
First Grade Children's Comprehension of *Noodle Doodle Box*

by *Jeanne Klein and Marguerite Fitch*

Abstract

This descriptive study is the third and last of a series of investigations of children's dramatic literacy. It continues to explore new testing methods. It supports the critical importance of visualized dramatic actions for young audiences by describing 38 first graders' comprehension. Over half of the children recalled the linear, cause-and-effect, central actions in this "absurdist" plot, particularly when playing with analogous props. Nearly three-quarters recognized friendship as the play's theme, though only 40% spontaneously inferred this same theme.

What do children know about the plays they see, and how do they know they know it? Theories abound regarding children's "dramatic literacy" and "theatrical sensibility" or what aesthetic judgments they can be expected to derive from theatre—all with a limited basis in cognitive developmental knowledge (Davis and Evans 1987, 60–71; Collins 1985; Rosenblatt 1984). To test the expectancies (or hypotheses) outlined in the National AATE Drama/Theatre Curriculum (1987, 61–71), researchers are exploring various empirical and ethnographic methodologies directly in formal interviews with child audiences (Saldaña 1987, 1989; Rosenberg 1990; Levy 1989). Four curricular theatre objectives include the ability to: 1) identify and discuss such Aristotelian dramatic elements as plot, character (actions, motivations, emotions), theme, dialogue, spectacle, and mood; 2) respond to live theatre by sharing perceptions and making inferences; 3) explore relationships between theatre and other arts by comparing similarities and differences; and, 4) recognize, experience, and evaluate the unique characteristics of theatre. While theatre studies focus on each of these objectives to varying degrees, much cognitive developmental research has been conducted already on children's understanding of audio-visual and narrative stories (e.g., van den Broek, et al. 1989; Mandler 1984). Still, the search for age-appropriate interviewing methods and the selection and phrasing of prototypical questions and tasks remain as pressing concerns.

Of all dramatic elements, characters and their dramatic actions are recalled most strongly and frequently over dialogue (including discussions of offstage content), theme, and spectacle in audio-visual stories, particularly when

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given linear plot structures (e.g., Deldime and Pigeon 1989; Klein and Fitch 1989; Gibbons, et al. 1986; Wright, et al. 1984). Using linear story grammars or schemas as a guiding principle, young children tend to describe observed behaviors (i.e., salient movement) and obvious feelings, while causes are attributed to external situational factors rather than to characters' internal dispositions. Though children understand characters' thoughts, desires, and emotions from their early years of dramatic play (Harris 1989, 51–55), characters' intentions and motives are inferred and differentiated to a greater extent later in development (Shantz 1983, 498–504). Likewise, the ability to derive and recall themes from plays occurs later as children increasingly infer and abstract global concepts from dramatic situations (Deldime and Pigeon 1989).

When describing characters' emotions, young children have difficulty attaching verbal labels to depicted emotions (Brody and Harrison 1987), but they are able to recognize emotions more accurately when first given diagrammatic representations (Harrigan 1984). Depending on the task, they also have some difficulty discriminating between such negative emotions as anger and sadness and identifying multiple emotions, especially in ambiguous situations (Meerum Terwogt, et al. 1986; Gnepp, et al. 1987; Donaldson and Westerman 1986).

Given this background, how do first grade children make sense of plays labeled as Theatre of the Absurd (cf., Berghammer 1983)? How do they recall actions from so-called "non-linear" plot structures, understand nonsensical characters, and infer themes from such plays? The following descriptive study explored these questions by replicating two previous theatre studies (Klein 1987; Klein and Fitch 1989) and by testing new visual and behavioral methods with younger, and presumably less verbal, respondents.

METHOD

Theatre Production

Noodle Doodle Box, as staged by the University of Kansas Theatre for Young People (1989), was chosen for its artistic standards and abstract "nonsensical" nature for primary-level audiences.¹ This 55-minute production was performed and designed by undergraduate college students under faculty direction.

A detailed content analysis of this text revealed that the dramatic actions of this plot structure are more concerned with revealing character relationships and extending the play's theme than with linear, sequential causality (Klein and Fitch 1990, 20–29). Dramatic actions often contradict language to signify that truth and reality are relative or "absurd."

On a simple, literal level, this fantasy is a socially realistic story about friendship between two clowns, Pepper and Zacharias. Their behavior toward one another accurately reflects the nature of friendships among 5- to 8-year-old children (Berndt 1983). Through dramatic play, these characters gradually shed their egocentric perspectives by exploring their boxes from different angles, particularly when the Drum Major thwarts expectations about friendship and steals their boxes in his offstage truck.² After discovering a new box (or perspective) behind a wall, Zacharias recognizes his selfish behavior and understands the true value of Pepper's friendship from her emotional viewpoint.³

Subjects

Thirty-eight first grade children from classrooms in three schools within one district were selected from middle-class, urban and rural neighborhoods based upon the willingness of interested principals and teachers. The majority of the children were Caucasian (2-Black; 1-East Indian; 1-Native American). There were 16 girls and 22 boys whose ages ranged from 6:7 to 7:8 with an average age of 7:1. None were seriously learning-disabled or visual- or hearing-impaired.

Procedure

Children were bussed from their respective schools to the auditorium (seating 1,188) for matinee performances on three different days. All classrooms sat in the first two or three rows of the center front orchestra 10' from the downstage edge of the raised orchestra pit (10' wide \times 35' long \times 4' high) where most of the play's action took place.

Fifteen-minute interviews were conducted individually on the day following the school's theatre attendance in separate rooms at the respective schools. Two interviewers and their assistants were trained during pilot tests conducted the day after a dress rehearsal. All interviews were audio tape-recorded.

Response Measures and Interview Materials

Interviews included *free recall* (retelling the story "to someone who didn't see the play yesterday"), *cued recall* (specific, open-ended questions), and *recognition tasks* (forced-choice questions with visual prompts) sequenced in descending order of cognitive difficulty. First, to evaluate the production, children were asked to rate how much first graders in another city would enjoy this production on a three-point scale and to rate their ease or difficulty in understanding this play.

To assist children in free recall as a non-verbal means of assessing audio-visual comprehension, miniaturized, analogous versions of characters and scenic props were available for play manipulation. Zacharias' and Pepper's boxes were constructed and painted identically by the scene designer (3" square and 4" square respectively). A small, 2" diameter drum (Christmas ornament) represented the Drum Major's bass drum. Character "dolls" were created from long-shot, color photographs of each of the three characters (both their fronts and backs) pasted on 1/4" plywood with small cardboard stands at the bottom. Each doll was 6 1/2" high \times 2 1/2" wide, so that

characters could be placed inside each box. Before retelling the story, children were asked to identify each of the three characters by pointing to its "doll" displayed randomly on a table in front of them. Interviewers and their assistants recorded detailed notes of children's physical use of props.

For cued recall and recognition tasks, several 5" \times 7" matte-finish, long-shot, color photographs were used as visual prompts. Children were asked to make broad inferences regarding the "main idea" or theme of the whole play to test their overall dramatic literacy and their integration of key thematic concepts intended by the director.⁴ To help determine the modal sources for inferences, they were asked if they understood their main idea from something they saw, heard, or felt, and what those cues were specifically. As a follow-up recognition task, they were then shown photographs of three key scenes, one at a time, in the same chronological order, as "some other main ideas in the play that other kids thought of." The following sentences were read aloud to them, one at a time, to describe the action of each photograph: 1) "This is when Zacharias and Pepper try to figure out if things look different from behind than from in front" (perspective); 2) "This is when Pepper and Zacharias argue and fight about their boxes because they are mad at each other" (fighting); and, 3) "This is when Zacharias and Pepper stick together by sharing one box together because they're friends" (friendship). Children were asked to point to which photograph they thought was the "biggest" and then the "littlest" main idea of the play, after their "biggest" choice had been removed. They were then asked whether they learned anything from the play, to state what they had learned, and whether they learned this from something they saw, heard, or felt.

Next, children were asked to infer characters' feelings at three moments of high emotional intensity in the play. First, they were asked to identify and label four negative emotions (sad, surprised, mad, and scared—in the same order) from black and white diagrammatic facial expressions copied from masks used in an improvisational theatre game package and pasted on 8" \times 11" poster board. Then, given a long-shot photo prompt of the scene in question with characters' faces blocked out, they were asked to show which feeling the character felt by pointing to one of the four facial expressions and how they knew this emotion. Because emotions are seldom pure and because they can change in a matter of seconds, children were also asked whether the character felt an additional emotion. For each emotion cited, children were asked to rate the intensity of each emotion on a three-point scale using another iconic representation—a strip of poster board depicting values printed in large to small letters (VERY VERY, Pretty, just a little bit).

Finally, children were asked if they would prefer to watch this same production on stage or on television and to give the differential reasons for their choices.

Coding and Data Analysis

After transcribing the audio tapes, descriptive and correlational analysis of the data were based upon children's most frequent responses and compared against the director's intentions and an in-depth content analysis of explicit and implicit audio-visual production features.

Written notes on children's physical use of toys assisted interpretations.

Coding for modal bases and media preferences reflected the same methods employed in the previous two studies (Klein and Fitch 1990, 121-132). Free story recall was coded from verbal bits and use of props for central, secondary, and incidental scenes and use of modal bases. Ten central scenes were identified and defined as those character actions which moved the plot forward directly in a linear fashion, located primarily in the second half of the play. Without these scenes, there would be no story. Eight secondary scenes developed character relationships and triggered central actions to move the plot forward indirectly, located primarily in the first half of the play. Five incidental scenes were gestural actions to assist character development as exposition or curtain call. Sequence scores were computed by the correct chronological order of central scenes only. Three adult raters were trained thoroughly in coding for reliability which ranged from 87% to 100%. One-tailed Pearson correlations were computed on all variables before collapsing them into more general indices.

RESULTS

Children's Evaluations

When asked to rate how much other first graders would enjoy this production, 76% of the 38 children said "a lot" and 24% said "a little bit." The majority (89%) found this unfamiliar play "sort of easy" or "real easy" to understand.

Children's Comprehension and Recall

Free Recall of Plot

All children correctly identified the three characters. When retelling the story, less than half recalled incidental or secondary events between Pepper and Zacharias in the first half of the play. Instead, most jumped immediately to the Drum Major's first entrance—a key marker for the second French scene when the plot takes on a more linear, schematic structure. On the average, children recalled 6 out of 10 central scenes, 2 out of 8 secondary scenes, and 1 out of 5 incidental scenes.

Over half of the children retold the story as follows (see Table 1): the Drum Major marches in playing his drum (55%); he and Pepper hide Zacharias' box in her box (61%); he and Zacharias push Pepper's box offstage (66%); the Drum Major drives away in his truck and steals both boxes (79%); Pepper and Zacharias get a bigger box out of the wall (84%); and they play in it (53%). Almost one-third of the children (32%) inferred the play's main idea in the story's resolution by noting that the two protagonists "shared" the big box. Apparently, losing the two boxes and getting one bigger new box were the most meaningful, central events for the majority of these first grade children.

Of all modal cues used by children in retelling the story, 64% were visual cues, 25% were verbal/aural cues, and 10% were psychological cues. The more children used these cues to retell the story, the more they recalled central scenes in sequential order (visual $r = .61$, $p < .001$; verbal/aural $r = .51$, $p < .001$; psychological $r = .30$, $p < .05$). More boys than girls spontaneously expressed

TABLE 1. Free Story Recall of Scenes.

Scene	Children	
	Freq.	%
(I) P & Z woke up from their boxes	13	34
(I) P's morning rituals	8	21
(I) Z's morning rituals	9	24
(I) P & Z name calling/mixing shoes	5	13
(S) P & Z argue and fight in general	11	29
(S) Z shows P front/back (with handkerchief)	5	13
(S) P & Z turn Z's box around to red/green	15	40
(S) P & Z turn P's box around with no difference	5	13
(S) P & Z play water fountain	8	21
(S) P plays airplane with big and little arm out	13	34
(S) DM enters marching/playing drum	21	55
(S) P & Z argue over who marches first	10	26
(C) Z marches off/plays drum first	17	45
(C) DM & P hide Z's box in P's box	23	61
(C) P marches off/plays drum next	18	47
(C) DM & Z push P's box offstage (to truck)	25	66
(C) DM drives away/steals both boxes	30	79
(C) P & Z confess their actions	15	40
(S) P plays on bottle/Z plays with shoebox	3	8
(C) Z & P get new big box out of wall	32	84
(C) P leaves Z to find new friend	6	16
(C) P & Z play games in new box	20	53
(C) DM returns/P & Z chase him away	16	42
(C) P & Z share big box as friends	12	32
(I) Curtain call	3	8

I = Incidental scene
S = Secondary scene
C = Central scene

their personal opinions and enjoyment of the play ($r = -.33$, $p < .05$) (2%). Characters' dramatic actions (or what they did visually on stage) (66%) were described more than their dialogue (22%) or their thoughts (12%). Use of visual cues was related to verbal/aural cues ($r = .68$, $p < .001$). When children inferred Zacharias' motives, they were more likely to report that both characters shared the big box ($r = .30$, $p < .05$).

One use of verbal/aural information is particularly noteworthy. Over half (53%) of the children inferred specifically that the Drum Major "drove" away with the boxes in his "truck," even though the truck was an implied offstage entity. Children were more likely to infer this critical aural information the more they used all characters' dramatic actions (Pepper's $r = .35$, $p < .05$; Zacharias' $r = .31$, $p < .05$; Drum Major's $r = .32$, $p < .05$) and Zacharias' acting behaviors ($r = .39$, $p < .01$), and the more they quoted Pepper's or the Drum Major's dialogue ($r = .29$, $p < .05$; $r = .33$, $p < .05$ respectively). Likewise, children were more likely to mention the "truck" if they used more visual and verbal/aural cues throughout free recall ($r = .37$, $p < .01$; $r = .36$, $p < .01$ respectively).

Verbal bits of codable information correlated with the use of props and photographed "dolls" ($r = .54$, $p < .001$), suggesting that props aided children's verbal recall of the story. In fact, the more children used props, the more likely they were to recall the central scenes of the play in sequential order ($r = .36$, $p < .01$).

Main Idea Inferences and Recognition

When asked to state the play's main idea, 40% inferred friendship and sharing, particularly if they focused on Zacharias' relationship to Pepper ($r = .32, p < .05$); 21% cited fighting, stealing, lying, and playing tricks on people; 21% described their favorite ideas and actions about the boxes; and, 18% discussed the theatre context or did not know the main idea (e.g., "I don't know that they showed me"). When asked to recognize the "biggest" main idea from three orally described photographs, 74% chose the friendship photo. Those who chose this photo also inferred friendship as a main idea earlier ($r = .31, p < .05$), and they were also more likely to recall freely that Pepper and Zacharias "shared" their big new box as "friends" when retelling the story ($r = .28, p < .05$).

When asked whether they based their main idea inferences on something they saw, heard, or felt, 51% of all bases were visual cues, primarily the protagonists' dramatic actions (35%). Verbal/aural and psychological cues comprised 15% and 23% of total bases respectively, and children expressed personal knowledge and empathy for 11% of all bases.

Sex differences were evident in the modal cues children used to infer the play's themes. Boys tended to base their main idea inferences on Pepper's (female) dramatic actions ($r = -.35, p < .05$); while girls used Pepper's and Zacharias' (male) feelings (both $r = .31, p < .05$), their own emotions ($r = .39, p < .05$), and their identification with and prescriptions for characters (both $r = .31, p < .05$). Girls were more likely than boys to choose the fighting photo as the "biggest" main idea ($r = .30, p < .05$).

What Children Learned from the Play

When asked whether they learned anything from the play, 47% learned something about friendship—girls more likely than boys ($r = .40, p < .05$); while 37% reported learning nothing—perhaps, in part, because they already knew the information. Those who reported learning something tended to choose the fighting photo as the "littlest" main idea ($r = .32, p < .05$). However, there was no relationship between what children learned and their main idea inferences. Again, visual cues (40%), primarily the protagonists' dramatic actions (31%), were used over verbal/aural (24%) and psychological (20%) cues, and children's general knowledge or personal associations (16%).

Recognizing Characters' Emotions

Children were asked to infer two emotions for characters at three moments in the play. When asked how Pepper felt when Zacharias squirted water in her face, 79% thought she felt sad (very = 17; pretty = 11; little = 2), and 66% thought she felt mad (very = 15; pretty = 8; little = 2). Few children chose surprised (pretty = 3; little = 1) or scared (very = 1; pretty = 1). In contrast, the actress reported feeling extremely surprised, and then very mad at this moment. Here, children relied on psychological cues (32% of total bases), visual cues (31%), verbal/aural cues (23%), and empathy or general knowledge (14%). Regardless of which emotion children chose, 5 children used Pepper's facial expression to decide how she felt ($r = .32, p < .05$).

When asked how Zacharias felt when he found out

his box was missing, 66% said he felt mad (very = 16; pretty = 6; little = 3), 47% chose sad (very = 12; pretty = 5; little = 1), 37% cited surprise (very = 7; pretty = 4; little = 3), and only 5% thought he felt scared (pretty = 1; little = 1). Again, in contrast, the actor reported feeling very surprised and then very scared at this moment. Psychological cues comprised 40% of total bases, primarily Zacharias' opinions about his box, visual cues 32% (including 5 mentions of his facial expression), verbal/aural cues 22%, and personal information 6%.

When asked how Zacharias felt when Pepper left him with the biggest box near the end of the play, the majority (97%) found him extremely sad, and few chose alternative emotions. Likewise, the actor reported feeling very sad (and "lonely") and pretty scared at the time. Here, psychological cues were relied on for 64% of all bases, primarily by inferring his internal state of loneliness and the loss of his relationship with Pepper. Visual (20%) and verbal/aural (15%) cues were used to a lesser extent.

Children's Preferential Reasons for Theatre

Finally, given a chance to see *Noodle Doodle Box* again, 71% said they would prefer to watch it in a theatre, 16% preferred television, and 13% liked both media. Visual features were the primary reasons for preferring theatre ($r = .36, p < .05$), with 8 children (21%) recognizing theatre's "real people" and live values. Eight children, primarily girls ($r = .49, p < .001$), preferred theatre's emotional qualities. Those who preferred theatre also reported that first graders in another city would enjoy this play "a lot" ($r = .40, p < .01$), inferred friendship as the play's main idea ($r = .37, p < .01$), and tended to express more personal opinions, feelings, and empathy throughout the interview ($r = .28, p < .05$). Most children had difficulty recognizing or verbalizing the different conventions between theatre and television, though their concrete, differential reasons were consistent with their media preferences.

Children's Cognitive Processing and Comprehension

Children's cognitive processing, or their use of modal cues, related to their general comprehension of the play as measured by their main idea inferences, reports of what they learned, and free recall of central scenes in sequence.

As found in the two previous studies (Klein 1987; Klein and Fitch 1989), the more children used visual cues (primarily characters' dramatic actions) in making inferences and in free recall, the more they also tended to use verbal/aural cues ($r = .60, p < .001$). Unlike these past studies, use of verbal/aural cues did not relate to use of psychological cues. However, those who processed more deeply by making more psychological inferences throughout the interview rated their understanding of this play as "easy" ($r = -.32, p < .05$). When combining all modal bases used in free recall and all inference questions, children relied on what characters did (dramatic actions) 42% of all bases and what characters said (dialogue) 11%.

Those who were more verbal in free recall and those who used props more often tended to have higher general

comprehension levels ($r = .58, p < .001$; $r = .37, p < .01$). Likewise, children who used more props exhibited increased cognitive processing ($r = .54, p < .001$) by integrating more visual, verbal/aural, and psychological cues (respectively $r = .53, p < .001$; $r = .57, p < .001$; $r = .28, p < .05$). Deeper cognitive processing was related to free recall of central scenes in sequence ($r = .65, p < .001$). Overall, there was a strong relationship between general comprehension and use of all available modal cues ($r = .66, p < .001$).

DISCUSSION

Comparing interview responses to theatre objectives in the National Curriculum, first graders' perceptions of this theatrical event met some of the expectancies for this age group. Despite the episodic, "absurdist" nature of this plot, children found the cause-and-effect schematic story structure by recalling most of the central actions located in the second half of the performance text. Thus, while children are expected to retell the beginning, middle, and end of plays, most seem to ignore the non-linear, temporal positions of actions in recall.

Young children rely on dramatic actions, or what characters do visually on stage, more frequently than on characters' dialogue or their internal thoughts. Actions support verbal information and lead to better integration and sequencing of plot structures. For example, the characters' actions and gestures toward offstage appear to have facilitated children's use of the word "truck," which in turn may have increased their recall about the Drum Major's implicit truck. These results confirm the visual superiority of action as the foundation of theatre, as found in television studies (Gibbons, et al. 1986).

Contrary to some curricular expectancies, young children tend not to describe spontaneously how characters behave physically or verbally, what they want (motives), how they relate, think, feel, appear, or speak, unless prompted for this information. For example, a few children inferred characters' motives spontaneously, though they were not asked to give reasons for characters' choices. This finding lends support to Scheibe, et al. (1989) who find that 4-year-olds are capable of inferring motives, depending on the task, and that the ability to draw inferences about motives and moral lessons in stories increases with age.

Children's ability to recognize central ideas in plays appears to be dependent upon the task: restricted response options and visual prompts provide a closer audio-visual, modality match between stimulus and recall (cf., White and Pollack 1985). Without such prompts and restrictions, first, third (Klein and Fitch 1989), and fifth graders (Klein 1987) tend to rely on visual cues, primarily dramatic actions, to infer central ideas in plays (see Table 2). These findings support the notion that "Plays teach because an idea is embodied in an action" (Davis and Evans 1987, 114).

Given the sex differences for inferring main ideas, the play may have reinforced sex-typed, prosocial ideas regarding friendship. This finding lends support to Levy's observations (1987, 48) based on Gilligan's work (1982) that girls may view moral dilemmas in plays as caring, subjective "actors," while boys perceive actions as objective "lawyers" seeking justice. More than changing social and moral attitudes about human behavior, plays

TABLE 2. Percentages of Total Modal Bases Used for Main Idea Inferences Across Three Studies.

Modal Bases	1st grade ^a	3rd grade ^b	5th grade ^c
Visual Cues (characters' actions)	51 (39)	43 (33)	47 (44)
Verbal/Aural Cues (characters' dialogue)	15 (4)	13 (9)	16 (16)
Psychological Cues (characters' motives)	23 (3)	29 (9)	31 (6)
Characters' General Knowledge	11	13	6
[Didn't Know Main Idea	11	20	22]

^a*Noodle Doodle Box*

^b*Monkey, Monkey* (Klein and Fitch 1989)

^c*Don Quixote of La Mancha* (Klein 1987)

may simply reinforce stereotypes already learned. Whether or not plays alter children's subsequent behavior socially remains speculative and difficult to prove on the basis of a one-hour play.

Nearly all children correctly recognized a particular character's negative emotion at one of three specific moments in the play. However, children's emotion labels varied somewhat from the actors' reports of their feelings for the other two moments, suggesting the difficulty of recalling and labeling dynamic emotions for children and adults alike.

Contrary to curricular implications, cognitive research has shown that children's recognition of characters' emotions and their empathy with characters' feelings are not synonymous, though theatre producers sometimes assume that such a transfer of learning takes place, given children's dramatic play. To clarify this theoretical debate, future research might apply Strayer's (1989) cognitive-affective continuum for empathy, which measures these quantitative and qualitative interrelationships. Such an instrument could facilitate the transfer of emotions from theater to life, and elicit children's ability to be "readily touched and deeply moved by a performance" (Rosenblatt 1984, 12).

Whether or not girls, more than boys, prefer theatre for emotional reasons remains for further investigation (cf., Ingersoll and Kase 1969), though both sexes continue to prefer theatre about 3 to 1 over television. However, unlike the responses of older children in previous studies (Klein 1987; Klein and Fitch 1989), first graders' preferential reasons indicate their lack of knowledge about theatre's unique qualities, according to curricular expectancies, perhaps, in part, because this may have been their first attendance to theatre or to this auditorium.

Though many directors assume children will grasp abstract notions about human values by virtue of attending theatre, such speculative assumptions are unfounded until producers speak directly with young audiences. Interviewing young children individually, rather than in small groups, provides greater focus and fewer discipline problems (cf., Saldaña 1987, 14; 1988). Analyzing transcripts is much like a director's analysis of any script, wherein language, grammar, and word choices provide insights into children's imaginations. Free recall, followed by cued recall and then recognition tasks, increases the probability of measuring children's real knowledge about plays in performance, while testing the

communication of directorial concepts and idealistic assumptions. Using dolls and analogous objects in dramatic play for free recall simulates characters' dramatic actions on stage as a closer modality match and provides more elaborate responses from 4- to 7-year-olds than verbal retelling without visual prompts (Gibbons, et al. 1986).

When selecting plays to produce, directors should choose scripts in which the dialogue involves characters in direct actions that communicate the play's themes, rather than conversations that "preach" abstract concepts about life. Actors' gestures or pantomimes of offstage characters, objects, and events can emphasize implicit textural content. Because young children tend to focus on visualized consequences more than inferring the causes and motivations behind characters' actions, directors, actors, and designers should explore ways to visualize such internal, psychological objectives to promote children's inference-making endeavors.

Theatre research based on cognitive developmental knowledge and methods informs practical artistic choices. In this way, the child audiences of today may be the more enriched adult audiences of tomorrow.

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NOTES

1. This West German play by Paul Maar is adapted and translated by Anita and Alex Page (1979). The original German title of the play, *Kikerikiste*, may be translated literally as "Cock-a-Doodle Box"—"kiste" means "box," and "kikeri" is the noise German children make for roosters.
2. Actors gestured off left whenever verbal mention was made of the Drum Major's truck to offset the possibility of children's ignoring or losing this critical verbal information, as studies suggest. In addition

- to these verbal and visual cues, the truck was communicated by a recorded sound effect of a truck starting up and driving away.
3. When asked to recall specific aspects of a very different French production of this play, children noted aspects which were integrated into the action or linked to characters (e.g., the two monumental boxes; the drum; Zacharias' use of "fantastomatic"; Pepper's crowing; the airplane sound coming from Pepper's box) (Deldime and Pigeon 1989).
 4. The concept of "main idea" is introduced in first grade language arts texts in this school district.

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Further guidelines will be sent upon submission or request. Four complete copies of the finished study must be available, upon the request of the jury, by **March 15, 1991**.

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Call for Winifred Ward Scholarship Nominees

The Winifred Ward Memorial Fund, Inc., is pleased to announce the 14th annual *Winifred Ward Scholarship*, named for the pioneer of children's theatre and creative drama in the United States. The 1990-91 award of \$6,000 will be given to a graduate-level student of demonstrated intellectual and artistic ability in the area of child drama.

Applicants must be nominated by a department or program chairperson who is familiar with their work. The nomination letter should include the rationale for the nomination and the name and address of the candidate. Information and an application form will be sent to each candidate immediately upon receipt of the letter of nomination. The deadline for receipt of nomination letters is December 1, 1990.

To qualify, the student must be a citizen of the United States and must have been admitted to one of the following approved programs of study: Arizona State University, Brigham Young University, California State University at Northridge, Eastern Michigan University, Emerson College, Hunter College, New York University, University of Hawaii at Manoa, University of Kansas, University of North Carolina at Greensboro, University of Northern Iowa, University of Texas, University of Utah, University of Wisconsin at Madison, Virginia Polytechnic Institute and State University, and for transfer to a degree-granting institution: the Empire State Institute for the Performing Arts.

In addition, the student must have received a bachelor's degree before beginning the graduate degree program. Each applicant will be judged on the basis of scholarship, faculty recommendations, indications of strong professional interest and growth, successful performance in some aspect of children's theatre or creative drama, including but not limited to directing, designing, playwriting, teaching, and other criteria. A committee of four persons, representing the Winifred Ward Memorial Fund, Inc., will make the final selection.

The deadline for receipt of application materials is February 1, 1991.

Nominations and inquiries may be directed to:
Robert Colby, Chair
Winifred Ward Scholar Selection Committee
180 Winchester Street
Newton Highlands, MA 02161