

Moral Scripts and Dialogic Inquiry in Maternal Scaffolding of
Young Children's Cultural Understanding of a Movie Story¹

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ABSTRACT

In a task concerned with the moral dilemma of how to treat a hurt animal, the dialogues of seven mothers and their 5-year-olds were studied to develop a moral script and dialogic inquiry model of scaffolding children's narrative competency. Content analysis revealed that dyads used comparable moral scripts, consisting of references to characters' actions and subjective states. A turn taking analysis showed that mothers and children engaged in: (a) an initial inquiry phase of initiatory questions, responses, and evaluation turns sequences, used to establish what children thought were characters' actions, intentions, and feelings; and (b) a follow-up, moral explanation and argument phase in which participants urged courses of action to resolve the dilemma. A scaffolding model for fostering narrative competency was proposed for developing children's intersubjective understanding and moral reasoning. Based on this model, a program was designed for training mothers to develop children's production of moral meanings from stories.

INTRODUCTION

This research was concerned with developing a moral script and dialogic inquiry model of natural conversational strategies, used by seven pairs of mothers and their 5 year-olds in extended dialogues, to prepare and scaffold their children's subsequent independent recall and comprehension in retelling a brief movie story. The story posed a complex moral dilemma about whether to put a hurt reindeer out of its misery.

Previous research on effective preparation for young children retelling this movie found that an experimental teacher strategy involving systematic questioning of children concerning the major features of the story, and corrections of the children's responses, if needed, were superior to natural maternal strategies. Moreover, mothers who spontaneously emulated the experimental strategy, by using frequent questions and corrections, were associated with children who performed significantly better than a group whose mothers did not employ the strategy (Beck & Clarke-Stewart, 1998). Related research also determined that children who had participated in at least one extended dialogue with their mothers, defined as 5-17 turns in which topical focus was maintained, received significantly higher scores for recall of facts and comprehension of actions and intentions in their retold stories (Clarke-Stewart & Beck, 1999). These extended dialogues were all preoccupied with the moral issues of the story. In the seven dialogues of this study, the moral issue concerned the treatment of an injured reindeer. The sample dialogues were treated, in effect, as expert systems and analyzed as exemplary models of discussions to support children's moral understanding. To understand why these extended dialogues were effective, it is useful to consider Valsiner's (1996) model of culture and cognition.

Drawing on models of cultural appropriation (Rogoff, 1993), co-construction of moral cognition (Kurtines, Alvarez, & Azmitia, 1990), and the dialogical nature of mental processes

(Markova & Foppa, 1991), Valsiner (1996) proposed a series of pathways in a methodological approach to understanding how culture and cognition are interdependent. He stated that: (1) emergent processes should be selected as objects of inquiry in the context of natural problem solving; (2) these processes could be analyzed through microgenetic research of dialogic events; and (3) the search should be for functioning structures that lead not to conformity with the demands of the normative cultural context, but to the emergence of “novel mechanisms in ways *coordinated with context demands*” (author’s emphasis, p. 47). Further, scaffolding (Wood, Bruner, & Ross, 1976), could be used to provide an analytic framework for studying how extended dialogues incorporated these pathways. In this regard, the purpose of the study was to develop a model of scaffolding that explained how moral cultural understandings were interdependently constructed by mothers and children during extended dialogues.

Scaffolding Theory and Research

Scaffolding is an adult- or expert-facilitated process that enables a child or novice to solve a problem, carry out a task, or achieve a goal that would be beyond his or her unassisted efforts (Wood, Bruner, & Ross, 1976). Scaffolding includes both content and form, which are seen, respectively, in scripts and dialogue. Wood and Middleton (1975) found that mothers who successfully scaffolded were those who had systematically changed their instructions on the basis of the child’s response to earlier interventions and were able to estimate the child’s current ability or readiness for different types of instructions. Such mothers were therefore contingently responsive to their children and employed verbal communications within their intellectual grasp. Hobsbaum, Peters, and Sylva (1996) argued that “scaffolding can take place only in one-on-one teaching situations because contingent responding requires a detailed understanding of the learner’s history, the immediate task and the teaching strategies needed to move on” (p. 32).

While researchers such as Wood and Bruner did not refer to the length of exchanges of turns between mother and child, it is apparent that, in order to “systematically change instructions on the basis of the child’s response to earlier interventions,” dialogues would need to consist of an *extended* series of turns on particular topics. Moreover, there is a growing body of evidence that topically focused elaborative and extended exchanges between adults and children contribute to children’s narrative and language development. Several investigators found that children included more material in narratives of personal experience when parents *extended children’s topics* rather than switching topics (McCabe & Peterson, 1991) or when mothers asked them *elaborative* questions (Fivush & Fromhoff, 1988; Reese & Fivush, 1993; Reese, Haden, & Fivush, 1993).

In a study of shared book reading, Haden, Reese, and Fivush (1993) found that children, whose mothers *embellished and elaborated* on indirectly specified information in the storybook, understood and retold the story better (although these differences were not statistically significant because of the small sample studied). As part of maternal training programs, Arnold, Lonigan, Whitehurst, and Epstein (1994), Dale, Crain-Thoreson, Notari-Syverson, and Cole (1996), Lonigan and Whitehurst (1998), and Whitehurst, Falco, Lonigan, and Fischel (1988) found that when mothers employed *numerous questions, followed children’s answers with questions, shadowed their interests, and expanded* what they said, this promoted children’s language development. Scaffolded extension and elaboration of children’s story topics appears to be critical in the development of children’s understanding of narratives.

A relatively ignored characteristic of conversational scaffolding about narrative subjects is that it not only consists of speech acts, such as questions and corrections that are used to probe and assess understanding, but also that these verbalizations are concerned with a particular topic

or theme (Mehan, 1979; McCabe & Peterson, 1991). Lemke (1993) argued that an adequate account of an episode must address the thematic content as well as the activity structures.

In the movie story segment under investigation, the theme addressed is the moral problem of whether to put a hurt deer out of its misery. Thematically attached to this question are issues in the story such as the feelings of a young girl for the deer, whether hurt wild animals can be helped, and a rationale for her father to shoot the deer. It might be expected that an extended set of conversational turns might be required to fully elaborate the theme. Therefore, it would be interesting to analyze how mothers and children used sequences of topically focused scaffolds during their dialogues to help children understand stories.

Morality Scripts

Morality scripts are used during interactions in which adults respond to children's misbehaviors or moral understandings through scaffolding. Scripts help children to develop an understanding of relevant moral concepts, rules, and norms. Narrative structures dictate the kinds of thematic content needed to make sense of the story. These structures, such as character intentions and feelings, as well as moral rules, might complement the dialogic moves in developing a comprehensive model of scaffolding. As Bruner (1986) theorized, story comprehension consists of integrating the dual landscape of story actions and characters' consciousness or intentions. Beck and Clarke-Stewart (1998) found that the critical cognitive development issue for young children in retelling stories was not so much the recall of the so-called causal chain of objective actions, but rather the comprehension of characters' intentions.

Importantly, the understanding of intentions is a key developmental milestone in children's moral socialization (Blasi, 1987). The children in the present study may not have yet achieved this milestone and, as such, might not understand the intentions of characters in the

movie story. Newman, Griffin, and Cole (1989) considered the asymmetry between adults and children in culturally organized activities in which the dominant task definition was one of movement toward the adult system. Because of the complexities of the moral issue in the movie, it was expected that the mothers and children of this study would have asymmetric views of the moral issue based on the latter's developmentally challenged understanding.

Several studies of young children's moral socialization, using mother-child dialogues as data, have analyzed the role of implicit *moral scripts* in which adults respond to children's misbehaviors with scaffolding that supports their understanding of relevant norms and rules (Emde, Johnson, & Easterbrooks, 1987; Edwards, 1987; Much & Shweder, 1978). In Beck and Wood's (1993) study of a fight between two pre-adolescent brothers brought to a family discussion, the parental moral scripts referred to the boys' communications concerning their intentions toward each other, the history (stories) of their aggressive interactions, and moral standards of verbal and physical aggression. Parents used the scripts both to inquire into, and to repair, the children's misunderstandings or lack of understanding of their actions. As such, in the present study, it was expected that mothers would use script-based arguments to overcome the asymmetric moral understanding engendered by the complex moral problem of this movie story.

Scaffolding as Dialogic Inquiry

Stone (1998) criticized research that employed unidimensional coding systems such as counting types of parental questions and their responses to children's understandings. He suggested that such an approach was likely to miss important "communications dynamics" in optimal patterns of scaffolding. Stone felt that the study of communicational processes, rather than frequency of individual scaffolds, would be more likely to yield understanding of rules governing well-formed scaffolding. Explicit in the research of scaffolding, as *extending* and

expanding children's responses, is the idea that the *exchanges* of communications or dialogic moves need to be analyzed to provide a more detailed model of knowledge construction in instructional dialogues. Halliday (1993) also stated that exchanges of dialogue were the meaningful units to analyze, not individual moves. Only exchanges could adequately show how collaborative knowledge artifacts were co-constructed by participants in a dialogue.

Wells (1999) formulated a dialogical inquiry model of semiotically-mediated activity. His model involves co-participants, with varying degrees of skill, who are engaged in jointly solving a problem. In the process, cultural artifacts, e.g., norms and reasoning, are generated, which may be used to mediate the solution. Finally, an "object," such as the story of the video and its moral in the present case, is created in the process of formulating a solution. From an analysis of a large corpus of classroom dialogues, Wells concluded that inquiry-response-evaluation moves in instructional conversations offer evidence of a ubiquitous conversational structure, with variations, that contributes to progressive knowledge building.

Structures of Dialogic Inquiry: IRE Sequences

It has been argued that a dialogic inquiry model of scaffolding is supported by the typical IRE sequences found in formal classroom dialogues. In these sequences, a teacher **I**nitiates with a question, the child **R**esponds, and the adult **E**valuates the response. IRE sequences were first recognized and labeled as such by Sinclair and Courthauld (1975) and have been found in naturalistic observational studies of verbal behavior in high school classrooms (Bellack & Davitz, 1963; Amidon & Flanders, 1963; Flanders, 1963; Cazden, 1988). The researchers found that, in these dialogues, the IRE sequences were used to start teacher-student exchanges. These IRE sequences then formed the basis for later collaborative elaborations in the conversation.

Mehan (1979) specified a particular variety of extended educational exchanges that followed a theme, which he termed “Topically Related Sets,” consisting of multiple basic IREs and conditional IREs, e.g., IRs. Several studies have found that IREs are effective strategies in contributing to children’s learning (Flanders, 1963; Beck & Clarke-Stewart, 1998). Lemke (1990) identified a ubiquitous generic structure in learning in which English is the language of instruction as the *triadic dialogue*, which consists of multiple repeating sequences of IREs.

Attention has been drawn to the role of the third term, E, in IRE exchanges (Wells, 1999). Sinclair and Courthauld (1975) refer to this term as *follow-up* to a response, while Mehan (1979) has emphasized that the move is an *evaluation*, which may be the most common use. Wells (1999) theorized that the third term served to provide feedback that extended the student’s answer to draw out its significance or to make connections with other parts of the student’s total experience of the unit (p. 200). Specifically, “. . . in the third move of the IRE exchange—when this discourse genre is used effectively—it is in this third step in the co-construction of meaning that the next cycle of the learning-and-teaching has its point of departure” (Wells, 1999 p. 207). Beck and Wood (1993) also found that questions embedded in the third turns in moral socialization dialogues served as feedback to extend discussions.

Wood, Bruner, and Ross (1976), Dillon (1988), and Herrenkohl and Guerra (1998) have argued, however, that teachers’ use of IRE sequences in classrooms was simply ritual recitation techniques and was not productive for student learning. It was suggested that, in using IREs, teachers merely asked questions to which they knew the answers, i.e., to simply test and not build upon or extend student prior knowledge. In naturalistic cultural appropriation discourse, however, when parents use IREs, it is probably rare for them to be simply testing children. Beck and Wood (1993) found that, while parental evaluations during moral socialization dialogues

were used to correct children, their evaluations also addressed selected parts of communications to which children needed to pay attention because they apparently misunderstood the issues.

Thus, evaluations served to elaborate, not bring closure to, the inquiry.

Graesser, Bowers, Hacker, and Person (1997) carried out a naturalistic study of tutoring involving 13 tutors and 40 tutees in middle school and high school research methods and mathematics courses. As a means to identify particular strategies and conversational styles of individuals, detailed microanalyses were performed on the tutorial dialogues, including the speech acts within each turn and the feedback that speakers gave each other's contributions. The results indicated that tutors who engaged in collaborative question answering and problem solving were highly effective. Specifically, the dialogic explanations improved tutees' comprehension and memory for material. Collaborative strategies involved joint tutor-tutee *elaborations* of IRE sequences. Thus, in 4th and 5th steps beyond standard three-step IREs, tutors and tutees collaboratively improved upon the initial levels of understanding.

Research Questions

The main research question that guided the study was: How well did a sample of extended dialogues of successful mother-child pairs fit the moral script and dialogic inquiry scaffolding models? This main research question is best expressed by two separate research questions, as follows:

Research Question 1. Did the dialogues employ morality scripts consisting of references to a set of standard subtopics in the form of story characters' actions, intentions, emotions, and moral rules that contributed to children's understanding of the moral theme?

Research Question 2. Did the dialogic inquiry consist of IRE turn taking sequences (2a) and collaborative explanations and moral arguments (2b) that revealed participants' theories of moral responsibility and action?

METHOD

Sample

The seven mothers and children were selected from a sample of 31 families living in Orange County, California. There were four boys and three girls, with mean age of 5.3 years ($SD = .2$; range = 4.7-6.0). The families had been recruited randomly from hospital births that met the following criteria. For the mother: (a) 18 years of age or older, (b) fluent in English, (c) having no medical complications at the birth, and (d) not planning to move within the next three years. For the infant: (a) not from a multiple birth and (b) not needing to stay in the hospital for more than 1 week after birth.

The children were among a larger sample tested on the Reynell Developmental Language Scales (Reynell & Gruber, 1990) at 36 months. The mean standard scores for the overall sample for the expressive scale were 98.3 (range = 63-127) and, for the vocabulary comprehension scale, 98.6 (range = 62-134). The children in the study group had scores clustering about the mean. For the expressive scale, the range was 77-111 and, for the vocabulary comprehension scale, the range was 83-108. The mean of parents' education was 15.2 years (for both mothers and fathers); 56% of the parents had graduated from college. In particular, the seven mothers had a variety of occupations: two professionals, one government field representative, one manager, and one company owner. Two mothers were unemployed, two worked full-time, and three worked part-time. The fathers, all of whom were employed, also had a variety of occupations: two engineers, one purchasing agent, one file clerk, one manager, one salesman,

and one marketing director. All but one of the children were Caucasian (the other was Asian). As part of a larger assessment of child development, these mothers and children were asked to watch a brief excerpt from a movie together and discuss it.

The Story

The videotaped story was a 5-minute segment selected from the movie *Prancer*, a commercial children's film about a girl who becomes closely attached to one of Santa's reindeer. The segment contained the following events: *Jessica, an 8- to 9-year-old girl, is seen following an animal's tracks and hears shots as she walks through snowy fields and forest. Jessica's father comes across his daughter unexpectedly while driving his truck on a forest road to go shopping. He criticizes her for being in the forest alone. She explains that she was looking for Prancer. They then have a tearful confrontation when her father tells her he is thinking about sending her to live with her Aunt Sarah because he is unable to give her the things she needs now that her mother is no longer there. Jessica yells to her father to stop and the truck screeches to a halt as Prancer suddenly appears on the road in front of them, his leg bleeding. The father goes to get his gun to put the animal out of its misery. Jessica tries to stop him. "No, daddy, no!" They turn around and the animal has mysteriously disappeared.*

This movie segment was selected because it was anticipated that it would arouse in children a complex range of empathic emotions, including fear, anger, and sadness when the deer was in danger, as well as relief and happiness when the deer escaped. The segment also was selected because it provided mothers with interesting and complex material to discuss with their children, including the central moral issue of why a hurt animal should be put out of its pain.

Procedure

Each mother-child pair was assessed alone in a child development laboratory playroom at the university. Mothers were told that they would be watching a brief excerpt from the movie *Prancer* with the child and then the child would be expected to retell the movie story to an experimenter who had not seen it. The mothers were instructed to watch the movie with the child and then talk to the child about the movie as they would at home. The videotape was put into the videocassette recorder, and an experimenter told the child to watch the tape carefully because he or she would be telling the story afterwards to someone who had not seen the movie. Mothers and children then watched the *Prancer* videotape clip. After viewing the videotape, mothers and children in the mother-discussion condition discussed the story together for as long as they cared to. If the child paused, but seemed ready to talk further, the mother was allowed to paraphrase the child's last statement, in the form of a simple non-leading question, or ask what happened next. The preparatory conversations between mothers and children and the child's retelling of the movie story were video recorded and transcribed.

Sample Dialogues

The pool of extended dialogues from which the sample was drawn was concerned with three moral themes: Should the little girl be in the forest alone? Should the poor father send his daughter to live with a rich relative? Should the father shoot the hurt deer to put it out of its misery? Seven of the 13 extended dialogues that dealt with these moral themes were concerned with shooting the deer. All seven of these dialogues, labeled as Dialogue # 1, Dialogue # 2, etc., were selected by the author for analysis in the present study. Thus, the sample dialogues were taken from *all* mother-child conversational pairs who talked about *shooting the deer*. The

children in these pairs subsequently told relatively rich stories demonstrating high recall and comprehension. Appendix A contains the complete transcripts of the dialogues.

Plan of Analysis

The analysis consisted of both content and turn-by-turn analyses. A content analysis was conducted of the mother and child script references made about the actions, feelings, and intentions of the three characters in the story: father, daughter, and reindeer. Also coded were mothers' and children's statements concerning the moral rule. A turn-by-turn analysis was conducted of the seven transcripts concerning the presence and sequence of IREs, as well as the presence of collaborative explanations and moral argument turns in the dialogues. For these analyses, the verbatim transcripts of Dialogues #s 1-7 were used.

RESULTS

Research Question 1

Research question 1 asked: Did the dialogues employ morality scripts consisting of references to a set of standard subtopics in the form of story characters' actions, intentions, emotions, and moral rules that contributed to children's understanding of the moral theme?

In addressing this question, four subtopics were considered to be essential elements in the comprehension of the characters and the moral rule: girl's (in the story) feeling, father's intention, deer's condition, and moral rule. While the girl's feelings, which included fear for and support of the reindeer, were not part of the adult model of the pertinent moral in this story, it was expected that this subtopic would need to be covered because of a related moral issue: the rule that one would normally express sympathy and support for the friend (girl) of a helpless animal victim (deer) in a movie story. Because the children who were engaged in the dialogue were likely to identify with the girl in the movie, this further increased the probability that

references would be made to the story girl's feelings. Clarification of the father's intentions was expected to be referred to because, in the story, the decision as to whether to shoot the deer lay in his hands. The moral script needed to refer to the deer's condition to show how this character's feelings and experiences were part of the moral equation and, as a premise for taking further action, i.e., either to put it out of its misery or propose saving it. Finally, it was expected that the moral rule would be referred to, that is, one needs to put a hurt animal out of its misery, because this would help integrate all the other moral elements. The moral script subtopics and the descriptions that were used by mothers and children in each dialogue are seen in Table 1.

-- Insert Table 1 here --

To address the research question, it is useful to consider the results in terms of the morality scripts that were produced.

Morality Scripts

Five dialogue protocols contained all four subtopics. Only Dialogues #6 and #7 did not include the girl's feelings in their dialogues, but included the three other subtopics. Thus, of 28 possible mentions (4 subtopics x 7 dialogue cases), the results indicated a total of 26 mentions of the four subtopics. It may be concluded that these subtopics were the standard features comprising the moral script. The statements were unexpectedly rich in references to characters' subjective states, given the young age of the children. This may have been enhanced by the emotional power of this movie and the film genre, in general. Dialogues #1, #2, and #3 were dominated by the mothers' statements about the characters and their conclusions about putting a hurt animal out of its misery. However, Dialogues #4 and #5 were led by children's statements about the characters and implications for helping the deer by curing its wounds. Dialogues #6 and #7 were relatively collaborative, containing both children's and mother's references.

Dialogue #6 contained statements by the only child in the sample, who may have understood the moral rule, while in Dialogue #7 the child communicated a fanciful attempt to save the deer through a deer paramedic!

The father's intentions were the most controversial, with mothers always defending him, while the children consistently, either explicitly or implicitly, criticized his actions. The girl's emotions were frequently mentioned early in the dialogue, perhaps because of the likely identification of the child with the child character in the movie. The mothers assumed that the moral rule was an important lesson to be learned from the movie segment, and they apparently considered that their children had marginal developmental proficiency in comprehending this moral. The final subtopic mentioned was always the moral rule, and it was stated in conjunction with the deer's suffering or pain. In one case, however, the mother in Dialogue #2 verbalized the moral rule first, and the conclusion it implied for the deer, then proceeded to answer her child's questions about her conclusion. The data suggested that the mother-child discussion of the moral also provided an anchoring for the child's comprehension of the story. If children understood the moral, then they should be able to better recall and comprehend all the characters' actions, internal states, and applicable rule(s) that form the interrelated components of the moral. This would then serve them to retell the story.

Research Question 2a

Research question 2a asked: Did the dialogic inquiry consist of IRE turn taking sequences that revealed participants' theories of moral responsibility and action?

Of the seven dialogues analyzed, six had IRE sequences at or near the beginning of dialogues. The other (Dialogue #4) contained an IRE in the middle of the dialogue. For the following passages, (I) refers to inquiry or question, (R) to response, and (E) to evaluation.

Dialogue # 1

Turn 1. Mother. Did you like that movie? (I)

Turn 2. Child. Yea. Maybe it was a girl, huh.(R)

Turn 3. Mother. Mmm Hmm. Little sad. He was, she was scared huh? (E)

Dialogue # 2

Turn 2. Child. What's suffer? (I)

Turn 3. Mother. Suffer. That is when you are hurt or sick and you have no chance of getting better and you just can't go out and get food to eat or water to drink because the reindeer had a broken leg so he couldn't walk to eat his food or to get water. So then he would die just alone and hungry, thirsty, and that would be suffering. So the Daddy thought he would shoot him so he wouldn't suffer. And then when they looked up he was gone. (R)

Turn 4. Child. Well he wouldn't suffer without it feeling better? (E)

Dialogue # 3

Turn 1. Mother. What was the daddy going to do with the deer? (I)

Turn 2. Child. Kill him. (R)

Turn 3. Mother. Why? Do you know why? (I)

Turn 4. Child. Mmm Mmm [NO]. (E)

Dialogue # 4

Turn 5. Mother. He wanted help? (I)

Turn 6. Child. Yea, the reindeer wanted help. He got hurt. (R)

Turn 7. Mother. He got hurt, and he wanted help. What was the man gonna do? (E)

Dialogue # 5

Turn 1. Child. You know he just runned away.

Turn 2. Mother. Why? (I)

Turn 3. Child. He didn't want to be shoot. (R)

Turn 4. Mother. He didn't want to be shot? (I)

Turn 5. Child. No. That wasn't very nice. (E)

Dialogue # 6

Turn 2. Mother. "You don't think it would have died? Well have you ever heard that if an animal like a horse or something gets hurt real bad . . . ?" (I)

Turn 3. Child. I know, then . . . (R)

Turn 4. Mother. . . . that means you have to shoot it. (E)

Dialogue # 7

Turn 1. Mother. Do you know why he (father) wanted to shoot him (deer)? (I)

Turn 2. Child. Cause he, she, he was already hurt. (R)

Turn 3. Mother. It was already hurt, right. And he was trying to do something good for him, huh? (E)

To address research question 2a, it is useful to consider the results in terms of an analysis of dialogic turn taking.

Dialogic Turn Taking

There were variations in the dialogues as to which character was the subject of the inquiries. The deer was the subject in four of the dialogues (#s 2, 4, 5, and 6). The father was the character discussed in two dialogues (#s 3 and 7) while, in one dialogue (#1), the girl in the story was discussed.

The majority (5) of IRE sequences were Mother-Child-Mother, except for those in Dialogues #2 and #5, which were initiated by the Child. Three IREs contained an embedded

question in the evaluation turn. In two of these cases, the questions served to trigger new discussion; in some instances, one or more IREs (not shown above) were triggered. While five of the seven dialogues employed standard IREs, in two dialogues, the sequences were analyzed as modified IREs (#s 3 and 5), in which the turn taking assumed the form Inquiry-Response-Inquiry-Evaluation (IRIE). In these IRIEs, to prompt the child's final evaluation, follow-up questions were needed after the response term. Although three-turn IREs are the most common structures analyzed in dialogues, if we add to these the IRIE forms, it may be more useful to think of their function as forming the *inquiry phase* of the dialogues. Generally, the function of the inquiry phase was to establish *what* the child understood about what that characters were doing, feeling, and thinking. In Dialogues #2 and #3, however, the inquiry also established *why* the father intended to shoot the deer.

As predicted by the literature, close readings of the dialogues indicate that the third turn varied somewhat in its principal meanings. The third turns in Dialogues #1, #2, #3, #5, and #7 were relatively *evaluative*, while in Dialogue #4, the third turn contained a *paraphrase* and an *embedded question* that served to extend the dialogue. In Dialogue #6, the third turn *drew out the significance* of the child's response. These findings provide some good empirical examples of Markova and Foppa's (1991) model of dialogue as using three-step units. By conceiving of dialogic events as "A1, B1, and A2—where A2 is the integrative reflection on upon the events A1 and B1" (Valsiner, 1996, p. 39). Markova (1993) clarifies the use of the third term as an emergent and novel construction. Therefore, no narrow or consistent use of the third term should be expected in dialogues serving the cultural and cognitive constructions of meanings.

Research Question 2b

Research Question 2b asked: Did the dialogic inquiry consist of collaborative explanations and moral arguments that revealed participants' theories of moral responsibility and action?

The mother-child dialogues were found to contain both mothers' moral arguments and children's competitive moral arguments. Arguments were operationally defined as any statements offering reasoning about solutions, that is, courses of action to be taken to meet the problematic situation of the reindeer.

It should be noted that the mothers' and children's arguments, which follow, have been paraphrased, and verbalizations communicating causal logical features, such as "because," "so," and "if-then" constructions are highlighted where explicit and interpreted where implicit. To better understand the results, it is useful to consider them in terms of maternal arguments, children's arguments, and a moral argument phase for mothers and children.

Maternal Arguments

Five mothers made moral arguments that the deer needed to be shot because it was suffering.

Dialogue # 1

(Mother). Because deer don't have doctors, and they can't go to the doctor to get better.

(Mother). The deer was in pain.

(Mother). So he was gonna kill him, so he wasn't in pain anymore.

Dialogue # 2

(Mother). When you are hurt or sick and you have no chance of getting better, then you just can't go out and get food to eat or water to drink.

(Mother). Because the reindeer had a broken leg, he couldn't walk to eat his food or to get water.

(Mother). So then he would die just alone and hungry, thirsty, and that would be suffering.

(Mother). So the Daddy thought he would shoot him, so he wouldn't suffer.

Dialogue # 3

(Mother). Because the deer got hurt, and so he was going to kill the deer to put it out of its misery, so it wouldn't suffer anymore.

Dialogue # 4 (no moral argument)

(Mother). The reindeer got away, but the girl was crying.

Dialogue # 5 (moral question raised but no moral argument)

(Mother). Should the daddy shoot the reindeer?

Dialogue # 6

(Mother). If an animal is hurt, then you have to shoot it.

DIALOGUE # 7

(Mother). If animals get hurt real bad, then they can't be helped.

Three of the seven mothers (Dialogue #s 1, 2, and 3) employed three-term *sylogistic reasoning* in supporting their children's understanding of the moral rule. These mothers made complex arguments consisting of separate statements that the deer was suffering, there was no chance of it getting better and, therefore, it should be put out of its misery. In two cases (#s 6 and 7), the arguments were more minimal, assuming the form of if-then reasoning: if animals are hurt, then they can't be helped (or have to be shot). In one case (#5), only a question was used to prompt understanding of the moral issue. Only the mothers in Dialogues #4 and #5 failed to elaborate the standard adult moral rule. However, the mother in Dialogue #5 posed the central

question that addressed the moral issue: “Should daddy shoot the deer?” Thus, only the mother in Dialogue #4 failed to directly address the moral issue.

Children’s Arguments

In five of seven cases, children’s moral arguments were in the service of saving the deer and, as such, competitive with the mothers’ moral arguments. In all five cases, these arguments were made in the final turn or turns of the dialogue. The children’s arguments were generally made in response to maternal arguments and can be analyzed in terms of whether they agreed with the mother that the deer should be shot.

Dialogue # 1. No. Child statement held out hope for saving deer. “If the deer was hurt . . .”
(Final turn.)

Dialogue # 2. No. Child said, “If deer would feel better, then he wouldn’t suffer. (Final turn).

Dialogue # 3. --. Child said, “In the end he [Father] killed the deer.” [No child argument].

Dialogue # 4. No. Child said, “She liked the reindeer, and didn’t want dad to shoot him.”
(Final turn).

Dialogue # 5. No. Child said, “The daddy shouldn’t shoot the deer because some reindeers are nice and some reindeers are not.” (Final turn).

Dialogue # 6. Yes. Mother said, “The deer would have died because it got hurt?” Child said, “Yeah.”

Dialogue # 7. No. Child said, “If they have paramedics for dogs and cats, then they have them for deer.” (Final turns).

In two dialogues (#s 1 and 2) the children argued weakly that the deer could be helped. In Dialogue #7, a precocious child suggested that a deer paramedic or veterinarian could help cure the deer. Egocentric reasoning should be noted in Dialogues #4 and #5, with children

arguing that the deer should be saved because it was liked or it was nice. The child in Dialogue #5 disagreed with the father's shooting the deer, not the mother's argument (for no moral was given by the mother). Only one child agreed weakly with the mother's argument (Dialogue #6), and this child may have understood the moral rule. At this age, children were simply opposed to killing a deer, whatever the maternal arguments.

Moral Argument Phase for Mothers and Children

To build on the foundation of narrative contextualization, it was necessary for mothers to methodically sequence and organize these intersubjective understandings to support children's acquisition of moral logic. It was found that, in five of the dialogues, the narrative contextualization assumed the form of either complex syllogistic reasoning or simpler if-then reasoning. Teaching the moral involves the use of appropriate sequences of the narrative statements or terms of the syllogism, or simple reasoning, and insertion of the relevant conjunctions, i.e., because/so (therefore) and if-then. In other words, mothers wanted children to accept their version of their plot of the actions implicated in the moral. These mothers' syllogistic scripts may be generalized as follows:

- The reindeer was hurt.
- A hurt wild animal cannot be helped.
- The father went to get his gun to shoot the deer so that he would not suffer.

The immature reasoning in the children's scripts also can be generalized as follows:

- The reindeer was hurt
- The reindeer needed help
- The father went to get the gun to shoot the deer to hurt him.
- The little girl was unhappy and judged the father as bad.

- Therefore, the deer should be or could be saved.

Among the seven children, distinct stages of moral reasoning were analyzed. At the earliest stage, children in two dialogues (#s 4 and 5) used egocentric arguments to save the deer, because it was nice or the child liked the deer. As if to confirm that these children were less developed, their mothers allowed them to direct the dialogue and did not try to use moral arguments. The children in Dialogues #1, #2, and #3 occupied a middle stage. The mothers of these children used three-term syllogistic moral arguments to scaffold their understanding of the moral. These children responded with weak or partial counter-arguments. It is notable that these children used if- or if-then constructions in their arguments. The children in Dialogues #6 and #7 may have had the most developed reasoning. Their mothers used more minimal if-then logic, perhaps assuming that children understood the moral rule. It was tentatively concluded that the child in Dialogue #6 may have understood the moral rule. The child in Dialogue #7 appeared to understand the maternal argument very well, but was advanced enough to propose a strong counter-argument in which world conditions (deer medicine) existed that might save the deer.

The story of the moral is told, then, through syllogistic and simple causal if-then logic. It is still uncertain whether two-term, if-then logic (if the deer is hurt, then it must be put out of its misery) developmentally precedes or succeeds children's understanding of three-term syllogistic logic. The more minimal scaffolding logic might be used with developmentally mature children, while the full syllogism might be needed to provide more complete scaffolding. In the latter, the first two statements must be about the deer's suffering and the impossibility of medical help, but the order is immaterial, and the conclusion must refer to the man's intended action and the rule that makes this action good. The moral is the story condensed to a syllogism involving the sequencing of the critical actions and inner states of the characters and their intersubjective

relations with each other. The syllogism is taught through inquiry (question-answer) and counter-arguments to rebut the children's misunderstandings as embodied in their scripts.

In five of the dialogues, both mother and child made moral arguments. These consisted entirely of turns involving explanations (some children's arguments were tested subsequently by maternal questions). Children made their own moral arguments, or confirmed a mother's moral argument, in six dialogues, except Dialogue # 3. The children's arguments contained different kinds of explanations than had been made previously, including both mature if-then logical constructions and developmentally immature references, e.g., to hypothetical or imaginary resources such as deer paramedics. Alternatively, they made egocentric appeals, such as favoring not shooting the deer because it was nice or because the child liked the deer. The children's moral arguments were always voiced in the final turn(s) of the dialogue. Moral arguments consisted largely of exchanges of *explanations*; there was little further questioning in this phase of the dialogues.

DISCUSSION

The study contributed to a theory of moral reasoning development, as well as presented methodological tools through which an understanding of culture and cognition as interdependent processes can be analyzed during children's cultural appropriation of moral reasoning in extended conversations with adults. The results suggest that the moral may be an important, yet overlooked, narrative structure in studies of retelling or composing stories. The logically organized story of the moral, in fact, provides a condensed set of cultural cognitions about the relations between the characters, as well as placement in a sequential argument intended to serve as a means to judge the characters. By containing all the nuclear information about the characters, the moral also serves as a means for recovering the story plot. Reciprocally, it was

concluded that knowledge of characters, particularly their inner states, is a precursor for learning the moral and, hence, for mothers to introduce their children to moral reasoning.

As Valsiner (1996) proposed, emergent processes in natural problem solving proved to be a fecund resource for analyzing cognitions that are implicated in cultural appropriation. According to his model, the microgenetic sequence of dialogic events is crucial in understanding how inquiry develops. It also may be concluded that functional structures, in which children's views proved to be "novel mechanisms," yet "coordinated with context demands," were discovered, as was predicted (albeit in opposition to the arguments of the mothers as cultural guides). The results suggest that it was the moral rule that integrated the interdependence of culture and cognition in problem solving dialogues about a movie story.

The results of this study also inform the issue of co-construction and directional leadership in the conduct of inquiry into the moral of the story. The data indicated that the mothers exerted considerable leadership in the learning process. They recognized in their children's emotional states and lack of moral developmental reasoning the need to target the story's moral for discussion. During the dialogues, mothers utilized graduated forms of support: (a) modeling or filling in knowledge as a response to children's queries, such as providing information about the moral rule; (b) pointing and prompting children through questions to provide missing information; (c) providing evaluative feedback to children's responses, giving an appraisal of children's moral understandings; and (d) providing explanations that pointed to elements missing in children's moral understandings.

It was apparent that the children lacked narrative understanding of the characters' subjective states, their intersubjective relations, and moral reasoning in the story. They assumed that the father intended to harm the deer because killing it was not mediated by any

understanding of the deer's pain. They did not have deep understanding of what the deer was feeling (suffering/misery), for this state was beyond their experience. They also did not know why the girl's feelings for the deer were not taken into account by the father, and they did not understand, or chose to reject, the moral rule because, probably, they could not tolerate a hurt animal being hurt further. Rather, they assumed that it was necessary to help the deer.

The maternal script in covering all these elements is, therefore, a moral matrix of critical intersubjective understandings about the characters' relations in the movie events. It is an intersubjective understanding because the young children and mothers in the conversations were talking about internal states in three different characters and trying to make causal narrative sense of relations between these characters, e.g., how the man's intentions would cause further suffering (or death) for the deer or how supporting the girl's feelings for the deer would save the deer (and presumably make both the deer and girl happy). The children could not understand, or at least not accept, the moral rule as a generalized model of these causal relations, from an adult perspective, because they could not understand or accept their mothers' interpretations about the story characters' intersubjective relations.

It is argued that children's mastery of characters' intersubjective relations would be needed for them to accept either simpler or complex syllogistic logic. However, the movie may have inspired mothers to try and teach this moral logic earlier in child development than might have been expected. In a movie, it is easier to arouse empathy for and identification with the characters. The movie form arouses protective feelings for the characters and leads to children expressing emotions toward the characters. Through dialogic inquiry, as well, feelings about the characters were aroused. Thus, while children do not yet understand intentions, they do sense what the characters are feeling and are moved to empathize with them. Feelings apparently

provide the intersubjective foundation for moral teaching at this age. The characters' states, in the proper order and tied together with logical conjunctions, are needed to teach the moral.

By voicing their opinions about the wrongness of the father's actions, by defending the deer and, in one case, by inquiring into the deer's suffering, children provided information about their conceptions of the moral that led their mothers to elaborate their own arguments in rebuttal. Nevertheless, following Rogoff (1993), it must be concluded that, while the children actively participated in their cultural appropriation, they played a subordinate role in the co-construction.

Mothers appear to intuitively understand that they must address each misunderstood subtopic of the moral, yet weave the whole into the conclusion that the adult theory of the context of the moral applies. Just as strongly, however, the children tenaciously cling to their own theories. Perhaps, in displaying counter-theories, the children are establishing one pole of the zone of proximal development, while the other adult pole is defined by the mothers through the culturally normative script. To get from one pole to another, however, mother and child would have to negotiate (in future dialogues) a matrix of the moral context. The building blocks of this matrix can be traversed through Valsiner's (1996) methodological pathways along each subtopic of the theme. It did appear that the father's intentions were most important to debate, yet the deer's condition and needs also defined an important area of emotional understanding about which to talk. Ruling out the possibility of deer medicine also needs to be clarified. Children also should know why the girl's feelings were irrelevant to the moral argument. Finally, within the confines of their developmental potential, they need to understand why egocentric reasoning misses the point of the relevant issues in the moral.

If mothers expect that their children, after viewing the movie and prior to discussion, already have theories of the prevailing moral context and have morally judged all the characters

acting in the context, then what can mothers do? This group of mothers used inquiry early in the dialogue to give them enough information to predict (or confirm, if the mother was able just by looking at the movie to be able to project their children's theories) the children's script theories of the moral context. The information also enabled them to predict that the children were likely to support one character over another, as well as judge one character as the perpetrator and the other as the victim. Finally, having definitively established the children's theories by the end of the IRE, the mothers used the rest of the dialogue to propose counter-theories. However, in the children's resistance to the mothers' theories, they elaborated the content of the world, suggested only in the IRE inquiry phase. This extended not only to interpretations of the characters' states, but referred to such world conditions as the existence of deer hospitals and paramedics.

Did these children learn anything from the conversations? Did they undergo any development in their moral reasoning? In the brief space of the dialogue, they did not necessarily. However, they were exposed to their mothers' models of the moral environment. They engaged in comparing two versions of the same objective movie phenomenon—their own and their mothers'. Because the mothers' versions were exposed under competitive, emotion arousing conditions, they may be better remembered on future occasions. Additionally, the children were given the opportunity to construct arguments involving moral reasoning and began to exercise the formal logical constructions that underlie moral rules, e.g., because-therefore, if-then, what if. Practice in using these logical constructions may subsequently generalize to other forms of social thinking and even scientific inquiry and argument. Therefore, while it cannot be said that the children actually learned anything, it is persuasive to conclude that mothers and children ought to routinely engage in these kinds of moral appropriation dialogues about real-life

or mediated social dramas. Further, parents ought to be trained in using IRE dialogic turn taking and scripted inquiry and argument during extended conversations with their children.

IMPLICATIONS

The findings suggest that mothers, after they saw how children responded to the inquiry phase, opportunistically adopted the goal of teaching their children the moral rule and the reasoning behind the rule during the rest of the dialogue. As we have reported (Clarke-Stewart & Beck, 1999), the successful mothers in this study were moral cognitive developmentalists. For children at this age, the challenging aspects of narration concerned the characters' internal states, motives, and emotions. They also needed adult support to understand and incorporate the underlying moral logic that organized these characters' motives, actions, and emotions, i.e., the moral. The mothers recognized that, because of their children's marginal developmental comprehension of the applicable moral, the moral rule needed to be taught through narrative contextualization, by spelling out the concrete intentional interactions that provided the examples of the moral and by arguing how these examples could be used to implicate the moral rule.

As components of this scaffolding model have been found in a variety of natural and experimental adult-child educational contexts and across a wide range of problems (e.g., classroom instruction, family moral socialization, tutoring, experimental problem-solving), and given the study's results, it seems plausible to develop the model into a prototype program for the training of scaffolding for parents in a movie retelling task. In the proposed program:

Mothers would be trained to conduct their communications with reference to the important moral(s) of the story. As building blocks for teaching to the moral, the key characters' feelings and reasons for acting, or potentially acting, would need to be explored. This should facilitate children's comprehension of the characters' actions. Then, the moral rule could be

scaffolded in relation to the children's understanding of the characters. Depending on the maturity level of the child, this scaffolding should assume a simple if-then or syllogistic form.

Mothers would progressively structure their dialogues with basic inquiry (IRE) and follow-up with an explanatory moral argument phase. Questions of increasing complexity (what-why-what if) should be used to guide the children's understanding. Mothers should be encouraged to propose and test their ideas about the characters' emotions and reasons for acting. Mothers also need to evaluate their children's responses and extend the discussion through follow-up questions. Mothers would encourage their children to voice their causal explanations of characters' actions, justify their explanations, and propose solutions. After determining that children have fully voiced their views, adults should question the children's views further or contrast the children's views with their own. This complex scaffolding would necessarily take place in more extended dialogues than have been reported in this study.

Recommendations for Future Research

Seven dialogues of a small and homogenous middle class sample constitute a limited set of data on which to build a complex model of scaffolding children's cultural understanding of a movie story. To produce additional data for these claims, it would be necessary to test the scaffolding model that has been developed on larger and more diverse populations. In particular, the model needs to be tested on less advantaged populations, whose parents might not be accustomed to holding extended dialogues with their children about movie or literature stories.

Endnote

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Table 1

Inclusion of Moral Subtopics by Mothers (M) and Children (C)

Dialog #	Girl's Feeling	Father's Intention	Deer's Condition	Moral Rule
1	The girl was sad/scared. (M)	He wanted to kill deer. (C)	The deer was hurt. (M)	He was going to kill him so he wasn't in pain anymore. (M)
2	Little girl didn't want him to die. (M)	Daddy thought he might shoot him. (M)	Reindeer hurt his foot/had broken leg. (M)	Daddy thought he might shoot him, so he didn't suffer. (M)
3	The little girl didn't want the deer to die. (M)	He was going to kill the deer. (C)	Deer got hurt. (M)	He was going to kill the deer to put it out of its misery. (M)
4	Child was scared (C) Girl crying. (M)	Man was going to shoot him. (C)	Reindeer wanted help. (C)	Cause she liked the reindeer and didn't want the dad to shoot him. (C)
5	Girl sad. (C)	Reindeer didn't want to be shot by dad. (C)	Reindeer runned away. (C)	Daddy shouldn't shoot because some reindeers are nice and some are not. (C) Do you think daddy should shoot the deer? (M)
6	---	He got to kill it. (C)	Reindeer was hurt. (C) (M)	If an animal gets hurt real bad, then you have to shoot it. (M)
7	---	Father wanted to shoot deer. (M) Father bad. (C)	Reindeer already hurt. (M)	If animals get hurt real bad, then they can't be helped. (M) Maybe he could have been saved if the paramedics were called. (C)

Appendix A

Dialogue Transcripts

Dialogue # 1

Turn 1. Mother. Did you like that movie?

Turn 2. Child. Yea. Maybe it was a girl, huh?

Turn 3. Mother. Mmm Hmm. Little sad. He was, she was scared huh?

Turn 4. Child. Yea. Cause they thought that he would shoot him, like he was.

Turn 5. Mother. Cause, do you know why?

Turn 6. Child. Why?

Turn 7. Mother. Cause the deer was hurt.

Turn 8. Child. Why did he want to kill him?

Turn 9. Mother. Because deer don't have doctors, and they can't go to the doctor to get better. And the deer was in pain. And so he was gonna kill him so he wasn't in pain anymore. Okay.

Turn 10. Child. If there was a deer and he was a hurt deer...

Dialogue # 2

Turn 1. Mother. And they saw a reindeer and he hurt his foot, and the daddy thought he might shoot him so he didn't suffer, and the little girl didn't want him to die.

Turn 2. Child. What's suffer?

Turn 3. Mother. Suffer. That is when you are hurt or sick and you have no chance of getting better and you just can't go out and get food to eat or water to drink because the reindeer had a broken leg so he couldn't walk to eat his food or to get water. So then he would die just alone and hungry, thirsty, and that would be suffering. So the Daddy thought he would shoot him so he wouldn't suffer. And then when they looked up he was gone.

Turn 4. Child. Well he wouldn't suffer without it feel better?

Turn 5. Mother. He might have, will it make you feel better if his pet was better? Yea.

Dialogue # 3

Turn 1. Mother. What was the daddy going to do with the deer?

Turn 2. Child. Kill him.

Turn 3. Mother. Why? Do you know why?

Turn 4. Child. Mmm Mmm.

Turn 5. Mother. Because the deer got hurt, and so he was going to kill the deer to put it out of its misery so it wouldn't suffer anymore. The little girl didn't want the deer to die, did he, did she?

Turn 6. Child. Mmm Mmm.

Turn 7. Mother. So what happened at the end though, do you know what happened at the end?

Turn 8. Child. He killed the deer.

Turn 9. Mother. No, he didn't. The deer disappeared and he went to shoot him and the deer wasn't there anymore it was gone. Did you see that? The deer was gone, when he turned back to shoot him, the deer was all gone.

Dialogue # 4

Turn 1. Mother. Wow.

Turn 2. Child. That was a scary story.

Turn 3. Mother. That was a scary story? What scared you?

Turn 4. Child. When the reindeer was gonna get killed and didn't nothing. He wanted help.

Turn 5. Mother. He wanted help?

Turn 6. Child. Yea, the reindeer wanted help. He got hurt.

Turn 7. Mother. He got hurt, and he wanted help? What was the man gonna do?

Turn 8. Child. Shoot him.

Turn 9. Mother. Yea. But, he got away huh?

Turn 10. Child. Mmm Hmm.

Turn 11. Mother. That's good, why was the girl crying?

Turn 12. Child. Cause [s]he liked the reindeer and didn't want him [Dad] to shoot him.

Dialogue # 5

Turn 1. Child. You know he just runned away?

Turn 2. Mother. Why?

Turn 3. Child. He didn't want to be shoot.

Turn 4. Mother. He didn't want to be shot?

Turn 5. Child. No. That wasn't very nice.

Turn 6. Mother. How do you think that little girl would feel?

Turn 7. Child. If she shoots him? Then sad.

Turn 8. Mother. Oh. Do you think the daddy should do that?

Turn 9. Child. No, because some reindeers are nice and some reindeers are not.

Turn 10. Mother. Did you like the reindeer?

Turn 11. Child. Yea I do. He's kind of a nice reindeer I think.

Dialogue # 6

Turn 1. Child. She was supposed to look at, at the person whoever shot . . . got it hurt. That was not the dad. And, umm, he got to kill it, because, anyways, it wouldn't have died."

Turn 2. Mother. You don't think it would have died? Well, have you ever heard that if an animal like a horse or something get hurt real bad.

Turn 3. Child. "I know, then . . .

Turn 4. Mother. . . . that means you have to shoot it.

Turn 5. Child. I know. I said that. Anyways it really would have died.

Turn 6. Mother. It would have died because it got hurt?

Turn 7. Child. Yeah.

Dialogue # 7

Turn 1. Mother. Do you know why he (father) wanted to shoot him [deer]?

Turn 2. Child. Cause he, she, he was already hurt.

Turn 3. Mother. It was already hurt, right. And he was trying to do something good for him, huh?

Turn 4. Child. Bad.

Turn 5. Mother. Well, sometimes when animals get hurt real bad, they can't be helped.

Turn 6. Child. Well, well, he doesn't think in his mind. Maybe he could, he could have called the paramedic and maybe he could have been saved.

Turn 7. Mother. Do they have paramedics for reindeer?

Turn 8. Child. Well they have paramedics for dogs, and they have paramedics for cats . . .

Turn 9. Mother. You're right, we have seen . . .

Turn 10. Child. . . . they have paramedics for mouses.

Turn 11. Mother. Where could he have taken him instead of shooting him to make him better?

Turn 12. Child. To the hospital.

Turn 13. Mother. To the hospital. What kind of hospital?

Turn 14. Child. A reindeer hospital.

Turn 15. Mother. A reindeer hospital? Is there such a thing as a . . . what is the place called we take animals when they are sick?

Turn 16. Child. Animal veterinarian.

Turn 17. Mother. Very good. Veterinarian.

. . . = pause of 3 seconds or more.