, out-of-body experiences," "too scarey [sic]," and "The depressing (but necessary) use of death was very hard on them."

Teachers' comments regarding this production (and future productions by this company) suggested that some prefer absolute control over the ideas and concepts presented to their students. For example, while ignoring or dismissing the positive benefits of the play's themes to follow one's dreams or become creative artists, some teachers focused on negative notions by fearing that dramatizations about ghosts, death, and fire-eating would harm their charges in detrimental ways. It is surprising how much power they attribute to a 48-minute play! On the other hand, many theatre producers hold the contrary view that young audiences need to be nurtured with diverse concepts in order to deal with such issues in their lives, rather than being protected or isolated from the social problems which surround and invade our culture. While many teachers appreciate diverse theatrical experiences for their students, others reflect their adult-based biases for their familiar and treasured children's novels by holding limited and stereotypical views about the far more vast children's theatre repertoire.

Teachers are a critical "conduit" through which students perceive and appreciate theatre. Their preparation with students

before and after theatre attendance can have a profound, motivational effect on students' understanding and appreciation of theatre (cf., Deldime & Pigeon, 1989). When teachers show their enthusiasm for theatre and when they encourage their students to tackle and appreciate unfamiliar, abstract concepts, students enjoy and fulfill these higher expectations in positive ways. On the other hand, when teachers treat theatre attendance superficially as any other field trip, or when they assume and let students know they don't think they can understand unfamiliar concepts and plays, students reflect and fulfill such self-defeating prophecies. As one teacher reported, "I was pleasantly surprised. The subject matter seemed rather obscure and I was afraid it would go right over their heads, but they really enjoyed and understood it."

Many teachers within the particular school district of this study assume that their students need to know at least the synopsis or story of a play before attending in order to grasp and appreciate its main ideas. They believe that only through thorough advanced preparation will students understand plays in performance. (Interestingly enough, few teachers and parents hold this belief in regard to television or movies.) Many theatre producers agree with this contention by offering teachers study guides with which to prepare their students. This study indicates that those students who had advanced elementary art training on Magritte's life and work exhibited good comprehension through the use of more inside production cues and outside

knowledge, and they rated higher peer enjoyment and greater ease of understanding than those without training. Though they were not trained explicitly on the metaphoric theme of this play, their training on Magritte may have assisted symbolic interpretations in another way. It is quite possible that pre-performance training induced these students to invest greater mental effort in processing inside production cues, thereby increasing their levels of comprehension (cf., Salomon, 1984; Field & Anderson, 1985). In other words, by searching for and applying factual comparisons learned about Magritte in art class, these students may have come to the theatre more willing and motivated to watch, listen for, and integrate critical cues.

Unfortunately, theatre producers cannot guarantee that all teachers will prepare their students by various degrees before attendance. At the same time, theatre artists have a responsibility to communicate directly all that is necessary for comprehension during a given performance. In fact, some audiences prefer to be surprised by the unfolding suspense of dramatic events and the protagonist's "virtual destiny," rather than knowing what to expect before attendance and having those expectations thwarted. Post-performance discussions with open-ended questions may be a more meaningful, educational tool whereby teachers give their students a necessary opportunity to reflect upon a play's thematic concepts. Here, students may share their individual opinions with classmates by comparing, evaluating, discussing, analyzing, and applying multiple

interpretations to their lives and the cultures in which they live. Essentially, the brief interviews conducted here with individual children one day after attendance served this purpose.

The results of this study and the limited teachers' evaluations reported here suggest that children and adults alike could benefit most from a theatre education to better grasp theatre's multi-layered symbol systems. Far too few teachers take or are required to take theatre courses during their pre-service training. Production companies might offer more teacher in-service seminars which focus on aesthetic criticism. With their limited knowledge of dramatic genres and theatrical styles, teachers would do well to increase their understanding and experiences regarding the aesthetic purposes and educational values of theatre for young audiences.

Implications for Future Research

Future studies can build upon this exploratory research with other local, diverse audiences and theatre productions employing various linear or episodic dramatic structures and realistic or fantastic texts, as well as other realistic or expressionistic designs and staging conventions to compare and contrast these developmental results. Given that older, intermediate audiences appear biased in favor of theatrical realism, future studies might focus on determining how children interpret alternative design factors and staging conventions to increase understanding of metaphoric themes.

Directors, playwrights, and designers of more experimental theatre productions might explore new aesthetic methods of helping children to follow and sustain characters' psychological perspectives in more concrete, visual and aural ways. Studies on empathy and how audiences feel with characters to experience "felt life" and "emotional truth" might also reveal more directly how audiences create their own "virtual texts" in their dramatic imaginations.

Open-ended questioning methods provide rich qualitative narratives to evaluate audience's comprehension of productions, to dispel myths about children's discriminations between fantasy and reality, and to refute many commonly held assumptions about theatre for young audiences. Asking what protagonists learn rather than what "main ideas" are in the play increases children's ability to interpret dramatic themes and make analogical connections to themselves and society at large. Asking "How do you know?" provides valuable insights into how children know beyond what they know or are able to verbalize to an interviewer. Allowing children's voices and perceptions to determine emerging categorical concepts inductively creates more heuristic quantitative results than forced-choice, pre-determined, adult-answer methods. By knowing how children make meaning of theatrical reality, theatre artists and educators may know young audiences' dramatic theories of mind and how they perceive theatre from a "child's gaze."

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INTERVIEW QUESTIONS FOR THIS IS NOT A PIPE DREAM

[Limit to 15-minutes! Test volume level for little, low voices on tape recorder to be sure you're picking up voices for data.]

Child's Subject #:

Age: 2nd grade 4th grade 6th grade Sex:

School: Quail Run Hillcrest New York

Date: Wednesday Thursday Friday

Introduction: (done on way to interview room)

I'm glad that you could come to see the play This Is Not a Pipe Dream yesterday. When people see plays, they get lots of different ideas about the story and the way it was done. Sometimes people have questions about plays, too.

May I ask you some questions about what you think about the play?
[Child Assent:] (yes) (no-Thank child and take back to classroom)

1. Did you already know the story of This Is Not a Pipe Dream before you saw the play yesterday?
(no)
(yes) How did you know that story? (teacher, parent, other)

2. Do you think (2nd, 4th or 6th) graders in another city would like this play
(3) a lot
(2) a little bit (or OK), or
(1) not at all?
(write in volunteered information:)

3. a. Was this play () easy or () hard to understand?
(if both:) Was it (2) sort of easy or (3) sort of hard?

 b. Was it
(1) real easy (4) real hard
(2) sort of easy (3) sort of hard

 c. What made this play (above answer) to understand?

[write in volunteered information:]

[TURN ON TAPE RECORDER. Spend 5 minutes (or less) on this page.]

4. What was "make-believe" or "not real" in the play?

How do you know (it) was "make-believe" and "not real"?

5. What was "actually real" in the play?

[If not actually real, ask: How do you know (it) was actually "real"?

6. What was "realistic" or seemed like it was real in the play?

How do you know (it) was "realistic"?

8. What were some facts about René Magritte in the play?

How do you know that those were facts about him/his life?

[Spend about 1/2 minute per question and answer.]

Theatre Conventions: [Show photo prompts of specific moments]

9a. [show photo] What did this woman [the Narrator] mean when she said that a play is not real life?

9b. [show photo] In the beginning of the play, what did it mean when this man [René] took off his jacket and bowler hat?

9c. Do you remember when René's voice came over the loudspeakers?
(yes) (no)
What did it mean when you heard René's voice recorded (over the loudspeakers)?

9d. [show photo] Why did the lights flash on and off during this classroom scene?

9e. Why were Magritte's paintings (pictures) projected on the screen during the whole play?

9f. [show photo] Why did René's Mother wear a handkerchief (cloth) on her face?

9g. [show photo] What was René doing at the river?

9h. [show photo] Why did René's Father give Rene his smoking pipe?

10. What do you think is the "main idea" (point, theme, message, moral, lesson) of the play?

How do you know that could be a main idea?

11. What did René Magritte learn at the end of the play?

How do you know he learned it?

12. What is a "pipe dream"?

[Ask the following, even if child answered above:]

13. [show photo] What did René mean when he said, "If everything is possible, then there are no pipe dreams"?

14. [show photo] Near the end of the play, why was René's Mother standing behind him when he was painting at the easel?

Debriefing:

Okay, that's all the questions I have.

Do you have any questions you'd like to ask me about the play?

[Feel free to answer child's question(s) as you prepare tape.]

[stand up and start to leave]

Thank you so much for all your help. You really know a lot about this play and your ideas (and questions) have really helped me a lot. Let's go back to your classroom now.

[PREPARE TAPE for next child: 2 children per side. Don't forget to rewind on second side...]

October 3, 1990

Dear Theatre 100 Patron:

The University of Kansas Theatre for Young People supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate in the present study. You are free to decide not to participate or to withdraw at any time without penalty.

We are interested in studying the comprehension and recall of adult and child audiences to children's theatre productions (This Is Not a Pipe Dream) and how audiences of different age groups distinguish the fictive and factual content of plays. If you agree to participate, please fill out the attached written questionnaire and return it to Marsha Morgan, your graduate teaching assistant. Filling out this questionnaire may take no more than 15 minutes of your time. Although it is not likely, but should you feel slightly uncomfortable, be aware that there are no right or wrong answers to these questions. Although participation may not benefit you directly, this information will assist theatre directors and educators in evaluating future productions with young audiences.

Your participation is solicited although strictly voluntary. We assure you that your name will not be associated in any way with the results of this descriptive study. The information will be identified only by a code number.

If you would like additional information about this study before or after it is completed, please feel free to contact me by phone or mail.

Sincerely,

Dr. Jeanne Klein
Director, KU Theatre for Young People
317 Murphy

*****PLEASE DETACH AND RETURN WITH QUESTIONNAIRE*****

Signature of subject agreeing to participate.
By signing the subject certifies that he or she is at least 18 years of age.

4. What was "make-believe" or "not real" in the play?

How do you know (it) was "make-believe" and "not real"?

5. What was "actually real" in the play?

How do you know (it) was "actually real"?

6. What was "realistic" or seemed like it was real in the play?

How do you know (it) was "realistic"?

8. What were some facts about René Magritte in the play?

How do you know that those were facts about him/his life?

- 9a. What did the Interlocutor [the Narrator] mean when she said that a play is not real life?
- 9b. In the beginning of the play, what did it mean when Vaughn/René took off his jacket and bowler hat?
- 9c. Do you remember when René's voice came over the loudspeakers?
(yes) (no)
What did it mean when you heard René's voice recorded over the loudspeakers?
- 9d. Why did the lights flash on and off during the classroom scene?
- 9e. Why were Magritte's paintings (pictures) projected on the screen during the whole play?
- 9f. Why did René's Mother wear a handkerchief (cloth) on her face?
- 9g. What was René doing at the river?

9h. Why did René's Father give René his smoking pipe?

10. What do you think is the "main idea" (theme, concept, message, lesson, point) of the play?

How do you know that could be a main idea?

11. What did René Magritte learn at the end of the play?

How do you know he learned it?

12. What is a "pipe dream"?

13. What did René mean when he said, "If everything is possible, then there are no pipe dreams"?

14. Near the end of the play, why was René's Mother standing behind him when he was painting at the easel?

Please list any questions you have about the production below:

Thank you so much for your assistance in this research!

Photograph Prompts Used in Child Interviews

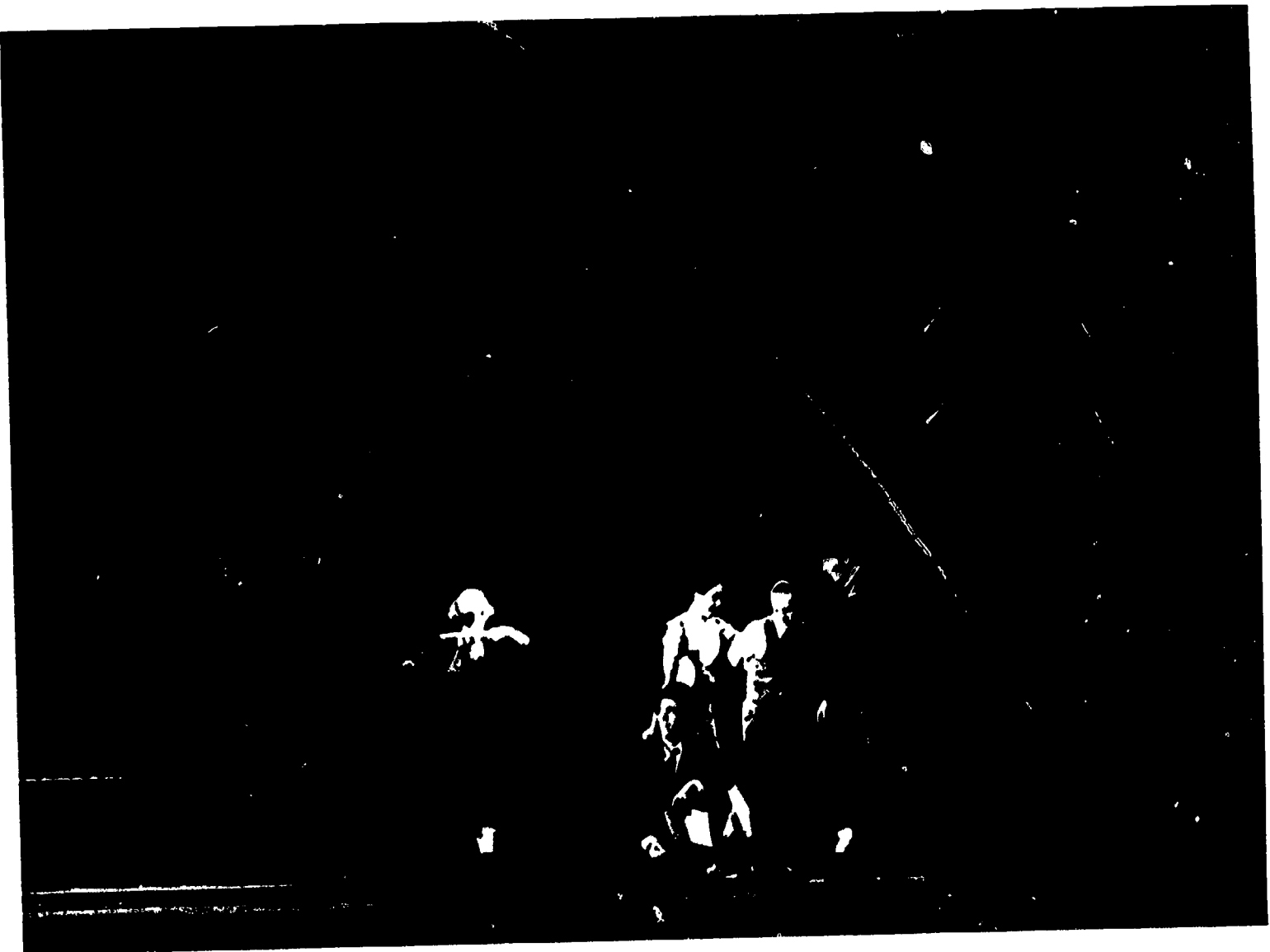
What did this woman [the Narrator] mean when she said that a play is not real life?



In the beginning of the play, what did it mean when this man [René] took off his jacket and bowler hat?

250

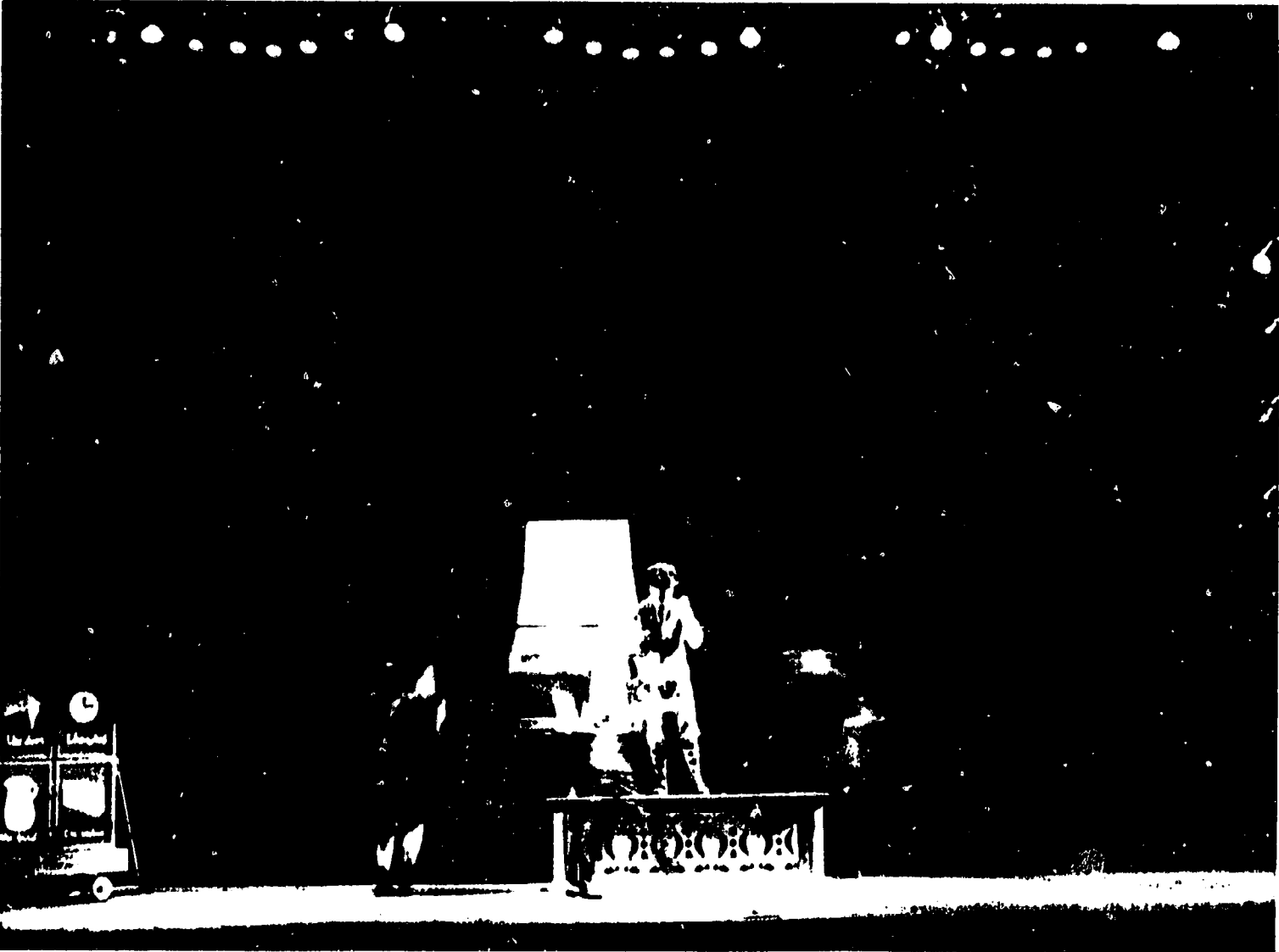
260



259

Why did the lights flash on and off during this classroom scene?

251



261

262

Why did René's mother wear cloth over her face?

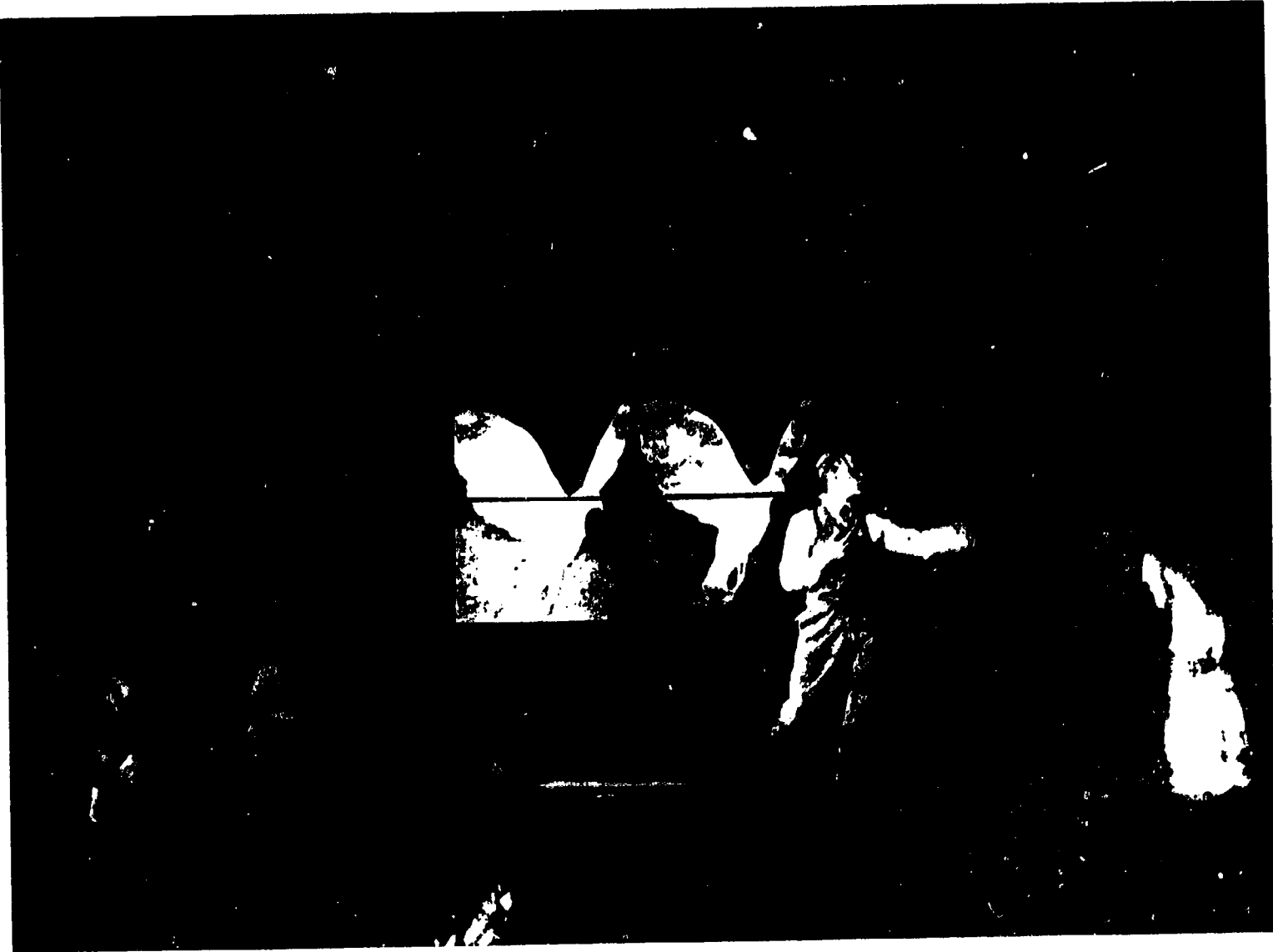


263

252

264

What was René doing at the river?

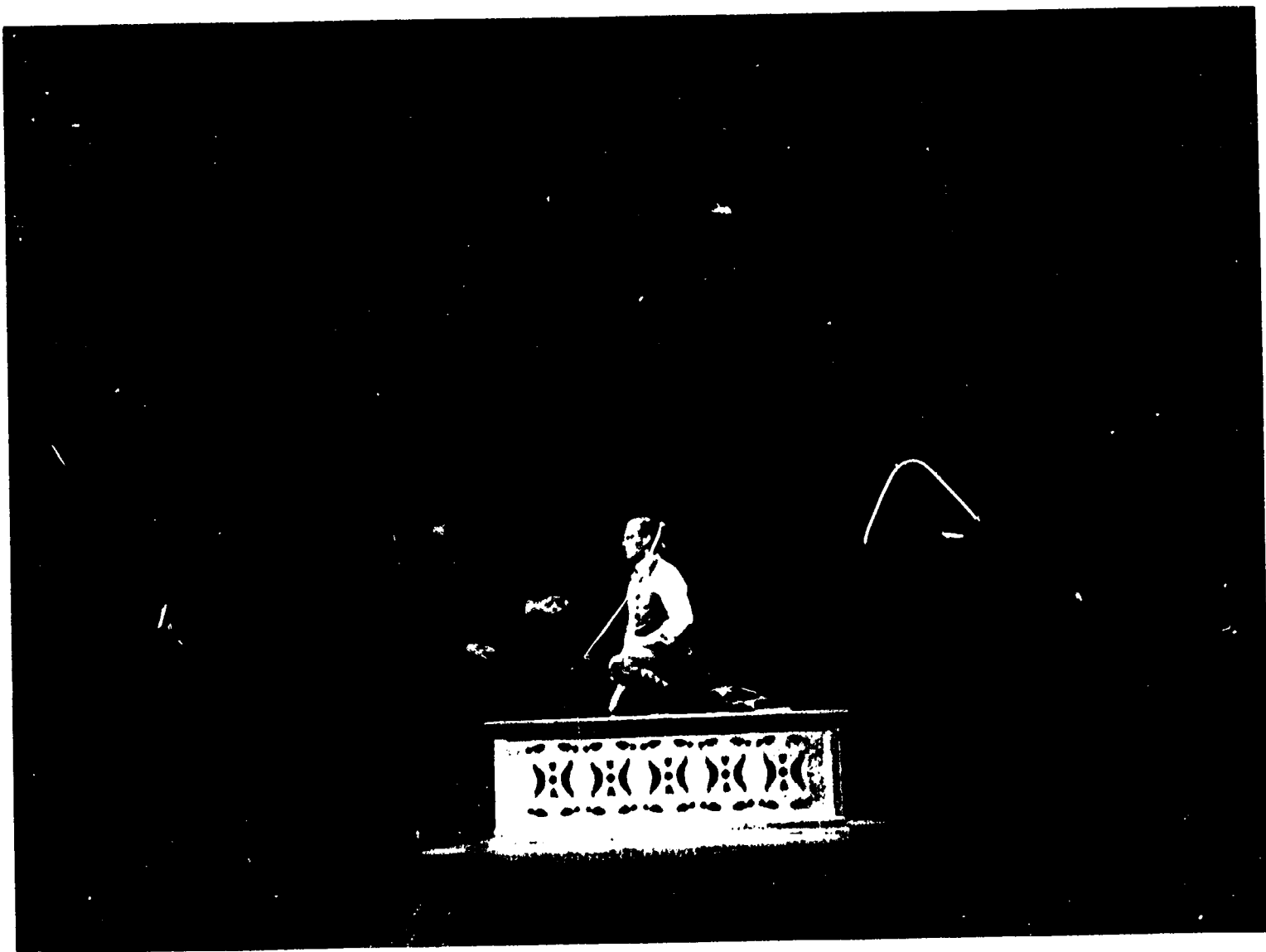


265

253

266

Why did René's Father give René his smoking pipe?



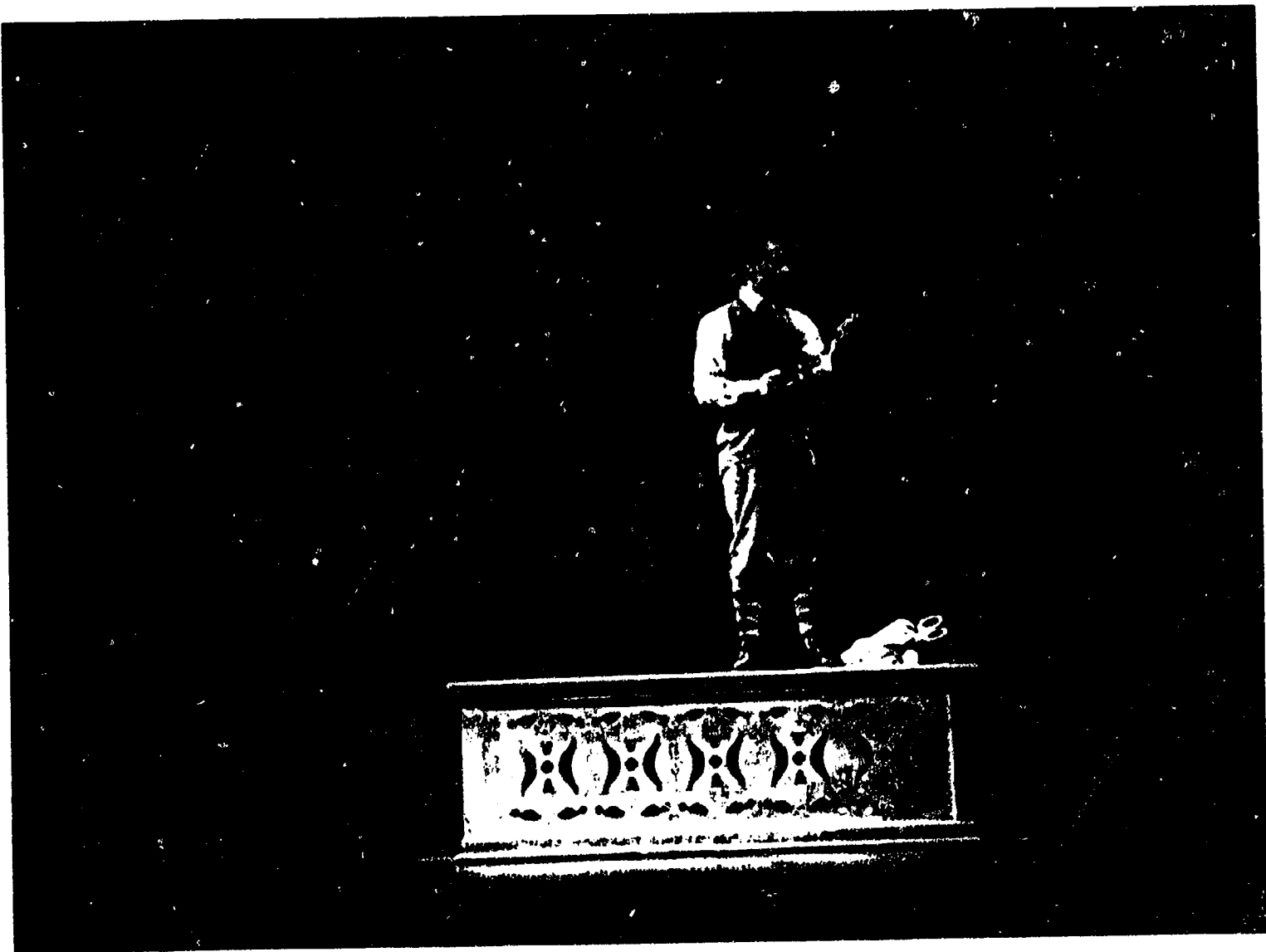
254

265

267

What did René mean when he said, "If everything is possible, then there are no pipe dreams"?

255



269

270

Near the end of the play, why was René's Mother standing behind him when he was painting at the easel?

256

272



271

**CODING METHOD for
THIS IS NOT A PIPE DREAM**

When reading transcripts:

- [] means interviewer's probing (watch if interviewer supplies answers)
 { } means child's non-verbal response or adult's written way
 () Klein's comments or clarifications of characters or scenes

(Left margin numbers refer to questions of interview. Note: #7 missing)

Subject Number

Age (in months)

Grade 1-2nd grade 2-4th grade 3-6th grade 4-college

Sex 1-male 2-female

School 1-New York 2-Hillcrest 3-Quail Run 4-KU

1. **Training** 1-no/none 2-art teacher 3-KU theatre lectures

2. **Enjoyment**

1-not at all 2-both 1/3 3-a little bit 4-both 3/5 5-a lot

3b. **Difficulty**

1-real easy 2-sort of easy 3-both 2/4 4-sort of hard 5-real hard

3c. **Attribution** (see Categories of Reality for explanations)

(Score 1 for each category used and also include info before Attributions)

0-didn't give reason or don't know

AC-Acting (e.g., how they acted, moved)

AM-Meta-theatrical (includes Interlocutor explaining play)

S-Scenery/Costumes (includes where scenes took place)

SL-Sound effects/Lights/music/special effects

RS-René's Superobjective (i.e., wanted to become artist)

SP-Story or Plot (use when reason given, but not specific below)

RA-René's other Actions, etc.

FS-Father's Superobjective (i.e., not letting René be artist)

SG-Supernatural Ghost (i.e., dead Mom walking around stage)

SD-Surreal Dreams (R's dreams/Interlocutor as conscience)

WA-Words/Art (e.g., vocabulary, meaning, messages, symbolism; about art)

NOTE: In coding everything below, search for and code answers given/transcribed under other questions as well. For example, HDYKs may be answered in original question as well; or additional reality things may be answered under HDYK section.

CATEGORIES OF REALITY (page 2 of interview; #7 missing)

[Label these variables with code letter MB, AR, R, F in front of each.]

MB-Make-Believe/not real
AR-Actually Real

R-Realistic/seemed real
F-Facts about Magritte

4-8. Semiotic Categories of Reality (use for all categories asked)
(Score 1 for each category used next to verbal bit in transcript.)

0-Don't know or didn't answer

PRODUCTION VALUES:

ACTING

AP-Live People/Actors/Characters (no mention of acting or performing actions)

AC-Acting/pretending to be dead, historical Characters

AM-Meta-theatrical actions/scenes (w/Interlocutor talking)
(i.e., SM calling cues; Scene 1 at windows; getting in/out box; hitting w/pipes; eating stone; pushing Interlocutor off box/somersault; Scene 4 w/actor "forgetting" lines; magic tricks; juggling or fire-eating)

SPECTACLE

(Code below if focus on scenery, not action by actors or characters)

S-Scenery

(i.e., wall unit, projected slides of Magritte's paintings, windows, center box, wagon w/4 doors; etc.)

(Code below if focus on prop, not action by actors or characters)

PA-Authentic Prods

(i.e., smoking pipe; apple; paintbrush; easel; canvas paintings already painted; giant scissors; fire; backpack; bowler hats aren't "underwear"; broken toy; paper cut-outs; tennis/juggling balls; handkerchiefs; Belgian map; dictionary)

PF-Fake, unauthentic Prods

(i.e., styrofoam "hitting" pipes, foam rock/stone; canvas paintings w/no paints)

C-Costumes (clothes, bowler hats, hair)

SL-Sound effects/music/Lights/special effects

(includes film of running water for river or "rain")

4-8 Semiotic Categories of Reality (use for all categories asked) (cont.)

SCRIPT VALUES:

FICTIVE PLAY

SP-whole Story or Play

RA-René's other Actions, dialogue, intentions, traits, etc.
(i.e., painting at easel; getting egg from cage; floating up in air; potatoes out of ears; washing in river)

FS-Father's Superobjective (didn't want René to be artist/Mom did)
(includes Father/Mother traits: mean, strict, nice, etc.)

CA-Other Characters' Actions, dialogue, intentions, traits
(use when not listed above: e.g., Mother gave paintbrush to René)

FACTUAL STORY

RC-René's factual Childhood life
(e.g., played in graveyard; lived long time ago; French)

RG-René met and married Georgette

MD-Mother Died (suicide/drowned in river)

FANTASY

SG-Supernatural Ghost (i.e., dead Mother walking around on stage)
(use when Mother comes out of grave/box)

SD-Surreal Dreams (R's dreams/nightmares; Interlocutor as conscience)

RS-René's Superobjective (wanted to become artist)
(includes became artist; liked painting; painted pictures)

HOW DO YOU KNOW (HDYK)
for Categories of Reality, Main Idea, and René Learn
(simplified from past coding in Klein & Fitch 1989, 1990)

[Score 1 for each category used once per code-number (no frequencies).
Write letter#-code in transcript next to bit.]

Leave BLANK if never asked HDYK or college students left blank

0-Don't know or didn't answer when asked
(use when respondent says "just seemed like it")

INSIDE CUES:

Visual Cues (explicitly given or shown on stage):

V1-René's dramatic actions (what René did visually on stage)

V2-Other characters' dramatic actions (what other characters did)

V3-Play/"they" "showed" in general (includes SM making sounds)

V4-Appearance of people or objects (known by looking/observing)

Aural/Verbal Cues (explicitly given or heard on stage):

A1-René's dialogue (NOTE: Code "R wanted to be artist" here as dialogue!)

A2-Other characters' dialogue (what other characters say)

A3-Play/"they" "told" in general (use when "Interlocutor said")

A4-Hearing sounds (e.g., from loudspeakers)

Psych Inferences about Characters' Thoughts, Dreams, Feelings:

(psychological inferences made from A-V above)

P1-René's motives, intentions/wants, feelings/emotions, likes/dislikes
(use when cites René's dream-state)

P2-Other characters' motives, intentions/wants, feelings/emotions, etc.

OUTSIDE KNOWLEDGE:

CK-General Knowledge about objects or Magritte (books, museum)

TC-Knowledge about Theatre Context and plays in general
(e.g., morals usually come at end of plays)

PE-Personal Experience (relates incident from personal life)

T-Training (from art teacher or KU lectures)

Social Realism (outside knowledge about people in general; not in play):

SR1-Realistic (could happen in real life; possible)

SR2-Unrealistic (could not happen in real life; impossible, like ghosts)

THEATRE CONVENTIONS

- 9a. Play Not Real Life (Score 1 for each category used once)
 (use definitions listed above under Semiotic Categories of Reality)
 0-Don't know, didn't answer, or repeats "wasn't real" with no other response below
 SP-whole Story or Play not true
 (e.g., fiction; storytelling; pretense; illusion; make-believe; made-up story; fake play; imitation of life; intentional communication; perception of reality)
 SG-Supernatural Ghost (i.e., dead Mother walking around on stage)
 SD-Surreal Dreams (R's dreams or imaging)
 AP-not real People (no mention of acting or performing actions)
 AC-Acting/playing/pretending to be historical Characters
 AM-Meta-theatrical actions/scenes
 S-Scenery (and combine w/Costumes here)
 PF-Fake, unauthentic Props (include "microphone" here)
 SR-Social Realism (could or could not happen in real life)

[Note: The following responses run on an ORDINAL continuum from most concrete or literal (1), as given in the play through visual or verbal (dialogue) cues, to most abstract (highest number), when respondent goes beyond givens and infers deeper implied meanings. Code accordingly.]

9b. Jacket/Hat

- 0-Don't know or remember
 1-Inferences based on immediate observed action
 (e.g., emotions, physically hot, at home, changing clothes, etc.)
 2-Inferences based on preceding or subsequent actions
 (e.g., coming from/going to; preceding scene/going to cemetery; confused chronological order; abstract motives)
 3-Getting ready to start the play/René's story
 4-Actor transforming into character; adult man to boy

9c. Voice Remembered (double-code 9c.)

- 1-no, did not hear or remember hearing recordings
 2-yes, remembered hearing or heard recordings

9c. René's Voice

- 0-Don't know or didn't answer question
 1-Recorded to hear louder because important
 2-René's thoughts/thinking in general/talking to self (in present)
 3-René's thoughts/words from narrated past/future destiny
 4-René's imagination/dreams/spirit/feelings

9d. Lights Flash

- 0-Don't know, didn't answer, repeated info given by interviewer
 1-Unrelated aesthetics (e.g., visibility and importance)
 2-Describes action during flashing w/no motive for lights
 3-Infers motive for lights during flashing
 4-Infers René's feelings of confusion/frustration
 5-Infers René's dream/nightmare

9e. Projections

- 0-Don't know
- 1-Infers literal technical or general aesthetic motives
- 2-To show info about RM, his paintings, or artistic qualities
- 3-To go along with story moments
- 4-To express René's thoughts and inspiration for paintings
- 5-To express René's feelings or dreams

9f. Mother's Veil

- 0-Don't know or didn't answer
- 1-Inferred disguise to René would not recognize her
- 2-To show she was dead/ghost/spirit
- 3-2 plus additional play/Mother motive
- 4-2 plus additional motive from René's psych/dream perspective
- 5-2 plus symbolize how she died w/cloth over head in river (training)

9g. René Doing at River

- 0-Don't know or remember/guessing
- 1-Describes René's movements literally (e.g., washing, swimming, drinking, dancing, singing)
- 2-Repeats explicitly stated objective: To find/look for Mother
- 3-Infers René's thinking about mother; remembering/mourning death where she died
- 4-Makes metaphoric connections with water as symbol (e.g., uniting/bringing back mom, baptism, peace of mind, set himself free)

9h. Father's Smoking Pipe

- 0-Don't know
- 1-Father didn't need anymore; so René could use it for smoking
- 2-Exchange pipe for broken toy
- 3-Inaccurate connections with pipe dreams
- 4-Father's feelings/motives for René's feelings
- 5-To remember Father by; in case he died; as family keepsake
- 6-So René could paint picture of pipe
- 7-To signify René's growing maturity into manhood
- 8-To signify Father's accepting René's pipe dream of becoming artist

14. Mother at Easel

- 0-Don't know
- 1-Inaccurate or unrelated ideas
- 2-To watch René paint; do good job; see what he learned
- 3-Mother's objective: wanted him to become artist so gave him paintbrush and watching him achieve his dream
- 4-René's explicit dialogue: Mother always with him in his heart
- 5-René's perspective: thinking, feeling, imagining, remembering her spirit or inspiration

THEME

[Note: The following responses run on ORDINAL continuum from most concrete or literal (1), as given in the play through visual or verbal (dialogue) cues, to most abstract (highest number), when respondent goes beyond givens and infers deeper implied meanings. Code accordingly.]

10. Main Idea (from concrete to abstract)

0-Don't know or didn't answer

1-Regarding ideas from play title "This Is Not a Pipe Dream" or theatre context
(e.g., enjoyment; acting)

2-Describes specific, unrelated scenes
(e.g., chase scene; "Don't try this at home")

3-About René's life in general
(e.g., grew up; Mother died; got married)

4-René's paintings and how he became an artist (by learning how to paint)

5-René wanted to be artist (and became one) (René's explicitly stated superobjective) [Code only if person mentions R saying it]

6-René's feelings/thoughts
(e.g., having his Mother in his heart)

7-More abstract applications regarding families & perception of art
(e.g., families staying together; words as pictures)

8-"If everything is possible, there are no pipe dreams" (R's dialogue)
(Use if child repeats this for René Mean PD)

9-Follow your dreams/dreams are possible/everything can come true
(e.g., nothing is make-believe; use your imagination; anything can happen)

10-You can be/do anything/whatever you want/dream, no matter what others say, if you try/concentrate/practice hard/work/patience

11. René Learn [Code same above]

13. René Mean PD [Code same above]

12. PD (definition)

0-Don't know or didn't answer

1-Dream about a pipe (or anything dealing with pipes)

2-Not a dream; like a play or life

3-Weird, unreal, day dream in general

4-"A wish that could never come true" (Interlocutor's definition)
(an impossible, fictional dream; doesn't come true/can't happen)

5-Possible dream that does come true, though others disagree

6-Metaphor connecting pipes and dreams
(e.g., you're up in clouds like floating pipe; idea up in smoke)

Major Variables Collapsed for Final Statistical Analysis

[Note: Collapsed variables were computed by adding mean scores of sub-variables and dividing by the number of variables added in to the computation, e.g., Production = (Acting + Spectacle)/2.]

GRADE LEVEL (and Age)

SEX

SCHOOL

TRAINING

ENJOYMENT

DIFFICULTY

COMPREHENSION OF SYMBOL SYSTEMS:

[Perceived Reality (Make-Believe+Actually Real+Realistic) + Facts + Play
Not Real Life + Attributions]

1. SCRIPT:

- a. Fictive Play (SP + RCFict + RGFict + RAFict + FS + CA)
- b. Factual Story (RCFact + RGFact + MD)
- c. Fantasy (SG + SD)
- d. René's Superobjective

2. PRODUCTION:

- a. Acting (AC + AM + AP)
- b. Spectacle (S + C + PA + PF + SL)

3. THEATRE CONVENTIONS (8 conventions combined by accuracy scores)

4. THEME (Main Idea + René Learned + René Mean PD + PD Definition combined by abstractness or accuracy scores)

COGNITIVE PROCESSING:

[Perceived Reality (Make-Believe+Actually Real+Realistic) + Facts + Main Idea + René Learned]

1. INSIDE PRODUCTION CUES:

- a. Visual Cues
- b. Verbal/Aural Cues
- c. Psychological Cues (Inferences about Characters' Thoughts)

2. OUTSIDE KNOWLEDGE:

- a. Social Realism
- b. Theatre Context
- c. General Knowledge
- d. Personal Experience
- e. Stated Training

Reliability Tables

Two independent raters were trained initially by the investigator (also the third rater) to code all open-ended responses. After arriving at interrater reliability percentages the first time, the three raters met to clarify the coding manual definitions, to discuss disagreements, and to agree or disagree with first time coding responses by all raters. Second time coding for Categories of Reality Asked (MB, AR, R, F), similar categories (e.g., Play Not Real Life, Attribution), and "How do you know?" (HDYK) coding is considerably higher because raters pointed out additional codes not caught by others the first time, and raters either agreed or disagreed with these codes per bit. Reliability ranged from 91% to 100% the second time. The following table shows first and second time interrater reliability:

| <u>Variable</u> | <u>1st time</u> | <u>2nd time</u> |
|--------------------|-----------------|-----------------|
| Attribution | 65% | 95% |
| Asked MB | 62% | 96% |
| MB HDYK | 55% | 95% |
| Asked AR | 71% | 95% |
| AR HDYK | 63% | 99% |
| Asked R | 64% | 92% |
| R HDYK | 55% | 93% |
| Asked F | 77% | 96% |
| F HDYK | 59% | 91% |
| Play Not Real Life | 56% | 91% |
| Jacket/Hat | 86% | 99% |
| Remembered Voice | 98% | 100% |
| René's Voice | 91% | 98% |
| Lights Flash | 79% | 98% |
| Projections | 89% | 97% |
| Mother's Veil | 90% | 99% |
| René Doing River | 92% | 99% |
| Father's Pipe | 88% | 99% |
| Mother at Easel | 85% | 100% |
| Main Idea | 76% | 98% |
| MI HDYK | 55% | 99% |
| René Learned | 76% | 95% |
| RL HDYK | 65% | 97% |
| PD Definition | 89% | 98% |
| René Mean PD | 66% | 97% |

Table 18

Means of Enjoyment Ratings by Grade

| <u>2nd</u> | | <u>4th</u> | | <u>6th</u> | | <u>Adult</u> | | <u>Total</u> | | <u>F(3,107)</u> |
|------------|-----------|------------|-----------|------------|-----------|--------------|-----------|--------------|-----------|-----------------|
| <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | |
| 2.46 | .62 | 2.33 | .60 | 2.22 | .42 | 2.68 | .48 | 2.41 | .56 | 3.03* |

*p < .05
[Range = 1-3.]

Means of Ease or Difficulty in Understanding Ratings by Grade

| <u>2nd</u> | | <u>4th</u> | | <u>6th</u> | | <u>Adult</u> | | <u>Total</u> | | <u>F(3,107)</u> |
|------------|-----------|------------|-----------|------------|-----------|--------------|-----------|--------------|-----------|-----------------|
| <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | |
| 3.15 | 1.09 | 2.78 | 1.07 | 3.09 | 1.20 | 2.72 | 1.09 | 2.84 | 1.15 | 3.70* |

*p < .05
[Range = 1-5.]

[Oneway ANOVA Student-Newman-Keuls test significant at .05 level.]

Table 19

Number of Respondents Who Attributed Reasons for Understanding by Grade

| | <u>2nd</u> (N=33) | <u>4th</u> (N=33) | <u>6th</u> (N=23) | <u>Adult</u> (N=23) | <u>Total</u> (N=112) |
|---------------------|----------------------|----------------------|----------------------|------------------------|-------------------------|
| <u>PRODUCTION:</u> | 15 | 10 | 11 | 20 | 56 (40%) |
| <u>ACTING</u> | 12 | 8 | 9 | 10 | 39 (28%) |
| Metatheatre | 7 | 5 | 6 | 7 | 25 |
| Acting | 5 | 3 | 3 | 3 | 14 |
| <u>SPECTACLE</u> | 3 | 2 | 2 | 10 | 17 (12%) |
| Scenery | 3 | 1 | 1 | 7 | 12 |
| Sound/Lights | | 1 | 1 | 3 | 5 |
| <u>SCRIPT:</u> | 16 | 27 | 17 | 25 | 85 (60%) |
| <u>FICTIVE PLAY</u> | 10 | 21 | 12 | 15 | 58 (41%) |
| Whole Play | 5 | 3 | 3 | 10 | 21 |
| Ghost | 1 | 5 | 4 | 1 | 11 |
| Rene's Actions | 3 | 2 | 1 | 1 | 7 |
| Father's Object | 1 | 5 | 1 | | 7 |
| René's Objective | | 5 | 1 | 1 | 7 |
| Dreams | | 1 | 2 | 2 | 5 |
| Words/Art/Symbols | 6 | 6 | 5 | 10 | 27 (19%) |
| Grand Totals | 31 | 37 | 28 | 45 | 141 |
| No Reason Given | 8 | 9 | 2 | | 19 (17%) |

Table 20

Means of Attributed Reasons in Understanding the Play by Grade

| | <u>2nd</u> | | <u>4th</u> | | <u>5th</u> | | <u>Adult</u> | | <u>Total</u> | | <u>F(3,108)</u> |
|---------------------|------------|-----------|------------|-----------|------------|-----------|--------------|-----------|--------------|-----------|-----------------|
| | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | |
| <u>PRODUCTION</u> | .11 | .14 | .08 | .15 | .12 | .15 | .22 | .22 | .13 | .17 | 3.56* |
| <u>ACTING</u> | .18 | .24 | .12 | .25 | .20 | .25 | .22 | .30 | .17 | .26 | |
| Metatheatre | .21 | .42 | .15 | .36 | .26 | .45 | .30 | .47 | .22 | .42 | |
| Acting | .15 | .36 | .09 | .29 | .13 | .34 | .13 | .34 | .13 | .33 | |
| <u>SPECTACLE</u> | .05 | .15 | .03 | .12 | .04 | .14 | .22 | .33 | .08 | .20 | 5.23** |
| Scenery | .09 | .29 | .03 | .17 | .04 | .21 | .30 | .47 | .11 | .31 | 4.50** |
| Sound/Lights | | | .03 | .17 | .04 | .21 | .13 | .34 | .05 | .21 | |
| <u>SCRIPT</u> | .07 | .09 | .12 | .12 | .11 | .10 | .16 | .06 | .11 | .10 | 3.70* |
| <u>FICTIVE PLAY</u> | .09 | .15 | .10 | .18 | .07 | .14 | .16 | .17 | .10 | .16 | |
| Whole Play | .15 | .36 | .09 | .29 | .13 | .34 | .44 | .51 | .19 | .39 | 4.33** |
| Ghost | .03 | .17 | .15 | .36 | .17 | .39 | .04 | .21 | .10 | .30 | |
| R's Actions | .09 | .29 | .06 | .24 | .04 | .21 | .04 | .21 | .06 | .24 | |
| F's Obj | .03 | .17 | .15 | .36 | .04 | .21 | | | .06 | .24 | |
| R's Obj | | | .15 | .36 | .04 | .21 | .04 | .21 | .06 | .24 | |
| Dreams | | | .03 | .17 | .09 | .29 | .09 | .29 | .05 | .21 | |
| Words/Symbols | .18 | .39 | .18 | .39 | .22 | .47 | .43 | .51 | .24 | .43 | |
| No Reason | .24 | .44 | .27 | .45 | .09 | .29 | | | .17 | .38 | 3.35* |

*p < .05 **p < .01

[Oneway ANOVA Student-Newman-Keuls test significant at .05 level.]

Table 21

Number of Respondents Who Used Symbol Systems For Reality by Grade

| | <u>2nd</u> (N = 33) | | | | <u>4th</u> (N = 33) | | | | <u>6th</u> (N = 23) | | | | <u>Adult</u> (N = 23) | | | | <u>Total</u> |
|----------------------|------------------------|------------|-----------|-----------|------------------------|-----------|-----------|-----------|------------------------|-----------|-----------|-----------|--------------------------|-----------|-----------|-----------|--------------|
| | <u>MB</u> | <u>R</u> | <u>AR</u> | <u>F</u> | <u>MB</u> | <u>R</u> | <u>AR</u> | <u>F</u> | <u>MB</u> | <u>R</u> | <u>AR</u> | <u>F</u> | <u>MB</u> | <u>R</u> | <u>AR</u> | <u>F</u> | |
| PRODUCTION | | | | | | | | | | | | | | | | | |
| Fake Props | 6 | 1 | | | 8 | 4 | | | 7 | 1 | | | 8 | | | | 35 |
| Scenery | 3 | 4 | 4 | 2 | 12 | 2 | 6 | | 5 | 4 | 5 | | 2 | | 5 | | 52 |
| Sound/Light | 1 | 2 | | | 5 | 7 | | | 3 | | | | 10 | 2 | 1 | | 31 |
| Auth Props | 6 | 2 | 10 | | 2 | 2 | 5 | | | 2 | 5 | | 1 | | 1 | | 36 |
| Costumes | | | 5 | 1 | | | 6 | | | 1 | 2 | | | | | | 15 |
| SPECTACLE | <u>16</u> | <u>10</u> | <u>19</u> | <u>3</u> | <u>27</u> | <u>15</u> | <u>17</u> | | <u>15</u> | <u>8</u> | <u>12</u> | | <u>21</u> | <u>2</u> | <u>7</u> | | <u>169</u> |
| Metatheatre | 10 | 6 | 4 | | 11 | 9 | 4 | | 5 | 3 | | | 5 | 2 | 4 | | 63 |
| Acting | 1 | | | | 5 | 2 | 3 | | 2 | 3 | 2 | | 4 | 4 | 1 | | 27 |
| Live Actors | 3 | 4 | 9 | | 1 | | 10 | | | | 6 | | | | 8 | | 41 |
| ACTING | <u>14</u> | <u>10</u> | <u>13</u> | | <u>17</u> | <u>11</u> | <u>17</u> | | <u>7</u> | <u>6</u> | <u>8</u> | | <u>9</u> | <u>6</u> | <u>13</u> | | <u>131</u> |
| SCRIPT | | | | | | | | | | | | | | | | | |
| Whole Play | 1 | 1 | 1 | 1 | 2 | 1 | 3 | | | | 2 | | 8 | 6 | 3 | | 29 |
| Char Actions | 1 | 2 | 1 | 3 | 1 | 4 | 2 | | | 1 | 1 | 1 | | | | | 17 |
| R Childhood | | | | | | | 1 | 4 | | | 2 | 1 | | | 3 | 1 | 12 |
| R & G Scene | | | | | | 2 | | | | 2 | | | | | | | 4 |
| F Objective | | 1 | 1 | 2 | | 2 | 6 | 10 | | 2 | 3 | 7 | | 5 | 2 | 8 | 49 |
| R Acts/Traits | 3 | 3 | 1 | 1 | 4 | 5 | | 7 | 4 | 4 | | 7 | | | | 1 | 47 |
| FICTIVE PLAY | <u>5</u> | <u>7</u> | <u>4</u> | <u>14</u> | <u>7</u> | <u>14</u> | <u>12</u> | <u>21</u> | <u>4</u> | <u>9</u> | <u>8</u> | <u>16</u> | <u>8</u> | <u>11</u> | <u>8</u> | <u>10</u> | <u>158</u> |
| R Childhood | | | | | 1 | | | 6 | 1 | | 3 | 2 | | | | 3 | 16 |
| R Married G | | | | 1 | | | 1 | 6 | | | 1 | 4 | | | | 7 | 20 |
| R Traits | | | | | | | | | | | | | | | | 5 | 5 |
| Mother Died | | | | | | 2 | 6 | 8 | | 3 | 3 | 8 | | | 1 | 14 | 45 |
| FACTUAL STORY | | | | <u>1</u> | <u>1</u> | <u>2</u> | <u>7</u> | <u>20</u> | <u>1</u> | <u>3</u> | <u>7</u> | <u>14</u> | | | <u>1</u> | <u>29</u> | <u>86</u> |
| R OBJECTIVE | | | 6 | 11 | | 1 | 5 | 26 | | 1 | 8 | 19 | | 1 | | 16 | 94 |
| Ghost | 11 | 1 | | | 14 | 1 | | | 12 | | | | 3 | | | | 42 |
| Dreams | 2 | | | 1 | 1 | 1 | | | 2 | 2 | | 1 | | 3 | 1 | | 12 |
| FANTASY | <u>13</u> | <u>1</u> | | <u>1</u> | <u>15</u> | <u>2</u> | | | <u>14</u> | <u>2</u> | | <u>1</u> | <u>3</u> | <u>3</u> | <u>1</u> | | <u>54</u> |
| Totals | <u>48</u> | <u>28</u> | <u>42</u> | <u>26</u> | <u>67</u> | <u>45</u> | <u>58</u> | <u>67</u> | <u>41</u> | <u>29</u> | <u>43</u> | <u>49</u> | <u>41</u> | <u>23</u> | <u>30</u> | <u>55</u> | |
| GRAND TOTAL | | <u>144</u> | | | <u>237</u> | | | | <u>162</u> | | | | <u>149</u> | | | | <u>692</u> |
| Don't Know | 2 | 9 | 3 | 11 | 2 | 1 | 1 | 1 | 1 | 2 | | | 1 | 4 | | | 38 |
| | | <u>25</u> | | | | <u>5</u> | | | | <u>3</u> | | | | <u>5</u> | | | |

MB=Make-Believe; R=Realistic; AR=Actually Real; F=Facts about Magritte

[Note: Inappropriate 2nd & 6th grade dream and spectacle responses for facts are shown here but removed from statistical computations.]

Table 22

Number of Respondents Who Used Cues to Judge Reality by Grade

| | <u>2nd</u> (N = 33) | | | | <u>4th</u> (N = 33) | | | | <u>6th</u> (N = 23) | | | | <u>Adult</u> (N = 23) | | | | <u>Total</u> |
|----------------------|------------------------|-----------|-----------|-----------|------------------------|-----------|-----------|-----------|------------------------|-----------|-----------|-----------|--------------------------|-----------|-----------|-----------|--------------|
| | <u>MB</u> | <u>R</u> | <u>AR</u> | <u>F</u> | <u>MB</u> | <u>R</u> | <u>AR</u> | <u>F</u> | <u>MB</u> | <u>R</u> | <u>AR</u> | <u>F</u> | <u>MB</u> | <u>R</u> | <u>AR</u> | <u>F</u> | |
| <u>INSIDE CUES</u> | | | | | | | | | | | | | | | | | |
| R Actions | 2 | | 1 | 2 | 2 | 5 | | 3 | 1 | | 1 | 3 | | | | | 20 |
| Others' Acts | 4 | 5 | 1 | 2 | 6 | 5 | 1 | 3 | | 3 | | 1 | 1 | | | 1 | 33 |
| "They show" | 3 | 4 | 1 | 1 | 6 | 5 | 4 | 2 | 1 | 1 | | 1 | 2 | 2 | 1 | 1 | 35 |
| Appearances | <u>17</u> | <u>7</u> | <u>4</u> | <u>1</u> | <u>13</u> | <u>10</u> | <u>3</u> | <u>3</u> | <u>7</u> | <u>6</u> | <u>2</u> | | <u>4</u> | <u>3</u> | <u>1</u> | | <u>81</u> |
| VISUAL | 26 | 16 | 7 | 6 | 27 | 25 | 8 | 11 | 9 | 10 | 3 | 5 | 7 | 5 | 2 | 2 | 169 |
| R said | 1 | 1 | 1 | 2 | 1 | | 1 | 7 | | | | 3 | | | | | 20 |
| Others said | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 4 | 1 | | | 4 | | | | | 21 |
| "They told" | 3 | 1 | 4 | 3 | 8 | 2 | 4 | 3 | 1 | 3 | 1 | 5 | 3 | 2 | 3 | 6 | 52 |
| Sounds | <u>3</u> | | | | <u>1</u> | <u>4</u> | | | | <u>2</u> | | <u>1</u> | <u>2</u> | <u>1</u> | <u>1</u> | | <u>15</u> |
| AURAL/VERBAL | 9 | 4 | 7 | 6 | 11 | 8 | 6 | 14 | 2 | 5 | 1 | 13 | 5 | 3 | 4 | 10 | 108 |
| R thoughts | 1 | 2 | 1 | | 1 | 2 | 3 | 2 | | 1 | | | | | | | 13 |
| Others th | | | <u>1</u> | <u>1</u> | | <u>3</u> | <u>2</u> | <u>2</u> | | | | <u>4</u> | | | | | <u>13</u> |
| PSYCH | 1 | 2 | 2 | 1 | 1 | 5 | 5 | 4 | 1 | | | 4 | | | | | 26 |
| <u>OUT KNOWLEDGE</u> | | | | | | | | | | | | | | | | | |
| Possible | | 1 | 1 | | | 2 | 1 | 4 | | 6 | 5 | 3 | | 6 | 1 | | 30 |
| Impossible | <u>9</u> | <u>1</u> | | | <u>18</u> | <u>1</u> | <u>1</u> | | <u>12</u> | | | | <u>1</u> | | | | <u>43</u> |
| SOC REALISM | 9 | 2 | 1 | | 18 | 3 | 2 | 4 | 12 | 6 | 5 | 3 | 1 | 6 | 1 | | 73 |
| TH CONTEXT | | 2 | | | 4 | 4 | 3 | 5 | 3 | 1 | 2 | 1 | 7 | 2 | 7 | 6 | 47 |
| G KNOWLEDGE | | 1 | 2 | 1 | 4 | 4 | 4 | 1 | 5 | 1 | 1 | 4 | 2 | 1 | 7 | 2 | 40 |
| P EXPERIENCE | 1 | 3 | 1 | | 3 | 2 | 2 | 1 | 1 | 1 | 1 | | 3 | 4 | 2 | 1 | 26 |
| TRAINING | | | | | 1 | | 3 | 5 | | | | 2 | 4 | 1 | | 4 | 20 |
| <u>Totals</u> | | | | | | | | | | | | | | | | | |
| <u>GRAND TOTAL</u> | <u>46</u> | <u>30</u> | <u>20</u> | <u>14</u> | <u>69</u> | <u>51</u> | <u>33</u> | <u>45</u> | <u>32</u> | <u>25</u> | <u>15</u> | <u>34</u> | <u>26</u> | <u>21</u> | <u>23</u> | <u>25</u> | <u>509</u> |
| | | 110 | | | | 198 | | | | 106 | | | | 95 | | | |
| Don't Know | 2 | 12 | 3 | 18 | 3 | 3 | 2 | 6 | 2 | 4 | 1 | 2 | 2 | 5 | | 2 | |
| Didn't Ask | | | 17 | | | | 10 | | | | 10 | | | | 3 | | |
| | | 62 | | | | 26 | | | | 19 | | | | 12 | | | |

MB=Make-Believe; R=Realistic; AR=Actually Real; F=Facts about Magritte

Table 23a

Ranked Means for each "Make-Believe" Convention by Age Group

| | <u>2nd</u> | <u>4th</u> | <u>6th</u> | <u>Adult</u> | <u>X</u> |
|-------------------------|------------|------------|------------|--------------|------------|
| Ghost | .33 | .42 | .52 | .13 | .36 |
| <u>Dreaming</u> | <u>.06</u> | <u>.03</u> | <u>.09</u> | | <u>.05</u> |
| FANTASY | .20 | .23 | .30 | .07 | .20 |
| Fake props | .18 | .24 | .30 | .35 | .26 |
| Scenery | .09 | .36 | .22 | .09 | .20 |
| Sound/Light | .03 | .15 | .13 | .44 | .17 |
| <u>Authentic props</u> | <u>.18</u> | <u>.06</u> | | <u>.04</u> | <u>.08</u> |
| SPECTACLE | .12 | .21 | .16 | .23 | .18 |
| Metatheatre | .30 | .33 | .22 | .22 | .28 |
| Acting | .03 | .15 | .09 | .17 | .11 |
| <u>Live actors</u> | <u>.09</u> | <u>.03</u> | | | <u>.05</u> |
| ACTING | .14 | .17 | .10 | .13 | .14 |
| Whole play | .03 | .06 | | .35 | .11 |
| R acts/traits | .09 | .12 | .17 | | .10 |
| <u>Char actions</u> | <u>.03</u> | <u>.03</u> | | | <u>.02</u> |
| FICTIVE PLAY | .05 | .07 | .06 | .12 | .07 |
| FACTUAL STORY (R child) | | .03 | .04 | | .02 |

Table 23b

Ranked Means for Each Cue Used for "Make-Believe" by Age Group

| | <u>2nd</u> | <u>4th</u> | <u>6th</u> | <u>Adult</u> | <u>X</u> |
|---------------------|------------|------------|------------|--------------|------------|
| SOCIAL REALISM | .27 | .55 | .52 | .04 | .36 |
| Appearances | .52 | .39 | .30 | .17 | .37 |
| "They showed" | .09 | .18 | .04 | .09 | .11 |
| Others' acts | .12 | .18 | | .04 | .10 |
| <u>R actions</u> | <u>.06</u> | <u>.06</u> | <u>.04</u> | | <u>.05</u> |
| VISUAL | .20 | .20 | .10 | .08 | .15 |
| THEATRE CONTEXT | | .12 | .13 | .30 | .13 |
| GENERAL KNOWLEDGE | | .12 | .13 | .30 | .13 |
| PERSONAL EXPERIENCE | .03 | .09 | .04 | .13 | .07 |
| "They told" | .09 | .24 | .04 | .13 | .13 |
| Sounds | .09 | .03 | | .09 | .05 |
| Others said | .06 | .03 | .04 | | .04 |
| <u>R said</u> | <u>.03</u> | <u>.03</u> | | | <u>.02</u> |
| AURAL/VERBAL | .07 | .08 | .02 | .05 | .06 |
| TRAINING (stated) | | .03 | | .04 | .02 |
| PSYCH (R thought) | .03 | .03 | | | .02 |

Table 24a

Ranked Means for each "Actually Real" Convention by Age Group

| | <u>2nd</u> | <u>4th</u> | <u>6th</u> | <u>Adult</u> | <u>X</u> |
|----------------------|------------|------------|------------|--------------|------------|
| RENÉ OBJECTIVE | .18 | .15 | .35 | | .17 |
| Live actors | .27 | .30 | .26 | .35 | .30 |
| Metatheatre | .12 | .12 | | .17 | .11 |
| Acting | | .09 | .09 | .04 | .05 |
| <u>ACTING</u> | <u>.13</u> | <u>.17</u> | <u>.12</u> | <u>.19</u> | <u>.15</u> |
| Authentic props | .30 | .15 | .22 | .04 | .19 |
| Scenery | .12 | .18 | .22 | .22 | .18 |
| Costumes | .15 | .18 | .09 | | .12 |
| Sound/Light | | | | .04 | <.01 |
| <u>SPECTACLE</u> | <u>.14</u> | <u>.13</u> | <u>.13</u> | <u>.08</u> | <u>.12</u> |
| Father objective | .03 | .18 | .13 | .09 | .11 |
| Whole play | .03 | .09 | .09 | .13 | .08 |
| R childhood | | .03 | .09 | .13 | .05 |
| Char actions | .03 | .06 | .04 | | .04 |
| R acts/traits | .03 | | | | <.01 |
| <u>FICTIVE PLAY</u> | <u>.02</u> | <u>.07</u> | <u>.07</u> | <u>.07</u> | <u>.06</u> |
| Mother died | | .18 | .13 | .04 | .09 |
| R childhood | | | .13 | | .03 |
| R married G | | .03 | .04 | | .02 |
| <u>FACTUAL STORY</u> | | <u>.07</u> | <u>.10</u> | <u>.02</u> | <u>.05</u> |
| FANTASY (dreaming) | | | | .04 | <.01 |

Table 24b

Ranked Means for Each Cue Used for "Actually Real" by Age Group

| | <u>2nd</u> | <u>4th</u> | <u>6th</u> | <u>Adult</u> | <u>X</u> |
|---------------------|------------|------------|------------|--------------|------------|
| GENERAL KNOWLEDGE | .06 | .12 | .04 | .30 | .13 |
| THEATRE CONTEXT | | .09 | .09 | .30 | .11 |
| SOCIAL REALISM | .03 | .06 | .22 | .04 | .08 |
| PERSONAL EXPERIENCE | .03 | .06 | .04 | .09 | .05 |
| TRAINING (stated) | | .09 | .09 | | .05 |
| Appearances | .12 | .09 | .09 | .04 | .09 |
| "They showed" | .03 | .12 | | .04 | .05 |
| R actions | .03 | | .04 | | .02 |
| Others' acts | .03 | .03 | | | .02 |
| <u>VISUAL</u> | <u>.05</u> | <u>.06</u> | <u>.03</u> | <u>.02</u> | <u>.05</u> |
| "They told" | .12 | .12 | .04 | .13 | .11 |
| Others said | .06 | .03 | | | .03 |
| R said | .03 | .03 | | | .02 |
| Sounds | | | | .04 | <.01 |
| <u>AURAL/VERBAL</u> | <u>.05</u> | <u>.05</u> | <u>.01</u> | <u>.04</u> | <u>.04</u> |
| PSYCHOLOGICAL | .03 | .08 | | | .03 |

Table 25a

Ranked Means for each "Realistic" Convention by Age Group

| | <u>2nd</u> | <u>4th</u> | <u>6th</u> | <u>Adult</u> | <u>X</u> |
|------------------------|------------|------------|------------|--------------|------------|
| Metatheatre | .18 | .27 | .13 | .09 | .18 |
| Acting | | .06 | .13 | .17 | .08 |
| <u>Live actors</u> | <u>.12</u> | | | | <u>.04</u> |
| ACTING | .10 | .11 | .09 | .09 | .10 |
| R acts/traits | .09 | .15 | .17 | | .11 |
| Father objective | .03 | .06 | .09 | .22 | .09 |
| Whole play | .03 | .03 | | .26 | .07 |
| Char actions | .06 | .12 | .04 | | .06 |
| <u>R & G scene</u> | | <u>.06</u> | <u>.09</u> | | <u>.04</u> |
| FICTIVE PLAY | .04 | .07 | .07 | .09 | .06 |
| Scenery | .12 | .06 | .17 | | .09 |
| Sound/Light | .06 | .21 | | .09 | .10 |
| Authentic props | .06 | .06 | .09 | | .05 |
| Fake props | .03 | .12 | .04 | | .05 |
| <u>Costumes</u> | <u>.03</u> | | <u>.04</u> | | <u>.02</u> |
| SPECTACLE | .06 | .09 | .07 | .02 | .06 |
| FACTUAL STORY (M died) | | .06 | .13 | | .05 |
| Dreaming | | .03 | .09 | .13 | .05 |
| <u>Ghost</u> | <u>.03</u> | <u>.03</u> | | | <u>.02</u> |
| FANTASY | .02 | .03 | .04 | .07 | .04 |
| RENÉ OBJECTIVE | | .03 | .04 | .04 | .03 |

Table 25b

Ranked Means for Each Cue Used for "Realistic" by Age Group

| | <u>2nd</u> | <u>4th</u> | <u>6th</u> | <u>Adult</u> | <u>X</u> |
|---------------------|------------|------------|------------|--------------|----------------|
| SOCIAL REALISM | .06 | .09 | .26 | .26 | .15 |
| Appearances | .21 | .30 | .26 | .13 | .23 |
| Others' acts | .15 | .15 | .13 | | .12 |
| "They showed" | .12 | .15 | .04 | .09 | .11 |
| <u>R actions</u> | | <u>.15</u> | | | <u>.05</u> |
| VISUAL | .12 | .19 | .11 | .05 | .13 |
| PERSONAL EXPERIENCE | .09 | .06 | .04 | .17 | .09 |
| THEATRE CONTEXT | .06 | .12 | .04 | .09 | .08 |
| GENERAL KNOWLEDGE | .03 | .12 | .04 | .04 | .06 |
| "They told" | .03 | .06 | .13 | .09 | .07 |
| Sounds | | .12 | .09 | .04 | .06 |
| Others said | .06 | .06 | | | .04 |
| <u>R said</u> | <u>.03</u> | | | | <u><.01</u> |
| AURAL/VERBAL | .03 | .06 | .05 | .03 | .05 |
| PSYCHOLOGICAL | .03 | .08 | .02 | | .04 |

Table 26

Ranked Numbers of Respondents Who Used Symbol Systems by Grade

| | <u>2nd</u> (N=33) | <u>4th</u> (N=33) | <u>6th</u> (N=23) | <u>Adult</u> (N=23) | <u>Total</u> (N=112) | |
|----------------------|----------------------|----------------------|----------------------|------------------------|-------------------------|-----|
| <u>Make-Believe</u> | | | | | | |
| Spectacle | 16 | 27 | 15 | 21 | 79 | 40% |
| Acting | 14 | 17 | 7 | 9 | 47 | 24% |
| Fantasy | 13 | 15 | 14 | 3 | 45 | 23% |
| Fict Play | 5 | 7 | 4 | 8 | 24 | 12% |
| Fact Story | | 1 | 1 | | <u>2</u> | 1% |
| | | | | | 197 | |
| <u>Actually Real</u> | | | | | | |
| Spectacle | 19 | 17 | 12 | 7 | 55 | 32% |
| Acting | 13 | 17 | 8 | 13 | 51 | 30% |
| Fict Play | 4 | 12 | 8 | 8 | 32 | 18% |
| R Objective | 6 | 5 | 8 | | 19 | 11% |
| Fact Story | | 7 | 7 | 1 | 15 | 9% |
| Fantasy | | | | 1 | <u>1</u> | <1% |
| | | | | | 173 | |
| <u>Realistic</u> | | | | | | |
| Fict Play | 7 | 14 | 9 | 11 | 41 | 33% |
| Spectacle | 10 | 15 | 8 | 2 | 35 | 28% |
| Acting | 10 | 11 | 6 | 6 | 33 | 27% |
| Fantasy | 1 | 2 | 2 | 3 | 8 | 6% |
| Fact Story | | 2 | 3 | | 5 | 4% |
| R Objective | | 1 | 1 | 1 | <u>3</u> | 2% |
| | | | | | 125 | |
| <u>Facts on RM</u> | | | | | | |
| R Objective | 11 | 26 | 19 | 16 | 72 | 37% |
| Fact Story | 1 | 20 | 14 | 29 | 64 | 32% |
| Fict Play | 13 | 21 | 16 | 10 | 60 | 30% |
| Spectacle | 3 | | | | 3 | 1% |
| Fantasy | 1 | | 1 | | 2 | <1% |
| Acting | 1 | | | | <u>1</u> | <1% |
| | | | | | 202 | |

Table 27

Combined Proportions of Number of Respondents Within Age Groups Collapsed
Across Six Conventions by Production and Script

| | <u>2nd</u> | <u>4th</u> | <u>6th</u> | <u>Adult</u> | <u>Total</u> |
|-------------------------|---------------|---------------|---------------|---------------|--------------|
| (MB) Spectacle | .34 | .40 | .37 | .51 | .41 |
| (MB) Acting | <u>.29</u> | <u>.25</u> | <u>.17</u> | <u>.22</u> | <u>.23</u> |
| UNREALISTIC PRODUCTION: | .63 | .65 | .54 | .73 | .64 |
| (MB) Fantasy (Ghost) | .27 | .22 | .34 | .07 | .22 |
| (MB) Fictive Play | .10 | .11 | .10 | .20 | .13 |
| (MB) Factual Story | <u> </u> | <u>.02</u> | <u>.02</u> | <u> </u> | <u>.01</u> |
| UNREALISTIC SCRIPT: | .37 | .35 | .46 | .27 | .36 |
| (AR) Spectacle | .45 | .29 | .28 | .24 | .32 |
| (AR) Acting | <u>.31</u> | <u>.29</u> | <u>.18</u> | <u>.43</u> | <u>.30</u> |
| REAL PRODUCTION: | .76 | .58 | .46 | .67 | .62 |
| (AR) Factual Story | <u> </u> | .12 | .16 | .03 | .08 |
| (AR) Fictive Play | .10 | .21 | .19 | .27 | .19 |
| (AR) René Objective | .14 | .09 | .19 | <u> </u> | .11 |
| (AR) Fantasy | <u> </u> | <u> </u> | <u> </u> | <u>.03</u> | < .01 |
| REAL (FACTUAL) SCRIPT: | .24 | .42 | .54 | .33 | .28 |
| (R) Spectacle | .36 | .33 | .27 | .09 | .26 |
| (R) Acting | <u>.36</u> | <u>.24</u> | <u>.21</u> | <u>.26</u> | <u>.27</u> |
| REALISTIC PRODUCTION: | .72 | .57 | .48 | .35 | .53 |
| (R) Fictive Play | .25 | .31 | .31 | .48 | .34 |
| (R) Factual Story | <u> </u> | .05 | .10 | <u> </u> | .04 |
| (R) René Objective | <u> </u> | .02 | .04 | .04 | .02 |
| (R) Fantasy | <u>.03</u> | <u>.05</u> | <u>.07</u> | <u>.13</u> | <u>.07</u> |
| REALISTIC SCRIPT: | .28 | .43 | .52 | .65 | .47 |
| (F) Factual Story | .04 | .30 | .28 | .53 | .29 |
| (F) Fictive Play | .50 | .31 | .32 | .18 | .33 |
| (F) René Objective | .42 | .39 | .38 | .29 | .37 |
| (F) Fantasy/Dreams | <u>.04</u> | <u> </u> | <u>.02</u> | <u> </u> | <u>.01</u> |
| FACTS ABOUT MAGRITTE: | 100 | 100 | 100 | 100 | 100 |

MB = "Make-Believe"
R = "Realistic"

AR = "Actually Real"
F = "Facts about René Magritte"

[Note: Percentages have been rounded off to achieve 100% totals.]

Table 28

Ranked Numbers of Respondents Who Used Cues to Judge Reality

| | <u>2nd</u> (N=33) | <u>4th</u> (N=33) | <u>6th</u> (N=23) | <u>Adult</u> (N=23) | <u>Total</u> (N=112) |
|----------------------|----------------------|----------------------|----------------------|------------------------|-------------------------|
| <u>Make-Believe</u> | | | | | |
| Visual | 26 | 27 | 9 | 7 | 69 40% |
| Social Realism | 9 | 18 | 12 | 1 | 40 23% |
| Verbal/Aural | 9 | 11 | 2 | 5 | 27 16% |
| Th Context | | 4 | 3 | 7 | 14 8% |
| Gen Knowledge | | 4 | 5 | 2 | 11 6% |
| Per Experience | 1 | 3 | 1 | 3 | 8 5% |
| Psych | 1 | 1 | | | 2 1% |
| Training | | 1 | | 1 | 2 1% |
| <u>Actually Real</u> | | | | | |
| Visual | 7 | 8 | 3 | 2 | 20 22% |
| Verbal/Aural | 7 | 6 | 1 | 4 | 18 20% |
| Gen Knowledge | 2 | 4 | 1 | 7 | 14 15% |
| Th Context | | 3 | 2 | 7 | 12 13% |
| Social Realism | 1 | 2 | 5 | 1 | 9 10% |
| Psych | 2 | 5 | | | 7 8% |
| Per Experience | 1 | 2 | 1 | 2 | 6 7% |
| Training | | 3 | 2 | | 5 5% |
| <u>Realistic</u> | | | | | |
| Visual | 16 | 25 | 10 | 5 | 56 44% |
| Verbal/Aural | 4 | 8 | 5 | 3 | 20 16% |
| Social Realism | 2 | 3 | 6 | 6 | 17 13% |
| Per Experience | 3 | 2 | 1 | 4 | 10 8% |
| Th Context | 2 | 4 | 1 | 2 | 9 7% |
| Gen Knowledge | 1 | 4 | 1 | 1 | 7 6% |
| Psych | 2 | 5 | 1 | | 8 6% |
| <u>Facts on RM</u> | | | | | |
| Verbal/Aural | 6 | 14 | 13 | 10 | 43 36% |
| Visual | 7 | 11 | 5 | 2 | 25 21% |
| Th Context | 1 | 5 | 1 | 6 | 13 11% |
| Training | | 5 | 4 | 4 | 13 11% |
| Social Realism | | 4 | 3 | | 7 6% |
| Gen Knowledge | 1 | 1 | 4 | 2 | 8 6% |
| Psych | 1 | 4 | 4 | | 9 7% |
| Per Experience | | 1 | | 1 | 2 2% |

Table 29

Combined Proportions of Number of Respondents Who Used Cues to Judge Reality Within Age Groups Collapsed Across Cues by In/Outside Production

| | <u>2nd</u> | <u>4th</u> | <u>6th</u> | <u>Adult</u> | <u>Total</u> |
|----------------------------------|------------|------------|------------|--------------|--------------|
| <u>MAKE-BELIEVE CUES</u> | | | | | |
| Visual | .57 | .39 | .28 | .27 | .40 |
| Verbal/Aural | .20 | .16 | .06 | .19 | .16 |
| Psychological | <u>.02</u> | <u>.02</u> | | | <u>.01</u> |
| INSIDE PRODUCTION: | <u>.78</u> | <u>.57</u> | <u>.34</u> | <u>.46</u> | <u>.54</u> |
| Social Realism | .20 | .26 | .38 | .04 | .23 |
| Theatre Context | | .06 | .09 | .27 | .08 |
| General Knowledge | | .06 | .16 | .08 | .06 |
| Personal Experience | <u>.02</u> | <u>.04</u> | <u>.03</u> | <u>.12</u> | <u>.05</u> |
| OUTSIDE PRODUCTION: | <u>.22</u> | <u>.43</u> | <u>.66</u> | <u>.54</u> | <u>.46</u> |
| <u>ACTUALLY REAL CUES</u> | | | | | |
| Visual | .35 | .24 | .20 | .09 | .22 |
| Verbal/Aural | .35 | .18 | .07 | .17 | .20 |
| Psychological | <u>.10</u> | <u>.15</u> | | | <u>.08</u> |
| INSIDE PRODUCTION: | <u>.80</u> | <u>.58</u> | <u>.27</u> | <u>.26</u> | <u>.48</u> |
| General Knowledge | .10 | .12 | .07 | .30 | .15 |
| Theatre Context | | .09 | .13 | .30 | .13 |
| Social Realism | .05 | .06 | .33 | .04 | .10 |
| Personal Experience | .05 | .06 | .07 | .09 | .07 |
| Training (stated) | | <u>.09</u> | <u>.13</u> | | <u>.06</u> |
| OUTSIDE PRODUCTION: | <u>.20</u> | <u>.42</u> | <u>.73</u> | <u>.74</u> | <u>.52</u> |
| <u>REALISTIC CUES</u> | | | | | |
| Visual | .53 | .49 | .40 | .24 | .44 |
| Verbal/Aural | .13 | .17 | .20 | .14 | .17 |
| Psychological | <u>.07</u> | <u>.10</u> | <u>.04</u> | | <u>.06</u> |
| INSIDE PRODUCTION: | <u>.73</u> | <u>.75</u> | <u>.64</u> | <u>.38</u> | <u>.625</u> |
| Social Realism | .07 | .06 | .24 | .29 | .13 |
| Personal Experience | .10 | .04 | .04 | .19 | .08 |
| Theatre Context | .07 | .08 | .04 | .10 | .07 |
| General Knowledge | <u>.03</u> | <u>.08</u> | <u>.04</u> | <u>.05</u> | <u>.06</u> |
| OUTSIDE PRODUCTION: | <u>.27</u> | <u>.25</u> | <u>.36</u> | <u>.62</u> | <u>.375</u> |
| <u>FACTUAL CUES</u> | | | | | |
| Verbal/Aural | .43 | .31 | .38 | .40 | .36 |
| Visual | .43 | .24 | .15 | .08 | .20 |
| Psychological | <u>.07</u> | <u>.09</u> | <u>.12</u> | | <u>.08</u> |
| INSIDE PRODUCTION: | <u>.93</u> | <u>.64</u> | <u>.65</u> | <u>.48</u> | <u>.675</u> |
| Training (stated) | | .11 | .12 | .16 | .11 |
| Theatre Context | | .11 | .03 | .24 | .10 |
| General Knowledge | .07 | .02 | .12 | .08 | .07 |
| Social Realism | | <u>.09</u> | <u>.09</u> | | <u>.06</u> |
| OUTSIDE PRODUCTION: | <u>.07</u> | <u>.36</u> | <u>.35</u> | <u>.52</u> | <u>.325</u> |

Table 30

Number and Percent of Respondents Who Explained Accurate and Inaccurate Reasons for Theatre Conventions by Grade

| | <u>2nd</u> (N=33) | <u>4th</u> (N=33) | <u>6th</u> (N=23) | <u>Adult</u> (N=23) | <u>Total</u> (N=112) |
|--------------------------|----------------------|----------------------|----------------------|------------------------|-------------------------|
| <u>JACKET/HAT</u> | | | | | |
| Didn't Know | 18 | 10 | 9 | 9 | 46 (41%) |
| <u>Inaccurate</u> | | | | | |
| 1. Observed action | 7 | 7 | 2 | 1 | 17 (15%) |
| 2. To/from actions | 7 | 8 | 6 | 6 | 27 (24%) |
| <u>Accurate</u> | | | | | |
| 3. Start R story | 1 | 3 | 6 | 7 | 22 (20%) |
| 4. Transformation | 1 | 4 | 2 | | 7 (6%) |
| | | 4 | 4 | 7 | 15 (13%) |
| <u>R'S VOICE</u> | | | | | |
| Didn't Know/Rem | 18 | 9 | 4 | 9 | 40 (36%) |
| <u>Inaccurate</u> | | | | | |
| 1. Aesthetics | 6 | 6 | 2 | | 12 (10%) |
| | 6 | 4 | 2 | | 12 |
| <u>Accurate</u> | | | | | |
| 2. R's thoughts | 9 | 20 | 17 | 14 | 60 (54%) |
| 3. R's past | 5 | 11 | 9 | 8 | 33 (30%) |
| 4. R's dreams | 4 | 4 | 6 | 3 | 13 (12%) |
| | 4 | 5 | 2 | 3 | 14 (12%) |
| <u>LIGHTING</u> | | | | | |
| Didn't Know | 8 | 3 | 2 | 8 | 21 (19%) |
| <u>Inaccurate</u> | | | | | |
| 1. Aesthetics | 15 | 15 | 7 | 1 | 38 (34%) |
| 2. No motive | 7 | 4 | 3 | 1 | 15 (13%) |
| | 8 | 11 | 4 | | 23 (21%) |
| <u>Accurate</u> | | | | | |
| 3. Motive | 10 | 15 | 14 | 14 | 53 (47%) |
| 4. R's feelings | 5 | 2 | 5 | 3 | 15 (13%) |
| 5. R's dreams | 3 | 8 | 8 | 9 | 28 (25%) |
| | 2 | 5 | 1 | 2 | 10 (9%) |

Table 30 (cont.)

| | <u>2nd</u> (N=33) | <u>4th</u> (N=33) | <u>6th</u> (N=23) | <u>Adult</u> (N=23) | <u>Total</u> (N=112) |
|-----------------------------|----------------------|----------------------|----------------------|------------------------|-------------------------|
| <u>PROJECTIONS</u> | | | | | |
| Didn't Know | 11 | 3 | 3 | 1 | 18 (16%) |
| <u>Inaccurate</u> | 18 | 16 | 11 | 5 | 50 (45%) |
| 1. Aesthetics | 7 | 4 | | 2 | 13 (12%) |
| 2. Show art | 11 | 12 | 11 | 3 | 37 (33%) |
| <u>Accurate</u> | 4 | 14 | 9 | 17 | 44 (39%) |
| 3. With actions | 4 | 10 | 7 | 1 | 22 (20%) |
| 4. R's thoughts | | 2 | | 7 | 9 (8%) |
| 5. R's dreams | | 2 | 2 | 9 | 13 (11%) |
| <u>MOM'S VEIL</u> | | | | | |
| Didn't Know | 3 | 1 | 1 | 3 | 8 (7%) |
| <u>Inaccurate</u> | 10 | 3 | 1 | | 14 (12%) |
| 1. Disguise | 10 | 3 | 1 | | 14 |
| <u>Accurate</u> | 20 | 29 | 21 | 20 | 90 (81%) |
| 2. Ghost | 16 | 19 | 18 | 16 | 69 (62%) |
| 3. M's motive | 1 | 6 | 2 | 1 | 10 (9%) |
| 4. R's dream | 3 | 1 | | 2 | 6 (5%) |
| 5. How died | | 3 | 1 | 1 | 5 (5%) |
| <u>R DO AT RIVER</u> | | | | | |
| Didn't Know | 2 | 1 | 3 | 1 | 7 (6%) |
| <u>Inaccurate</u> | 7 | 6 | 2 | | 15 (13%) |
| 1. Literal acts | 7 | 5 | 2 | | 15 |
| <u>Accurate</u> | 24 | 26 | 18 | 22 | 90 (81%) |
| 2. To find mom | 20 | 22 | 16 | 15 | 73 (65%) |
| 3. Think mom | 4 | 4 | 1 | 4 | 13 (12%) |
| 4. Metaphors | | | 1 | 3 | 4 (4%) |

Table 30 (cont.)

| | <u>2nd</u> (N=33) | <u>4th</u> (N=33) | <u>6th</u> (N=23) | <u>Adult</u> (N=23) | <u>Total</u> (N=112) |
|-------------------------|----------------------|----------------------|----------------------|------------------------|-------------------------|
| FATHER'S PIPE | | | | | |
| <u>Didn't Know</u> | 8 | 7 | 3 | 7 | 25 (22%) |
| <u>Inaccurate</u> | 12 | 7 | 7 | 1 | 27 (24%) |
| 1. Smoke it | 5 | 2 | 2 | | 9 (8%) |
| 2. Exchange | 4 | 1 | 2 | | 7 (6%) |
| 3. Dream pipes | 3 | 4 | 3 | 1 | 11 (10%) |
| <u>Accurate</u> | 13 | 19 | 13 | 15 | 60 (54%) |
| 4. F's feelings | 7 | 6 | 3 | | 16 (14%) |
| 5. Remember F | 3 | 7 | 3 | | 13 (12%) |
| 6. Paint pipe | | 4 | | 1 | 5 (5%) |
| 7. Accept R | 2 | | 4 | 3 | 9 (8%) |
| 8. Symbolize PD | 1 | 2 | 3 | 11 | 17 (15%) |
| MOM AT EASEL | | | | | |
| <u>Didn't Know</u> | 5 | 1 | | 4 | 10 (9%) |
| <u>Inaccurate</u> | 18 | 9 | 8 | 1 | 36 (32%) |
| 1. Unrelated | 4 | 1 | 1 | 1 | 7 (6%) |
| 2. Watch paint | 14 | 8 | 7 | | 29 (26%) |
| <u>Accurate</u> | 10 | 23 | 15 | 18 | 66 (59%) |
| 3. M's objective | 4 | 14 | 9 | 4 | 31 (28%) |
| 4. R's dialogue | 2 | 5 | 3 | 5 | 15 (13%) |
| 5. R's thoughts | 4 | 4 | 3 | 9 | 20 (18%) |

Table 31

Means of Uncollapsed and Collapsed Theatre Convention Explanations by Grade

| | <u>2nd</u> | | <u>4th</u> | | <u>6th</u> | | <u>Adult</u> | | <u>Total</u> | | <u>F(3,108)</u> |
|-------------------|------------|-----------|------------|-----------|------------|-----------|--------------|-----------|--------------|-----------|-----------------|
| | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | |
| Jacket/Hat | | | | | | | | | | | |
| (R=0-4) | .73 | .91 | 1.55 | 1.37 | 1.57 | 1.53 | 1.78 | 1.70 | 1.36 | 1.41 | 3.46* |
| (R=0-2) | .49 | .57 | .94 | .75 | .87 | .82 | .91 | .85 | .79 | .75 | |
| Rem Voice | | | | | | | | | | | |
| (R=1-2) | 1.79 | .42 | 1.91 | .29 | 1.91 | .29 | 1.61 | .50 | 1.81 | .39 | 3.51* |
| R's Voice | | | | | | | | | | | |
| (R=0-4) | .97 | 1.36 | 1.76 | 1.39 | 2.00 | 1.21 | 1.61 | 1.47 | 1.55 | 1.40 | 3.10* |
| (R=0-2) | .74 | .88 | 1.33 | .89 | 1.57 | .79 | 1.22 | 1.00 | 1.18 | .93 | 4.63** |
| Lighting | | | | | | | | | | | |
| (R=0-5) | 1.82 | 1.51 | 2.70 | 1.57 | 2.74 | 1.42 | 2.44 | 1.97 | 2.39 | 1.64 | |
| (R=0-2) | 1.06 | .75 | 1.36 | .65 | 1.52 | .67 | 1.26 | .96 | 1.29 | .76 | |
| Projection | | | | | | | | | | | |
| (R=0-5) | 1.24 | 1.06 | 2.30 | 1.24 | 2.30 | 1.26 | 3.65 | 1.56 | 2.27 | 1.51 | 16.40**** |
| (R=0-2) | .79 | .65 | 1.33 | .65 | 1.26 | .69 | 1.70 | .56 | 1.23 | .71 | 9.63**** |
| Mom's Veil | | | | | | | | | | | |
| (R=0-5) | 1.73 | 1.01 | 2.36 | 1.11 | 2.09 | .85 | 2.09 | 1.16 | 2.06 | 1.06 | |
| (R=0-2) | 1.52 | .67 | 1.83 | .44 | 1.87 | .46 | 1.74 | .69 | 1.73 | .59 | |
| R at River | | | | | | | | | | | |
| (R=0-4) | 1.79 | .74 | 1.88 | .65 | 1.78 | .90 | 2.35 | .89 | 1.93 | .80 | 2.87* |
| (R=0-2) | 1.67 | .60 | 1.76 | .50 | 1.65 | .71 | 1.91 | .42 | 1.74 | .57 | |
| F's Pipe | | | | | | | | | | | |
| (R=0-3) | 2.64 | 2.29 | 3.49 | 2.40 | 4.09 | 2.73 | 5.13 | 3.64 | 3.70 | 2.84 | 3.99** |
| (R=0-2) | 1.15 | .80 | 1.36 | .82 | 1.44 | .73 | 1.35 | .94 | 1.31 | .82 | |
| M at Easel | | | | | | | | | | | |
| (R=0-5) | 2.18 | 1.49 | 3.00 | 1.15 | 3.00 | 1.09 | 3.39 | 1.88 | 2.84 | 1.47 | 3.79* |
| (R=0-2) | 1.15 | .67 | 1.67 | .54 | 1.65 | .49 | 1.61 | .78 | 1.50 | .66 | 4.88** |
| ALL CONV | | | | | | | | | | | |
| (R=0-2) | 1.06 | .35 | 1.45 | .37 | 1.48 | .32 | 1.46 | .42 | 1.35 | .40 | 9.05**** |

*p <.05 **p <.01 ****p <.0001

[Note: First row ranges for each convention indicate uncollapsed variables per coding in table above. Second row ranges indicate accurate (2) to don't know (0) coding per table above. Oneway ANOVAs Student-Newman-Keuls test significant at .05 level.]

Table 32

Number and Percent of Respondents Who Explained Definition of "Pipe Dream" by Grade

| | <u>2nd</u> | <u>4th</u> | <u>6th</u> | <u>Adult</u> | <u>Total</u> |
|---------------------|------------|------------|------------|--------------|--------------|
| DIDN'T KNOW: | 13 (39%) | 9 (27%) | 4 (17%) | 3 (13%) | 29 (26%) |
| INACCURATE: | 18 (55%) | 15 (46%) | 9 (39%) | 2 (9%) | 44 (39%) |
| 1. About pipes | 13 | 10 | 3 | | 26 |
| 2. Not a dream | 2 | 1 | 1 | 1 | 5 |
| 3. Wierd dream | 3 | 4 | 5 | 1 | 13 |
| ACCURATE: | 2 (6%) | 9 (27%) | 10 (44%) | 18 (78%) | 39 (35%) |
| 4. I's definition | 2 | 4 | 7 | 16 | 29 |
| 5. Possible dream | | 3 | 2 | 2 | 7 |
| 6. Metaphoric | | 2 | 1 | | 3 |

Table 33

Number of Respondents Who Inferred Concepts to Main Idea, What René Learned, and René's Explicit Thematic Dialogue by Grade

| <u>Concept</u> | <u>2nd</u> | | | <u>4th</u> | | | <u>6th</u> | | | <u>Adult</u> | | | <u>Total</u> |
|----------------------|------------|-----------|-----------|------------|-----------|-----------|------------|-----------|-----------|--------------|-----------|-----------|--------------|
| | <u>MI</u> | <u>RL</u> | <u>RM</u> | <u>MI</u> | <u>RL</u> | <u>RM</u> | <u>MI</u> | <u>RL</u> | <u>RM</u> | <u>MI</u> | <u>RL</u> | <u>RM</u> | |
| INCIDENTAL: | | | | | | | | | | | | | |
| 1. Title | 3 | 1 | 11 | 1 | | 2 | 2 | | 2 | | | | 22 |
| 2. Unrelated | 6 | 1 | 4 | | | 1 | | | | | 1 | | <u>13</u> |
| | | | | | | | | | | | | | 35 |
| PLAY CONTENT: | | | | | | | | | | | | | |
| 3. R's Life | 5 | 2 | | 10 | 1 | | 1 | 2 | | | | | 21 |
| 4. R's Art | 1 | 11 | 2 | 7 | 3 | | 4 | 3 | 2 | | 1 | | 34 |
| 5. R's Goal | 3 | | 1 | 3 | 3 | 3 | 5 | 1 | | | | | 19 |
| 6. R's Feelings | 1 | 4 | 1 | 2 | 2 | | 2 | 1 | 1 | | 3 | | 17 |
| 7. Other Ideas | 1 | | | 1 | | 1 | | 2 | | 6 | 4 | | <u>15</u> |
| | | | | | | | | | | | | | 106 |
| THEME: | | | | | | | | | | | | | |
| 8. R's Dialogue | | 2 | 3* | 1 | 2 | 8* | 1 | 3 | 5* | 5 | 3 | | 33 |
| 9. Follow Dreams | | | 1 | 2 | 2 | 8 | 4 | 6 | 6 | 9 | 5 | 14 | 57 |
| 10. Do Anything | 4 | 2 | 3 | 4 | 12 | 3 | 2 | 5 | 4 | 1 | 2 | 6 | <u>48</u> |
| | | | | | | | | | | | | | 138 |
| | 24 | 23 | 26 | 31 | 25 | 26 | 21 | 23 | 20 | 21 | 19 | 20 | |
| Didn't Know | 9 | 10 | 7 | 2 | 8 | 7 | 2 | | 3 | 2 | 4 | 3 | 57 |
| N = | (33) | | | (33) | | | (23) | | | (23) | | | 112 |

MI = Main Idea

RL = What René Learned

RM = What René Meant by explicit thematic dialogue

(*Note: Repeated givens in question.)

Table 34

Number of Respondents Who Used Cues for Main Idea and What René Learned by Grade.

| <u>Bases</u> | <u>2nd</u> | | <u>4th</u> | | <u>6th</u> | | <u>Adult</u> | | <u>Total</u> |
|-----------------------|------------|-----------|------------|-----------|------------|-----------|--------------|-----------|--------------|
| | <u>MI</u> | <u>RL</u> | <u>MI</u> | <u>RL</u> | <u>MI</u> | <u>RL</u> | <u>MI</u> | <u>RL</u> | |
| <u>Aural/Verbal</u> | | | | | | | | | |
| R said | 4 | 7 | 3 | 8 | 7 | 7 | 3 | 6 | 45 |
| Others said | 4 | 4 | 1 | 6 | 4 | 2 | | 2 | 23 |
| "They told" | <u>3</u> | <u>5</u> | <u>7</u> | <u>2</u> | <u>4</u> | <u>3</u> | <u>3</u> | <u>1</u> | <u>28</u> |
| Sub-Tot | 11 | 16 | 11 | 16 | 15 | 12 | 6 | 9 | 96 |
| <u>Visual</u> | | | | | | | | | |
| R Actions | | 8 | 4 | 8 | 6 | 9 | 1 | 5 | 41 |
| Others' Acts | 1 | 3 | 2 | 5 | 4 | | 1 | | 16 |
| "They showed" | | | 4 | 1 | 3 | 2 | 2 | | 12 |
| Appearances | | | | | | | <u>1</u> | <u>1</u> | <u>1</u> |
| Sub-Tot | <u>1</u> | <u>11</u> | <u>10</u> | <u>14</u> | <u>13</u> | <u>11</u> | 5 | 5 | 70 |
| <u>Psychological</u> | | | | | | | | | |
| R thoughts | 2 | 5 | 5 | 10 | 3 | 4 | 3 | 4 | 36 |
| Others th | <u>4</u> | <u>5</u> | <u>5</u> | <u>5</u> | <u>1</u> | <u>4</u> | <u>3</u> | <u>4</u> | <u>19</u> |
| Sub-Tot | 6 | 5 | 10 | 15 | 4 | 8 | 3 | 4 | 55 |
| <u>Th Context</u> | 4 | | 6 | 1 | 5 | 1 | 4 | | 21 |
| <u>Social Realism</u> | | | | | | | | | |
| Possible | | | | | 1 | | | | |
| Impossible | 1 | | 1 | | | | | | 3 |
| Sub-Tot | | | | | | | | | |
| <u>Training</u> | | | 3 | | | | | | 3 |
| <u>G Knowledge</u> | | | | | | 2 | | | 2 |
| <u>Grand Total</u> | 23 | 32 | 41 | 46 | 38 | 34 | 18 | 18 | 250 |
| | (55) | | (87) | | (72) | | (36) | | |
| Didn't Know | 13 | 11 | 5 | 8 | 4 | 1 | 7 | 9 | 58 |

MI=Main Idea
RL=What René Learned

Total MI bases = 120
Total RL bases = 130

Table 35

Means of Cues Used to Infer Main Idea by Grade

| | <u>2nd</u> | | <u>4th</u> | | <u>6th</u> | | <u>Adult</u> | | <u>Total</u> | | <u>F(3,108)</u> |
|-----------------------|------------|-----------|------------|-----------|------------|-----------|--------------|-----------|--------------|-----------|-----------------|
| | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | |
| INSIDE CUES | .06 | .08 | .10 | .09 | .16 | .18 | .07 | .07 | .09 | .11 | 4.15** |
| <u>Verbal</u> | .11 | .18 | .11 | .16 | .22 | .28 | .09 | .15 | .13 | .20 | 2.15* |
| R said | .12 | .33 | .09 | .29 | .30 | .47 | .13 | .34 | .15 | .36 | |
| Others said | .12 | .33 | .03 | .17 | .17 | .39 | | | .08 | .27 | |
| "They told" | .09 | .29 | .21 | .42 | .17 | .39 | .13 | .34 | .15 | .36 | |
| <u>Psych Infer</u> | .09 | .20 | .15 | .23 | .09 | .19 | .07 | .17 | .10 | .20 | |
| R thoughts | .06 | .24 | .15 | .36 | .13 | .34 | .13 | .34 | .12 | .32 | |
| Others th | .12 | .33 | .15 | .36 | .04 | .21 | | | .09 | .29 | |
| <u>Visual</u> | .01 | .04 | .08 | .13 | .14 | .22 | .05 | .13 | .07 | .15 | 4.28** |
| R Actions | | | .12 | .33 | .26 | .45 | .04 | .21 | .10 | .30 | 4.10** |
| Others' Acts | .03 | .17 | .06 | .24 | .17 | .39 | .04 | .21 | .07 | .26 | |
| "They showed | | | .12 | .33 | .13 | .34 | .09 | .29 | .08 | .27 | |
| Appearances | | | | | | | .04 | .21 | .01 | .09 | |
| OUTSIDE CUES | .04 | .08 | .10 | .09 | .16 | .18 | .07 | .07 | .09 | .11 | |
| <u>Th Context</u> | .12 | .33 | .18 | .39 | .22 | .42 | .17 | .39 | .17 | .38 | |
| <u>Social Realism</u> | .02 | .09 | .02 | .09 | .02 | .10 | | | .01 | .08 | |
| Possible | | | | | .04 | .21 | | | .01 | .09 | |
| Impossible | .03 | .17 | .03 | .17 | | | | | .02 | .13 | |
| <u>Training</u> | | | .09 | .29 | | | | | .03 | .16 | 2.54* |

*p < .05 **p < .01

Table 36

Means of Cues Used to Infer What Rene Learned by Grade

| | <u>2nd</u> | | <u>4th</u> | | <u>6th</u> | | <u>Adult</u> | | <u>Total</u> | | <u>F(3,108)</u> |
|----------------------|------------|-----------|------------|-----------|------------|-----------|--------------|-----------|--------------|-----------|-----------------|
| | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | |
| INSIDE CUES | .12 | .11 | .17 | .14 | .17 | .09 | .10 | .10 | .14 | .12 | |
| <u>Verbal</u> | .16 | .24 | .16 | .21 | .17 | .20 | .13 | .17 | .16 | .21 | |
| R said | .21 | .42 | .24 | .44 | .30 | .47 | .26 | .45 | .25 | .44 | |
| Others said | .12 | .33 | .18 | .39 | .09 | .29 | .09 | .29 | .13 | .33 | |
| "They told" | .15 | .36 | .06 | .24 | .13 | .34 | .04 | .21 | .10 | .30 | |
| <u>Psych Infer</u> | .08 | .18 | .23 | .33 | .17 | .24 | .09 | .19 | .14 | .26 | |
| R thoughts | .15 | .36 | .30 | .47 | .17 | .39 | .17 | .39 | .21 | .41 | |
| Others th | | | .15 | .36 | .17 | .39 | | | .08 | .27 | 3.48* |
| <u>Visual</u> | .11 | .18 | .14 | .19 | .16 | .17 | .07 | .14 | .12 | .17 | |
| R Actions | .24 | .44 | .24 | .44 | .39 | .50 | .22 | .42 | .27 | .45 | |
| Others' Acts | .09 | .29 | .15 | .36 | | | | | .07 | .26 | |
| "They showed" | | | .03 | .17 | .09 | .29 | | | .03 | .16 | |
| OUTSIDE CUES | | | .02 | .09 | .07 | .17 | | | .02 | .09 | 2.80* |
| <u>Gen Knowledge</u> | | | | | .09 | .29 | | | .02 | .13 | 2.73* |
| <u>Th Context</u> | | | .03 | .17 | .04 | .21 | | | .02 | .13 | |

*p < .05

Table 37

Means of Combined (MI + RL) Cues Used to Infer Theme by Grade

| | <u>2nd</u> | | <u>4th</u> | | <u>6th</u> | | <u>Adult</u> | | <u>Total</u> | | <u>F(3,108)</u> |
|-----------------------------|------------|-----------|------------|-----------|------------|-----------|--------------|-----------|--------------|-----------|-----------------|
| | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | <u>M</u> | <u>SD</u> | |
| INSIDE CUES | .09 | .17 | .14 | .09 | .16 | .12 | .08 | .06 | .12 | .09 | 4.75** |
| <u>Verbal</u> | .14 | .17 | .14 | .15 | .20 | .20 | .11 | .12 | .14 | .16 | |
| R said | .17 | .30 | .17 | .27 | .30 | .33 | .20 | .33 | .20 | .30 | |
| Others said | .12 | .25 | .11 | .21 | .13 | .23 | .04 | .14 | .10 | .21 | |
| "They told" | .12 | .25 | .14 | .23 | .15 | .24 | .09 | .19 | .13 | .23 | |
| <u>Psych Infer</u> | .08 | .14 | .19 | .22 | .13 | .17 | .08 | .14 | .12 | .17 | 2.87* |
| R thoughts | .11 | .24 | .23 | .33 | .15 | .32 | .15 | .28 | .16 | .29 | |
| Others th | .06 | .17 | .15 | .23 | .11 | .21 | | | .09 | .19 | 3.45* |
| <u>Visual</u> | .05 | .08 | .10 | .12 | .15 | .18 | .06 | .10 | .09 | .12 | 3.59* |
| R Actions | .12 | .22 | .18 | .27 | .33 | .36 | .13 | .27 | .18 | .29 | 2.85* |
| Others' Acts | .06 | .17 | .11 | .21 | .09 | .19 | .02 | .10 | .07 | .18 | |
| "They showed Appearances | | | .08 | .22 | .11 | .26 | .04 | .14 | .05 | .18 | |
| | | | | | | | .04 | .21 | .01 | .09 | |
| OUTSIDE CUES | .03 | .06 | .06 | .08 | .07 | .10 | .03 | .07 | .04 | .08 | |
| <u>Th Context</u> | .06 | .17 | .11 | .28 | .13 | .32 | .09 | .20 | .10 | .26 | |
| <u>Training</u> | | | .09 | .29 | | | | | .03 | .16 | 2.54* |
| <u>Gen Knowledge</u> | | | | | .09 | .29 | | | .02 | .13 | 2.73* |
| <u>Social Realism</u> | .02 | .09 | .02 | .09 | .02 | .10 | | | .01 | .08 | |
| Possible | | | | | .04 | .21 | | | .01 | .09 | |
| Impossible | .03 | .17 | .03 | .17 | | | | | .02 | .13 | |

*p < .05

Table 38

Correlation Matrices of Modal BasesBases Used to Know Make-Believe

| | A1 | A2 | A3 | A4 | P1 |
|----|-------|------|------|-------|-------|
| V1 | .62** | | | | .30** |
| V2 | | .26* | | .32* | |
| V3 | | | .29* | | |
| A1 | | | | | .49** |
| A2 | | | | .38** | |

Bases Used to Know Actually Real

| | V2 | V3 | V4 | A1 | A2 | P1 | T | PE |
|-----|-------|------|-------|-------|-------|------|------|-------|
| V3 | .27* | | | | | | | |
| A1 | .49** | .27* | | | .40** | | | |
| A4 | | | .30** | | | | | |
| P1 | | | | .34** | .56** | | | |
| P2 | | | | .40** | .32** | .27* | .23* | |
| SR2 | | | | | | | | .40** |

Bases Used to Know Realistic

| | V1 | V2 | A2 | P1 | PE |
|----|------|-------|-------|------|-------|
| A1 | | .26* | .49** | | .30** |
| A2 | | .38** | | | .28* |
| P2 | .23* | .29* | .27* | .23* | |

Bases Used to Know Facts

| | A2 | P2 | PE |
|-----|-------|------|------|
| V1 | .28* | | |
| V2 | .31** | .24* | |
| A1 | .25* | .22* | |
| SR1 | | | .24* |

Bases Used to Know Main Idea

| | V1 | A2 | P1 |
|----|------|------|------|
| V2 | .26* | | .22* |
| V3 | .23* | | |
| A1 | .28* | .24* | |

Used to Know What Rene Learned

| | V3 |
|----|-------|
| A3 | .32** |

*p<.01 **p<.001

Key

Visual 1 = René's Actions
 Visual 2 = Others' Actions
 Visual 3 = "They showed"
 (& SM made sounds)
 Visual 4 = Saw appearances
 Aural 1 = René said
 (e.g., wanted to be artist)
 Aural 2 = Others' said
 T = Training

Psych 1 = René's thoughts
 Psych 2 = Others' thoughts
 SR1 = Social Realism (possible)
 SR2 = Social Realism (impossible)
 PE = Personal Experience
 Aural 3 = "They said"
 (e.g., Interlocutor told)
 Aural 4 = Heard Sounds

Table 39

Percent of Respondents Who Used Cues to Judge Reality

| <u>Bases</u> | <u>MB</u> | <u>R</u> | <u>AR</u> | <u>F</u> | <u>Total</u> |
|----------------|-----------|----------|-----------|----------|--------------|
| Visual | 40 | 44 | 22 | 21 | 33 |
| Aural/Verbal | 16 | 16 | 20 | 36 | 21 |
| Social Realism | 23 | 13 | 10 | 6 | 14 |
| Th Context | 8 | 7 | 13 | 11 | 9 |
| Gen Knowledge | 6 | 6 | 15 | 6 | 8 |
| Psychological | 1 | 6 | 8 | 7 | 6 |
| Per Experience | 5 | 8 | 7 | 2 | 5 |
| Training | 1 | 0 | 5 | 11 | 4 |

Table 40

Percent of Respondents Who Used Modal Bases for Theme by Grade

| <u>Bases</u> | <u>2nd</u> | <u>4th</u> | <u>6th</u> | <u>Adult</u> | <u>Total</u> |
|--------------------|------------|------------|------------|--------------|--------------|
| <u>Verbal</u> | 49 | 31 | 38 | 42 | 39 |
| <u>Visual</u> | 22 | 28 | 33 | 28 | 28 |
| <u>Psych</u> | 20 | 29 | 17 | 19 | 22 |
| <u>T Context</u> | 7 | 8 | 8 | 11 | 9 |
| <u>Soc Realism</u> | 2 | 1 | 1 | | 1 |
| <u>Training</u> | | 3 | | | 1 |
| <u>Knowledge</u> | | | 3 | | <1 |

Table 41

Percent of Combined Modal Bases Used for all Questions by Grade

| <u>Bases</u> | <u>2nd</u> | <u>4th</u> | <u>6th</u> | <u>Adult</u> | <u>Total</u> |
|---------------------|------------|------------|------------|--------------|--------------|
| Visual | 41 | 33 | 29 | 20 | 32 |
| Verbal/Aural | 32 | 23 | 27 | 28 | 27 |
| Psychological | 10 | 14 | 10 | 5 | 10 |
| Social Realism | 8 | 10 | 15 | 6 | 10 |
| Theatre Context | 4 | 8 | 7 | 20 | 10 |
| General Knowledge | 2 | 5 | 7 | 9 | 5 |
| Personal Experience | 3 | 3 | 2 | 8 | 3 |
| Training | N/A | 4 | 3 | 4 | 3 |

Behavioral Responses of Young Audiences

The squeaky loge seats in this particular auditorium offer an aural barometer of audiences' physical responses during performances. The principal investigator observed and listened to these behaviors during five school matinees with roughly 600 audience members and one public performance with mostly adults (about 250) as an additional response measure to this study (cf., Chorpensing, 1954; Rosenberg & Prendergast, 1983, 333-337). While actors' performances varied slightly from day to day, audience behaviors may be summarized as follows:

Children giggled or laughed at many metatheatrical, physical antics (e.g., Scene 1 with heads popping from the windows), sound effects, and verbal word plays (e.g., "Don't try this at home," bowler hats called "underwear," "Spell it" (meaning I-T). They verbalized their disgust when the Interlocutor pretended to bite into a stone accompanied by the apple sound effect. They screamed loudly when the lights flashed in the classroom scene, and laughed loudest during the chase in Scene 16.

Child audiences grew restless whenever characters delivered long, "philosophical" speeches (e.g., Teacher's lessons), especially the Interlocutor's and René's explanatory speeches (e.g., about the boulder and pipe dreams) or those without musical underscoring. They also shifted in their seats when Mother put René to bed, and during "mysterious" scenes which seemed to elicit discussion. Scenes underscored by music seemed to quiet child audiences considerably (though this was not the

case with Saturday's adult audiences who remained quiet throughout this performance). Children quieted considerably during the following dramatic moments: when Mother placed a paintbrush in René's backpack while he slept; when Father told René that Mother was "lost"; during René's nightmare scene and Mother's ghostly appearance from the crypt; when René gave Father his broken toy and when Father gave René his smoking pipe; and, when Mother stood behind René at the easel near the play's end. Audiences also quieted during juggling and magic tricks, and this actor received applause at one school performance for his fire-eating during the fair scene.

During René's scene with Georgette when he was reluctant to kiss her, audiences giggled restlessly, and one child from this study was heard to say, "Go for it!" Children expressed their opinions most verbally by talking about René's nightmare when he found an egg in a birdcage, and about the "water" during the river scene with its special "cool" film and lighting effects. They indicated their awe for these special effects, and many turned around in their seats to see the source of these effects. During the river scene as the ensemble moved to the music, one 6th grader asked his friend, "Do you understand?" who answered, "No, do you?" "No," he replied back, "It's a pipe dream;" just before René placed a stone in the canvas painting on the easel.

Audiences were unsure of the play's ending even with a fade to blackout, and applause did not begin until the actors lined up for their curtain call bows.

TEACHERS' EVALUATIONS OF
THIS IS NOT A PIPE DREAM
 KU-TYP Fall 1990
 4th through 6th grade

There were 35 total respondents (out of 120 attending teachers):
 34 Lawrence USD 497 & St. Johns teachers (33% return rate)
 1 County teacher (5% return rate)

In the table below, the numbers indicate the number of teachers who ranked the question with the scale number at the top. 1=low; 7=high

| | <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> | <u>7</u> |
|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|
| 1. Understanding play | 2 | 8 | 1 | 5 | 12 | 7 | 0 |
| 4. Attention levels | 0 | 3 | 6 | 4 | 7 | 13 | 2 |
| 8. Meaningful experience | 5 | 7 | 1 | 6 | 8 | 4 | 3 |
| 9. Rank w/other KU-TYP (N/A - 6) | 5 | 2 | 2 | 4 | 6 | 7 | 1 |
| 10. Teacher preparation | 3 | 0 | 5 | 5 | 6 | 7 | 9 |

[Note: Below, totals are calculated by multiplying the number of respondents () in each rank by the rank number.]

ANALYSIS

1. To what extent did the children in your class appear to understand what was happening in the play? N = 35

Mean: 4
 Median: 5
 Mode: 5
 Totals: 1-3 = 21 (11); 4 = 20 (5); 5-7 = 102 (19)

Subjectively: Over half of the teachers perceived that children understood this play well in the upper rankings; yet a mean of 4 also indicates a great deal of ambivalence and disagreement across a range of high and low perceptions.

2. What main ideas did children understand best?

Metaphoric connections to children's lives (explicit in dialogue)

- (rated 5) That you should follow your dreams even if no one else believes in them or you!
- (rated 6) Honor your dreams. What seems impossible may not be.
- (rated 5) The idea of some things being real--others seem real. "Truth" found in your "heart."
- (rated 6) Pipe dreams can come true.
- (rated 6) There are no pipe dreams.
- (rated 6) The struggle to do what you want to in life.
- (rated 5) Committing to a dream; wanting to be an artist.
- (rated 6) Committing to dreams; reality vs. illusion.
- (rated 5) It's OK to have pipe dreams; sometimes pipe dreams become reality.
- (rated 4) Follow dreams.
- (rated 5) Love for mother; frustration of wanting to do something and being denied by parent.
- (rated 5) Parental loss; doing the impossible; everything is possible.
- (rated 2) Keep trying (not sure).
- (rated 5) Correlation between the events in Magritte's life and the paintings that were influenced by these events. Influence of Magritte's mother and her "message" of not giving up on your dreams.

Dreamed of becoming artist (protagonist's explicit superobjective)

- (rated 6) René wanted to be an artist when he grew up but his father was very negative about it for a long time; and his art ideas came from his life experiences.
- (rated 5) Father didn't want him to be an artist; about an artist growing up.
- (rated 5) His childhood dream to be an artist.
- (rated 5) René pursued his dreams and succeeded.
- (rated 5) That a boy grew up to become a famous painter and that he used his imagination.
- (rated 3) The main character wanted to be an artist; hats can be underwear.
- (rated 2) That the boy (René) wanted to be an artist.
- (rated 2) The children understood that René and his father did not get along and that René wanted to be an artist.
- (rated 2) The idea that he wanted to be an artist.

Other salient ideas

- (rated 6) That it was biography. Learned about how theater and art are related.
 - (rated 4) The basic facts of René's life.
 - (rated 2) The fact that the father was mean to his son.
 - (rated 4) That his mother was a ghost.
 - (rated 2) René's mother died; the juggler was funny.
 - (rated 2) The mother was dead when veiled; the carnival.
 - (rated 1) The mother and father were ghosts.
 - (rated 5) The juggler.
- No response (4)

3. Which of the following theatre conventions confused children, and for what reasons? (playwright's script, staging, acting, scenery, costumes, props, lights, sound, special effects, etc.)

Playwright's script and/or staging

Script was too vague.

Script--the non-linear format confused them.

Script--they thought it was very unusual.

Script was hard to follow for this age group.

Hard to follow for this age group.

Script--very confusing jumping from one idea to another.

Changing from the narrator to the scenes of the past and back. At times this change was confusing. Also, saying "This is not a hat or pipe." This was too abstract.

The narrator seemed to have a profound effect on most kids. Her constant presence confused some.

The "narration" by woman in black was confusing for some and others said they couldn't tell what she was saying. (I found her words were very distinct and clear.)

I'm not sure they understood the part about what is acting and what is real.

The part where the cast departed from the script on René and began performing a different scene about remembering lines. Some of the kids understood. Some were confused. For the most part, I felt they really followed well.

The mistakes purposely written into the script.

Were confused by actor "forgetting" words--weren't sure what was "real"--was a good discussion later though!

They were confused when actors "acted" as if they made a mistake and were quitting.

Actors forgetting lines; lights coming on.

Stopping the play in the middle; heads popping up and down.

Staging confusing when actors got on "wrong page."

Some students didn't understand what happened to René's mother.

The coffin scene was confusing--one child left crying. Very upset with scary stuff. Can cause young kids to have nightmares. Not suitable for kids!

The mother coming on stage after dying.

Why the mother kept reappearing and wandering around; why people kept popping up out of the box; why the play "stopped" for a while because the father/mother/narrator were discussing what was supposed to be going on.

(noted script w/no elaboration-6)

All of above.

Acting

The dancing; sometimes the switching of actors from their parts to the actor himself/herself.

Scenery/Lighting (circled-1)

I think the multi-media presentation confused some kids. (not all!)
 Changed locations.
 Slides were confusing and distracting.

Costumes/Props (circled-1)

Ghost or not?

Fire eating? Some kids thought it was great that they weren't "supposed" to try this act at home--but I wonder if they will.

No specific aspect mentioned

It was pretty abstract for elementary students to understand.

No response (9)

Director's Response:

Considering that the majority of children abstracted several metaphoric connections about dreams to their own lives, it is bewildering why many teachers didn't rate children's understanding higher. Likewise, even though most children clearly understood that René wanted to become an artist (explicitly stated in the play), many teachers still rated their comprehension very low.

Despite the non-linearity of this script, children were quite capable of grasping these so-called "vague and abstract" notions. The Interlocutor (narrator) herself explicitly stated the script's main ideas about René's struggles to become an artist. While teacher's note that the script's "break" from René's story was confusing, it appears that children did grasp the fact that this "wasn't supposed to happen." In other words, they clearly understood when we were in the fictive world of René's story and when we were in the real world of stage action. It is quite understandable that children might be confused about René's Mother's death and her "spiritual" presence on stage. Though she wore a veil over her head to signify her death, René's Father stated only that she was "lost at the river." (One child (out of the 2,567 who attended) was so frightened by René's nightmare of his deceased mother, that he left the theatre.)

It concerns me greatly that teachers are not giving their students more credit for understanding the main ideas of non-linear plays in performance.

4. To what extent did the children in your class seem attentive most of the time? N = 35

Mean: 4.8

Median: 5

Mode: 6

Totals: 1-3 = 24 (9); 4 = 16 (4); 5-7 = 127 (22)

Subjectively: Sixty-three percent of the teachers perceived that children seemed attentive to the play well in the upper rankings.

5. What scenes or segments held their attention?

They were attentive during the entire play.

Scenes with moderate action; more intense scenes emotionally.

Lots of movement (of many characters); when pictures in background corresponded to action of main characters; "water spray" [river] backdrop scene.

First 25-30 minutes--after that, they were antsy. The introduction with the fast action appearing in the windows. The slapstick comedy/juggling held their attention.

The opening act with the heads popping up and down; the carnival.

They liked the sound effects; the beginning part with actors in windows.

Window scenes at beginning; juggler and asst. tricks; "chase" scenes.

Circus/fair scene; graveyard scene; opening sequence with people popping up in the windows; when the "river" was flowing over the sets/scenery.

Water scene; cemetery scene at beginning.

The opening; the juggler and fire-eater; the river scenery.

The humorous scenes--the yelling about the pipe, etc.; the father's scenes that were funny; the juggling and fire-eating. The pictures on video held many of their attentions most of the time.

They remembered the comic aspect; they favored the early scenes.

First scene and the juggler.

Beginning with faces in window; where said, "Don't do this at home," and ate fire; where said, "This is not your hat, it's your underwear."

Beginning where people were going up and down; raining and all talking together, mixture of lights; hat=underwear; guys hitting each other with pipes.

Hat to underwear; opening--people in windows; narrator helped explain the action.

Scene with river running on screen.

Magic; intro; loved the photos shown on the screen.

Magician's tricks.

Magic tricks.

When the magician did his tricks.

Carnival scene; juggling.

At the fair and other tricks.

The carnival scene.

Juggling/funny parts/mother's death and reappearances.

Ghost; opening--heads appearing; paintings shown as background.

They were especially fascinated with special effects--juggling, fire-eating, the beginning scene with all the people in suits, disappearing into the box, sound effects.

The slides; death of the mother; anything that mentioned underwear.

Sound effects and special effects held their attention more than anything.

The visual action kept their attention.

Most.

Action.

Nothing consistently--they didn't understand it.

No response (2)

6. What scenes or segments lost their attention entirely?

Talking without actions reinforcing it (i.e., describing author's life as monologue).

All but the final scene.

Scenes with little action.

When dialogue more than action.

No action.

Where there was a lot of talk about the characters' feelings.

Chaotic scenes of dancing; long dialogues/monologues.

The narration.

When actors were out of character; what was all that talk about script--
"page 22"?

Father becoming actor trying to be spontaneous. Also, many were distracted by "narrator" being in constant movement and pictures changing and main actions all happening simultaneously during much of the performance.

They were bored by the lack of set change.

The narrator's movements.

Some students thought the movement of the Interlocutor was distracting; others liked it.

Lady w/microphone (narrator?)--they thought she was completely inappropriate crawling around on the floor.

The school scene and the scene with the father explaining "This is not a pipe."

The dream--at the fair.

Narration, graveyard, father and son.

Graveyard scenes; spirit of his mother and the search for her.

Super natural.

None or no response (9)

I don't know. They seemed to be paying attention most of the time.

Not many!

None. The warm-up at the beginning did confuse some as to when the play started.

None (to our surprise).

They got restless at about the midway point.

Much of the rest (not opening, juggling, river)--they didn't understand.

The students did not understand the meaning of the dialogue.

Director's Response:

The most frequently mentioned segments that held attention most include: opening, non-verbal scene w/actors popping heads out of windows; juggler/magician's tricks; river video; slides of Magritte's paintings throughout; cemetery scene, René's nightmare, and frequent appearances of Mother's ghost; humorous dialogue (hat=underwear); and sound effects. Teachers believe generally that any scenes with action will hold attention and that any dialogue will not--almost as if plays should be non-verbal. Interestingly enough, there is some debate among the children over the Interlocutor's use of constant movement as she narrates the play's actions.

While some teachers find constant movement distracting, others believe that lack of movement (e.g., set changes) bores children.

The question arises: why would children pay attention to something they didn't understand? In fact, according to cognitive developmental research, children invest more mental effort in those audio-visual stories which demand greater understanding in order to make sense of the experience. From my perspective in the auditorium each day, children seemed quite attentive to this production--there were less "squeaky loge seats" than during other past productions. They were most quiet and least restless during slide projections, changing lights, and underscored music than during the few times when all spectacle elements stopped and the actors (particularly René) spoke dialogue regarding the main ideas of the play.

7. What comments did you overhear your children say during and/or after the play?

"The mother's dead! She didn't just go away! This is sad!"
They liked it. "Better than last year." "Life is not a pipe dream." "How did the mother die--accident? suicide?"

"Neat, great, awesome." One was touched to tears.

"I was confused." "Good play." "Liked river scene." "Better than last year."

"It was different." "Couldn't tell real from acting."

"That was different." "The pictures were awesome." "The Interlocutor was a 'babe.'"

"Interesting but weird."

"It was strange." "It was weird." "Weird!"

"It was weird!"

"Liked it a lot." "Hard to follow." "Confusing." Half my class enjoyed it a great deal.

"Refund." "Did you understand that?"

"I understood it. I cried when they cried and I laughed when they laughed." "Boring, I fell asleep." "I was scared."

"What was that about anyway? Can you explain that to me?"

"What was that about? I didn't understand it?"

"What was this about?"

"I don't understand."

"Maybe art people would like it." "It didn't make sense."

"Boring, weird." Above their heads.

They didn't really like it or understand it.

They basically enjoyed the play. Understood more than I thought they would.

Commenting on ghost, opening scene, and paintings.

Confusion over [actor "forgetting" words scene]; enjoyed paintings reproduced; generally liked it; "2 thumbs up."

The children were confused about what is real and not real in play!

Most of the comments seemed to be about the narrator. They either thought she was really "cool" or didn't like her presence. Out of all the actors, most comments were about her. It makes you wonder if they have even been to a play with a narrator. One boy in the aisle behind me was frightened when René's Mother rose out of the box! He actually cried and left. None of my class was affected quite in this manner, but this scene held their attention!

Strong likes and dislikes about Magritte's artwork. Headache from scene [end of classroom scene] in which René is confused by conflicting opinions (roving lights).

Enjoyed the slapstick humor (i.e., potatoes, sound effects when blowing nose and digging in ear, the hat being referred to as underwear); sound/music; fire swallower/juggling; really liked the pictures being projected on backdrop.

They felt it was dull except for the magician.

They thought it was "awesome" and "rad."

Laughing about underwear and hat. "We saw that" meaning art teacher had shown them slides.

No response (5)

8. To what extent was the experience meaningful or relevant to children's lives or education? N = 34

Mean: 3.9
 Median: 4
 Mode: 5
 Totals: 1-3 = 22 (13); 4 = 24 (6); 5-7 = 85 (15)

Subjectively: Teachers are exceedingly divided on the meaningfulness of this experience for children.

(rated 6) With background info.
 (rated 5) Tie into art and imagination.
 (rated 2) At 4th grade level!

9. How do you think this production ranks with the others in the TYP series that you have seen? N = 27

Mean: 4
 Median: 5
 Mode: 6
 Totals: 1-3 = 15 (9); 4 = 16 (4); 5-7 = 79 (14)

Subjectively: Again, teachers are somewhat divided on how this production ranks with other TYP plays. The mean average of 4 indicates a great deal of ambivalence toward this production.

(no rating) [Fourth grade] children said they enjoyed Winnie-the-Pooh.
 (no rating) Are these appropriate for intermediate children? High school perhaps?

Director's Response:

Based on children's comments and teachers' ratings, this production appears to have stimulated a great deal of debate about its meaningfulness.

Again, it is quite bewildering and worrisome that teachers would not consider a play about following one's dreams to be relevant and meaningful to children's lives; especially given the fact that so many children grasped these particular main ideas.

10. Please indicate the level at which you prepared the children for seeing the play (using the following as a guide):

| | | |
|---------|---|--|
| 7 | Extensive preparation (including all below) | |
| 6 | Engaged in some related activities | |
| 5 | Discussed background and thematic concepts | |
| 4 | Told or read the story/synopsis | |
| 3 | Told them the title of the play | |
| 2 | Told them we were going to a play | |
| 1 | No preparation | |
| Mean: | 4.9 | N = 35 |
| Median: | 6 | |
| Mode: | 7 | Totals: 1-3 = 18 (8); 4 = 20 (5); 5-7 = 135 (22) |

Subjectively: Sixty-three percent of the teachers prepared their students well in the upper rankings.

Volunteers' comments:

Our art teacher also was involved. She brought in a book of his paintings and talked about his techniques.

The children were extensively prepared by our art teacher. They spent lots of time studying René and his art. It was like a culminating activity to come to the play after this unit.

We had extensive pre-teaching at school.

Art teachers did most of this.

Especially with the art teacher!

Our art teacher worked extensively with the Teacher's Guide. It was informational to me, but I didn't use it in the classroom.

(rated 3) Because the art teacher did extensive preparation through the art program.

(rated 1) Never had one [Teacher's Guide].

(rated 7) I pulled sections out of here and there.

(rated 7) I used assorted parts as they fit into the rest of our preparation.

(rated 3) I didn't have time to use the Teacher's Guide. I will find time to prepare the students for the next production.

(rated 1) We were being interviewed, therefore I didn't go into details.

11. Which sections of the Teacher's Guide were most useful or effective?

Story synopsis.

Synopsis, questions.

Synopsis, discussion questions, visual art ideas.

Synopsis, background/thematic concepts.

Synopsis, visual art ideas.

Page 4--Things to look for; page 2--synopsis.

"Things to look at" section.

Page 3--What Does It Mean.

Hands-on activities.

Background of author. [meaning protagonist Magritte?]

I showed the pictures. The questions to discuss before the play were useful to set purpose.

All.

I found it difficult to use info from Teacher's Guide to prepare the students.

No response (19)

12. Which sections of the Teacher's Guide were least useful or effective?

But What Does It Mean?; Things To Look For; Discuss after Performance.

Those that required the use of prints.

The guide didn't really explain the extent to which René's life was affected by death and graveyards, etc.

None of it prepared me for all the things that were on stage--casket, ghosts.

No response (30)

Director's Response

As in the past, the synopsis and Things To Look For questions in Teacher's Guides seem to be the most useful sections for teachers. Art teachers appeared to have focused on Magritte's painting techniques, while the play created fictive scenes from his life to show how he might have gotten the images for his work. It is not known to what extent this art preparation assisted children in comprehending the main ideas of the play itself.

3. Additional comments in regard to this production:

Enjoyed it immensely--thought provoking.

I enjoyed it myself!

I liked it a lot.

As an adult I really enjoyed this production. It was a little short!

This was a great experience for my students.

It was wonderful. The main character (narrator?) was fabulous. She really set a wonderful tone. We had a 45 minute discussion on the play when we got back to school. Thanks for a marvelous production.

Since one of our goals it to expose children to a variety of theater experiences, this play was an excellent choice and extremely well done.

I was pleasantly surprised. The subject matter seemed rather obscure and I was afraid it would go right over their heads, but they really enjoyed and understood it.

Enjoyed unusual format. Entertained as well as informed. We were pleasantly surprised--feared it would be incomprehensible.

My 5th grade students seemed to respond most to the production.

A little deep for 4th graders, but OK with the art preparation.

Difficult to understand if students not prepared ahead of time. Some teachers did not receive Teacher's Guides and did not know they were available.

I do not think this production was at all applicable to 4th and 5th graders. My students could not distinguish a main idea and they were so confused by all of the abstract, out-of-body experiences.

This play was too abstract for 4th-6th graders.

Too abstract for 4-6 graders.

I felt it was over the children's level. Too abstract and confusing!

I don't feel this type production should be shown below high school level.

It was way over the heads.

I think this was somewhat "over their heads" for 4th graders, but it was well done and exposure to different productions is important.

Content was too far above their heads. They are only 10 years old. It was too scary!

We can't do this [re: caskets, ghosts] in the classroom! Why should it be allowed in a play we attend?

One child cried and had to leave the performance. He has nightmares!

Another child has a deceased parent. The depressing (but necessary) use of death was very hard on them.

I think something more "realist" should have been chosen when a study and 2nd grade was being used. [Note: This production was originally written and produced for grades 1-6.]

Director's Response

Teachers are sharply divided on this production, based on their preconceptions and untrained assumptions of what theatre for young audiences should be like. If children are told they won't understand a play because it is too "abstract" in a teacher's view, then they won't-- they won't trust any ideas they have about a production. If children are told they will understand a play, they will surprise you with their insightful minds. A teacher's context for attending a play is critical to a child's comprehension and appreciation of theatre. The interviews conducted with 2nd, 4th, and 6th grade children will bear out these notions in the final analysis.

14. Additional comments in regard to future KU-TYP productions:

We wish to say thank you for inviting us.

Keep it up.

I find your productions valuable learning experiences and appreciate the material in the Teacher's Guide every year.

I think it's important to continue to expose students to a wide variety of plays.

I think you need to employ an educational consultant to direct you as to what grades would enjoy and comprehend your various productions.

Stick to children's classics! Charlotte's Web was excellent 2 years ago.

Please choose a simple children's story they can watch for enjoyment.

Charlotte's Web was wonderful.

The plays that seem to work best are ones they are familiar with.

Charlotte's Web a few years ago was great.

The students do best with familiar material. Any of the 2-act plays listed [in teachers' survey] look great.

The Pushcart War or Secret Garden [2-act plays over 1 1/2 hours] would be great to see!

Try to choose a play that elementary age children can understand.

Choose play at the level of the children.

The children would enjoy a light-hearted, comical play that they would really understand!

The intermediate children need to see a fun, "kid" play. The last few have been too deep. Fun audience participation plays would spark some interest I feel. [Note: This Is Not A Pipe Dream was originally written for audience participation; but we could not produce this version with audiences of 500-600 children.]

Things should not be shown to kids that aren't appropriate for kids to try, such as fire-eating. Kids will try anything they see. Show productions that 10-11 year olds can understand and relate to. Many of the plays I have attended have been more for adult audiences!

Director's Response

Again, teachers are divided on the appropriateness of various plays for intermediate audiences. Though some teachers perceive that Charlotte's Web is a "simple" play, it contains both realistic and non-realistic (conversations among animals) elements, the death of a mother-figure, "abstract" main ideas, numerous conversations with little action, and many sub-plots. KU-TYP will be unable to produce two-act plays until school districts are able to change lunch and bus schedules to accomodate longer 1 1/2 to 2 hour plays with intermissions.

15. In what other ways may KU-TYP provide your students with drama and theatre experiences?

Don't know--what do you have in mind?

(Note: Follow-up drama workshops with actors are advertised in both the handbills and Teacher's Guide.)

I hope to take advantage of the drama workshop.

We are looking forward to classroom follow-up!! Can the narrator come?!

Last year actors came after Winnie-the-Pooh--the class really enjoyed them.

I think these experiences are very good for them.

Come to our school and do a workshop or presentation to the students.

Come out and do a workshop or in-school presentation.

We would enjoy your actors visiting our school anytime.

Class visits and/or tours.

A brief, simple instruction on the basics of putting on a play would be helpful later on when we do a play with our reading series.

If we would ever attend another play as advanced in concepts as this one, perhaps a video might be good to prepare students. Maybe if my students had some actual visual exposure prior to the play rather than just our discussions, this might have been more enjoyable and understandable for them.

I'll call. [To date, I haven't heard from this teacher or any others about serving as educational consultants.]

Director's Response

Given college students' class and evening rehearsal schedules, it is difficult for actors to visit the schools before classes attend the production. On the average, roughly 15-20 teachers invite us for post-production workshops. Perhaps teachers might benefit from pre-production lecture/discussion/workshops on theatre for young audiences, given the fact that few elementary teachers have pre- or in-service training in theatre.

Biographical Facts Regarding Magritte's Life

Little is known about the biographical facts of Magritte's childhood. According to one biographer (Waldberg 1965, 36),

Magritte is one of the most openly unwilling to evoke his youth and, in a general way, anything belonging to the past. Louis Scutenaire, his lifelong friend and admirer, has noted it rightly: 'He will not be bothered with memories . . . he ruminates over nothing in the past.'

René Magritte (1898-1967), the eldest of three sons, was born and raised in various cities in Belgium. His father, Leopold, a business man and trader, moved the family at least three times during René's childhood. Of that childhood, Magritte has written of three mysterious memories (Waldberg 1965, 42-43): 1) "A memory of a wooden crate standing beside my crib. It gave me the same feeling of mysteriousness that is yet able to come over me, spontaneously, in virtually any connection." (The playwright may have used this reference in creating the wooden box as the play's main set piece.); 2) a later memory of a dirigible balloon which made a forced landing on their house and of the aeronauts who packed it away; and, 3) around the age of 6, memories of playing in a cemetery and discovering a painter:

In my childhood I used to play with a little girl in the old crumbling cemetery of an out-of-the-way provincial town, where I always spent my vacations. We would lift the iron grates and descend to the underground passageways. Climbing back up to the light one day I happened upon a painter from the Capital, who amidst those scattered dead leaves and broken stone columns seemed to me to be up to something magical. (Magritte 1938) (This quote is paraphrased by the playwright in the play in Scene 3.)

Undoubtedly, the most memorable event of Magritte's childhood occurred in 1910 when he was 12-years-old. For unknown

reasons, his mother, Régina, committed suicide by drowning herself in the Sambre River near Chatelet. The youngest son, Paul, had roused the family that night when she was missing from their shared bedroom. They discovered her body in the river with her face hidden inside her nightgown. According to Scutenaire (Waldberg 1965, 41), "There was never any way of knowing whether she had covered over her eyes with it so as not to see the death she had chosen, or whether the swirling water had caused her so to be veiled." (Several biographers believe this image is the influence for The Lovers and other cloth-covered, hidden faces in his paintings.) Magritte recalled feeling a sense of proud self-importance after everyone expressed their pity and sympathy over the loss. After this tragic event, the children were raised by governesses and maids. During their adolescent years, the boys enjoyed Fantomas films at the cinematograph, while their father carried on affairs with "liasons" or mistresses.

In 1913 at the age of 15, Magritte met Georgette Berger on a carrousel-salon at the Charleroi Fair. They were married in 1922 and never had any children. In 1916 at the age of 18, Magritte left home to attend the Academy of Beaux-Arts in Brussels, where he had his first exhibition in 1919.

In a 1938 lecture entitled "Lifeline," Magritte discusses another memorable influence upon his painting: "One night in 1936, I awoke in a room where a cage and the bird sleeping in it had been placed. A magnificent visual aberration caused me to see an egg, instead of the bird, in the cage." (Scene 8?)