

Children's Pretend Play With Television and Film-Scripted Character Toys

Sandra Chang

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## ABSTRACT

## Children's Pretend Play With Television and Film-Scripted Character Toys

Sandra Chang

Children's cultural environments have been inundated with television and film-based character toys: replica models of characters seen in children's popular television and film. This study examined whether "scripted" toys had a restrictive influence on children's imaginations, by investigating how children used play to emulate or transform the materials, identities, and narratives they were provided through these toys.

The effects of toy type (scripted versus unscripted) and gender (boys versus girls) on the pretend play, roles, and themes engaged in by children were examined. Twenty-eight 5-year-olds (14 boys, 14 girls) were observed in play sessions under two conditions: (a) with a set of television or film-scripted toys, and (b) with a set of toys unrelated to mass media. The children's pretend play, roles, and themes were measured.

Results revealed that scripted toys elicited pretend enactment with fictive roles and themes, whereas unscripted toys encouraged high-level negotiation (especially with girls) and archetypical or reality-based roles and themes. These findings tentatively suggest that television and film-scripted toys promote imitative pretend play, whereas unscripted toys encourage more creative pretense behavior in the children. The results also confirmed that the inclusion of an "archetypical" category was necessary to describe the children's pretend roles and themes. As well, girls were found to engage in more pretend negotiation behaviors than boys.

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## INTRODUCTION

Contemporary society is witnessing the merging of two important facets of children's culture - stories and play - through the development and marketing of television and film-based toys: plastic replica models of characters seen in television and films. These replica toys offer a unique means to examine how children use play to emulate or transform the materials, identities, and narratives they are offered through mass culture. How do children play with toys derived from television and film narratives? What roles and themes do these toys inspire? Do these toys affect boys and girls differently?

Psychological and educational research on children's pretend play has generally taken place within the home, school, or preschool environment. However, a number of complex and conflicting forces shape the lives of contemporary children, and the effects of a corporate production of children's culture cannot be ignored (Jenkins, 1998). Over the past 50 years, marketing industries and mass media have united to inundate the child's world with images of television and film characters on television, in movie theatres, and in products ranging from toys to clothes and dishes. Children have little choice but to become familiar with these characters. By 1990, 70% of gross profits from toy sales in America were from promotional character toys derived from commercial television and films (Steinberg & Kincheloe, 1999). Kline (1993) argued that children are not only absorbing the narratives as depicted by media, but are being provided with mass-produced tools to direct the very activities that develop the world of their imagination, that is, their pretend play activities. The concern is that when children today pretend, much of their play seems to be directed by the narratives of popular television

programs and films. Giroux (1994) also maintained that books, television, films, magazines, toys, and advertisements contributed to the shaping of children's experiences, the formation of their identities, and the content of their play.

While adults may not explicitly conceive of their society's definition of childhood, the assumptions behind the definition impact all factors in their relationship with children, including the culture that they produce for children (Calvert, 1992). Following Jenkins' (1998) arguments, this paper will oppose the nostalgic conception of the child as victim or innocent blank slate "waiting to be corrupted or protected by adults" (p. 4). Instead, the child will be viewed as an active participant in his or her cultural development - albeit in an adult's corporate world, an active participant with unequal power. Walkerdine (1996) wrote that the process by which children internalize or reject cultural standards is complex and that through play, children contribute actively in their own socialization and in the internalization of cultural values. As Rotundo (1993) stated, play offers children a space to experiment.

Psychological and educational research in children's play offers rich insight into the process through which children encounter and interact with objects in their imaginative worlds. This research literature provided the format in which to examine children's play with television and film-based toys.

The goal of this study was to examine how children use play to emulate or transform the toys, identities and ideas that corporate culture provides them through media-based toys. The study compared the effects of character toys derived from television and film (scripted toys) with the effects of toys unrelated to mass media (unscripted toys) on the pretend play, roles, and themes observed in the imaginative play

of 5-year-old children. The manner in which these toys affected girls and boys differently was also examined.

The literature reviewed included research on the development of television and film-based character toys, children's use of objects in pretense, the distinction between reality-based and fiction-based pretense, media effects on children's play, and gender differences in marketing and pretend play. Psychological theories of Piaget, Vygotsky, and Bettelheim relevant to this study were also examined.

Research on children's culture and media for the most part has been of a qualitative nature, whereas this study examined the issues using empirical methodology. The experimental design of this study was based on Pulaski's (1973) work on children's play with toys varying in levels of realism.

This paper did not aim to attack television, film, or media-based products marketed for children. Nonetheless, one cannot deny that the ultimate goal of mass producers of toys and commercial media is monetary gain. Corporate culture does not strive to assist children in reaching their optimal development as human beings. The fictional narratives and identities of television, films, and media-based toys may thrill and please children, but they may also confine the children to a limited set of roles and themes, and restrict the depth and direction of their imaginative play (Steinberg & Kincheloe, 1999). If television and film-based toys impose restrictions on children, it is necessary to expose these limitations so that children and adults can recognize the effects of a corporate culture and the choices they may not have otherwise perceived.

### *Development of the Character Toy*

Fictional narratives have played a role in children's culture since the oral tradition when myths and tales were transmitted from one generation to another by word of mouth (Frazer, 1966; Campbell, 1959). The invention of the printing press in the 16th century resulted in these stories being passed in greater numbers through books (DeMause, 1974; Aries, 1962). In the beginning of the 20<sup>th</sup> century, the presentation of children's narratives was expanded and transformed through developing media: comic strips, radio, film, and television (Postman, 1982; Kline, 1993).

In 1934, Walt Disney produced the feature-length animated film *Snow White* and institutionalized the fairy tale genre in the film industry in just as revolutionary a manner as the Grimms' brothers' written collection of tales impacted the 19<sup>th</sup> century print industry (Zipes, 1995). Disney brought story-telling and characterization in films to new heights by taking advantage of the narrative freedom offered by animation, in which reality could be endlessly transformed. At the same time, Disney wanted to provide entertainment and not lessons in morality so his retellings of classic tales purposely excluded the moral imperatives, psychological ambiguity, and character development that were the inspirations of the original tales. These animated stories were light, predictable, and became the new staple in children's popular culture (Finch, 1975). In the 1950s, television took over as children's primary storyteller with family dramas, situation comedies, variety shows, adventure movies, and to a growing extent, animated cartoons.

With the unprecedented popularity of Disney's film and television characters (e.g., Mickey Mouse and Donald Duck), television producers and marketing industries converged to create and market a major children's cultural product: the promotional

character toy - replica models of the characters depicted in popular films and television (Ladensohn & Schoenhaus, 1990; Barcus, 1977; Kline, 1993). The mass market, realizing the consumer potential of children and parents, began to exert a major influence on childhood. Marketing theorists focused on the concept that it was the consumer's orientation to merchandise that influenced the market's selling power. That is, children and parents had to walk into the store wanting the merchandise. Communication became the marketer's key to selling consumer goods and took on two forms: (1) researching consumers' tastes, habits, and preferences, and then (2) promoting the products to consumers in order to motivate the children and parents to purchase the goods. Advertisers latched on to the persuasive powers of mass media while mass media, in return, benefited financially from the exposure of advertising endorsements (Kline, 1993).

The 1984 deregulation of commercial television in the United States resulted in a mass marketing strategy whereby characters and character-based products were developed first, followed by the creation of a supporting animated television program, which had as its purpose the promotion of these products. Some of the so-called "30-minute commercials" included: Transformers, Teenage Mutant Ninja Turtles, Strawberry Shortcake and Care Bears (Kline, 1993). Character-marketing has provided children with the tools to recreate animated narratives as seen in films and television, and emphasized the toy as a necessary tool for pretense. Some researchers have argued that contemporary children's play depends on the identities of television and film personas to the extent that they no longer seem in charge of their make-believe play (Engelhardt, 1987; Kline, 1993).

*Promotional character toys and gender.* Promotional toys and children's television have been criticized for promoting gender-specific role play (Paley, 1984; Carlson-Paige & Levin, 1987). Market researchers discerned that not all children liked the same television shows or toys, and as a result, segregated target groups were created along age and gender lines. Promotional shows and toys were developed to appeal to three separate age ranges: preschoolers 4 years and under, 5 to 8-year-olds, and 9 to 13-year-olds. The preschool category dealt mostly with plush type characters that were generally not gender-specific, such as Care Bears and Blue's Clues. The two older age ranges, however, involved unmistakable gender distinctions. Marketers' formula for girls' characters were domestic or fashion type dolls, which encouraged a nurturing, grooming, or performative style of role play, whereas boys were barraged with action figures and persuaded to battle, build, and control (Carlson-Paige & Levin, 1987; Kline, 1993). Children's advertising promoted sex-typed toys and encouraged gender-specific forms of pretend play, for instance, by purposely avoiding mixed-sex groups of children in toy advertisements.

But how do character toys linked with television and film narratives actually affect children's pretense?

### *Theories of Pretend Play*

Imagination is an essential human attribute. It is what allows people to transcend their current situations, to think about things in different ways, and to generate new ideas (Singer, 1973). Pretense has historically been described in terms of a phenomenological duality pitting reality against nonreality, with the implication that via some imaginative means, a person could move between a real and an unreal world. The word 'pretend' is



derived from the Latin word 'prae-tendere' or 'stretch forth', meaning one representation extending over and beyond another. Philosophers such as Aristotle and Coleridge considered pretense to be a rearrangement or transformation of reality transpired through some imaginative process rather than a straightforward imitation of reality (Goldman, 1998).

The child learns to separate meaning from reality by forming "symbols of missing objects, persons, and places in one's mind" and eventually, imagination takes the form of metaphors, similes, and abstract thought (Singer, 1993, p. 73). Children develop this ability to form symbols through experiences in pretend play. Psychologists posited that children played imaginatively when they transformed objects, situations, or identities using simulative, or "as if" behavior, describing the activity interchangeably as imaginative play, pretend play, symbolic play, make-believe play, fantasy play, or dramatic play (Rubin et al., 1983; Garvey, 1976). When children pretend, they play at detaching themselves from real-life situations. For example, a child will play out a dinnertime scene outside of the time and the place it ordinarily occurs in real life and without the motivational factor of hunger ordinarily associated with it (Fein, 1979). Role enactment takes place when a child simulates the characteristics or the identity of another person, temporarily taking on a perspective that is not his or her own (Fein, 1981; Kavenaugh & Engel, 1998). In playing a role, the child transforms his or her identity and becomes the symbol of another person (Bretherton, 1989).

Piaget (1962) and Vygotsky (1966) both ascribed to a cognitive developmental perspective, whereby a child's level of pretend play development was considered a reflection of his or her level of cognitive development. Piaget (1962) described symbolic

play as the assimilation of external experiences into the child's ego in which a child invoked his or her experiences of the outside world and reinvented them into an imaginary world. To accomplish this, the child constructed symbols in the form of objects, pictures, gestures, words, thoughts, or some combination of these (Fein, 1979).

Piaget wrote that children developed the capacity for symbolic play in an inverted U-shaped curve, emerging at approximately 12 months of age, increasing to a peak at around four or five years of age with collaborative peer role play, and declining until six or seven years when pretend play behaviors begin to decrease in favor of games-with-rules. Pretense activities begin with isolated instances of self-referenced symbolic activity as the child acts as both the agent and the recipient of pretense (e.g., the child pretends to feed him/herself), then other agents are added and people as well as objects are substituted (e.g., the child feeds father or doll). Still later, the child is able to detach him/herself from the situation and make a substitute object act on another substitute object (e.g., the child makes a doll feed another doll) (Fein, 1979; Piaget, 1962; Bretherton, 1989).

Vygotsky purported that imaginative play was the "leading source of development in the preschool years", leading to abstract thought as a child learned to separate meaning from immediate concrete situations (p. 76, 1966). To make the transition from a concrete relationship with reality to purely symbolic thought, the child depended on objects to act as pivots. For example, in pretending that a stick was a horse, the child used an object (the stick) as a pivot to separate the meaning of horse from a real horse.

### *Use of Objects in Pretense*

Replica play, also known as doll play, is a specific form of imaginative play in which the child uses a character object to make the transition from reality to nonreality. In other words, rather than assuming a role himself or herself, the child ascribes sentient or animate qualities and identities to an object. The replica figure acts as a substitute character for the real representation. For example, a baby rag doll acts as a substitute for a real baby and a G-I Joe figure acts as a substitute for a real soldier (Bretherton, 1989). Replica figures come in a number of forms, including: dolls, historical characters, soldiers, fashion models, animal forms, and television or film characters (Sutton-Smith, 1988). Replica play generally entails a combination of construction, manipulation, gesture, and language. The child participates in replica play through: (1) enactment, as a player acting out the story events, and (2) negotiation, as a narrator or stage manager directing and explaining the events (Rubin & Wolf, 1979)

There is a strong motoric quality to young children's symbolic activities, in which interacting with objects plays an integral part of understanding concepts and symbols (Saltz et al., 1977). Both Piaget (1962) and Vygotsky (1966) reasoned that objects or props were required to support young children's pretend play. While there has been some debate concerning the validity of considering objects as the primary tools in the development of pretend play (Almqvist, 1994; Wolf & Grollman, 1984; Sutton-Smith, 1988; Singer, 1973), there exists ample research in children's developmental use of realistic versus unrealistic objects in pretense. In most of these studies, an array of items beyond replica figures or dolls were included under the designated heading of "objects", such as: furniture, boxes, building blocks, and art supplies. While the objects considered

in this present study were either linked to or not linked to a mass media narrative, the findings and design of object realism studies shared a similar focus, primarily in exploring the impact of object type on children's pretend play behaviors.

The ability to pretend, according to Piaget (1962), was based on semiotic functioning whereby one object was substituted for another as the child gradually developed the increasing ability to separate "signified" and "signifier". According to Piaget (1962), for a very young child, there was minimal need to adapt to reality thus "any object can be a make-believe substitute for any other" (p. 166). As the child approached the fourth year of age, an increasing need for verisimilitude or the need to imitate reality resulted in the child desiring objects, words, and actions accompanying symbolic play to be "exact and true to life" (Piaget, p. 137, 1962). Contrary to Piaget's theory, Vygotsky (1966) believed that the child's need for a substitute or pivot object to resemble a real object decreased as the meaning of the object became detached from the immediate and external stimulation.

Most research supports Vygotsky's theory that representational thought develops from dependence on realistic substitute objects and moves toward less realistic or object-independent abstract thought. Elder and Pederson (1978) found that children over three years performed equally well with substitute objects that were both similar and dissimilar to the referent objects of comb, telephone, cup, and hammer, while children under three years required substitute objects that were similar to the referent objects. McLoyd (1983) observed that 3.5-year-old triads engaged in more noninteractive dramatic play with high-structured objects than with low-structured props, but this effect was not found in 5-year-old triads. Woodard (1984) and Yawkey (1979) stated that younger preschoolers needed

realistic props or objects to assume pretend roles and suggested that once children learned how to make-believe, less realistic toys allowed a child to adapt the material to the direction he or she chose to take, thereby facilitating greater inventiveness and imagination.

Pulaski (1973) determined that minimally structured play materials, including rag dolls and spool dolls, facilitated greater variety and number of pretense themes in kindergartners and first- and second-grade students than highly structured props such as realistic dolls. However, Pulaski found no significant differences in richness of fantasy or transcendence in pretense, measured by distance from the child's reality, as related to structure realism. Phillips (1945) noted that, while preschoolers spent more time exploring high-realism doll play materials, they engaged in a higher number of fantasy themes with low-realism objects, and structure of realism did not affect the amount of imaginative play. Olszewski and Fuson (1982) investigated the effects of toy realism (realistic Fisher Price family figures versus cylindrical figures cut from broomsticks) on the fantasy play speech of 3- and 4-year-olds during doll play and found no significant differences between the high- and low-structure conditions for both age groups.

Wolf and Grollman (1982) suggested a different approach to considering children's use of objects in pretend play, theorizing that equally sophisticated players would consistently take a distinctive and contrasting approach to make-believe, which they termed object-dependent transformational play versus object-independent fantasy play. In other words, differences in how children used objects in play were individualized rather than developmental (see also Jennings, 1975).

In general, the research seems to support the theory that low-realism objects elicit more pretend play themes and that younger preschoolers need the support offered by realistic objects to make-believe, although findings are inconsistent, possibly because there was an overall lack of consensus as to what constituted low-realism versus high-realism in children's play material. For example, Playmobil figurines were considered high-realism objects in one study and low-realism in another.

*Pretense and gender.* In her observations of pretense, McLoyd (1983) found that the themes and roles children enacted were not affected by the organization or level of realism of play materials (i.e., high-structured versus low-structured), but highly related to gender. Research on gender differences in levels of pretend play revealed mixed findings. Some studies pointed to a higher level of pretense in boys (Rubin et al, 1976; Singer, 1973); some studies favored girls (McLoyd, 1980; Woodward 1984); and others revealed no significant gender differences (Pulaski, 1973). Fein (1981) noted that these discrepancies may have resulted from setting factors (e.g., naturalistic versus experimental observations) or the selection of play materials (e.g., sex-typed or neutral).

Researchers on play tend to agree that the difference between boys and girls, from approximately four to nine years of age, takes place at the level of types of roles and themes adopted in their pretense. Boys are more likely to engage in fantastic, fictitious, or violent roles (e.g., monsters, bad guys, superheroes), whereas girls are more likely to engage in quieter, sedentary, and friendlier type roles of the domestic variety (e.g., mother, baby). In terms of themes, boys spend more time play-fighting and killing, whereas girls spend more time in domestic activities and engaging characters in conversations (Pulaski, 1973; McLoyd, 1980).

*Dramatic play centers.* Dramatic play centers are comprised of objects assembled and arranged together to form a particular setting, such as: a kitchen, a restaurant, or a veterinary clinic. Empirical research demonstrated that the contextual design of dramatic play centers impacted the roles and themes children engaged in during pretend play (Howe et al., 1993; Petrakos & Howe, 1996; Dodge & Frost, 1986; Hogan & Howe, 2001). Garvey and Berndt (1976) defined a theme as an “abstract plan” or “representation of an event sequence” (p. 9). The theme, once formed, directs the children’s pretend performance. Garvey and Berndt described themes as “verb-like” processes, such as treat/heal or making a call (p. 10).

Yawkey (1979) wrote that a child’s preferred thematic content in imaginative play depended on the child’s age, as well as his or her current interests and concerns. Griffing (1983) used anecdotal observations to argue that housekeeping was the preferred theme with children, providing them with familiar and meaningful roles. Experimental research demonstrated that role play tended to correspond to the specific setting of a dramatic play center and that children engaged in a greater variety of themes in familiar rather than unfamiliar settings (Howe et al., 1993; Petrakos & Howe, 1996). Familiarity was described as experiences children were most likely to encounter in daily life (e.g., housekeeping, eating at a restaurant, grocery shopping). Girls preferred the housekeeping center, whereas boys preferred the unfamiliar centers and younger children spent more time in familiar centers, whereas older preschoolers favored unfamiliar centers. Of note for this present study, while the variable of unfamiliarity in Howe et al.’s (1993) research included settings that were not typical in children’s day-to-day world (e.g., a farm, a train

station), only one of the ten unfamiliar centers presented to the children depicted a fictional setting: a pirate ship with a treasure chest.

In combining the questions of object realism and dramatic play settings, Dodge and Frost (1986) and Hogan and Howe (2001) found that some realistic props and contextual design, such as dolls and shopping carts, as opposed to exclusively low-realism and decontextualized props, such as boxes and cylinders, were required to stimulate and maintain pretend play. Dodge and Frost (1986) reported tentatively, from their study of twelve 5-year-olds, that the setting of a dramatic play area influenced dramatic play in terms of the types of themes the children engaged in.

The research on object use and dramatic play centers seems to indicate that while some level of realism is required to stimulate pretense, lower realism objects and familiar settings allow for a greater variety of pretense themes, whereas higher realism objects and unfamiliar settings restrict the range of pretense themes. The definition of familiarity as experiences children are likely to encounter in their daily lives implies a direct and real-life experience (Howe et al., 1993). In such a sense, a narrative as experienced via television viewing would be considered an unfamiliar experience and one would expect a resulting restriction of themes. However, this would be difficult to conclude because with American children watching an average of three or four hours of television per day (Greenfield et al., 1993; Kline, 1993), one could argue that children have become very familiar with the indirect and fictive world of media. That is, with the proliferation of mass media and marketing influences in contemporary children's lives, the definition of familiarity has likely broadened.



The significant difference between television and film-based toys and the toys and objects used in the low versus high-realism studies by Pulaski (1973), Phillips (1945), Olszewski and Fuson (1982) and Elder and Pederson (1978) is the source of the toy's meaning. The meaning of low-realism objects depends on what the child chooses to assign to them. The meaning of high-realism objects is demonstrated to the child through real-life exposure to these objects. And the meaning of television and film toys is found in children's mass media fiction. Television and film toys are social symbols with specific scripts, carrying references, meanings and narratives that are conveyed to the child through media forms, including television programs, movies, books, and advertising.

#### *Reality-based versus Fiction-based Pretend Play*

If pretense involves a transformation of reality using simulative or "as if" behavior, how is one to describe pretense based on fiction, in which reality has already been transformed? In keeping with Vygotsky's (1967) theory that symbolic play gradually frees the child from the control of concrete external stimuli, Bretherton (1989) argued that the child's symbolic thought developed from an ability to assimilate personally experienced events to the assimilation of nonfactual events, including fictive themes. Saltz et al. (1977) contended that children would benefit most from symbolic play that was removed furthest from concrete reality, in effect arguing that fictional pretend play, in which children dealt with themes and events that were adopted from sources other than real-life experience, was a more sophisticated form of symbolic play than the more concrete pretense, in which themes and events were invoked from personal experience.

Children learn about both their real and fictive worlds through narratives (Bretherton, 1989). A narrative is a mode of communication through which people's thoughts and feelings are expressed in story form (Bruner, 1986). It is a description of experience centering around characters and a theme or problem, which may or may not be based on actual events (Kavanaugh & Engel, 1998; Fein, 1995). Pretend play and narrative have both been described as forms of symbolic thought, with pretend play being the object-dependent, less developed form of narrative compared with the more sophisticated, abstract form of storytelling (Kavanaugh & Engel, 1998; Fein, 1995).

Real-life pretense, and not just fictive pretense, is based on storylines and narratives. In other words, narratives provide themes and roles for children to enact (Kavanaugh & Engel, 1998). Adults play a key role in socializing children through their narration of real-life experiences (El'Konin, 1966; Bretherton, 1989). From a very young age, children hear real-life narratives from family members as they exchange stories of their daily experiences, for example, about a shopping trip or a school event (Brostrom, 1988). Children learn to talk about their own experiences in script-like format, interpreting and remembering stories and personal events (Bretherton, 1989). Fictional narratives describe situations, themes, and characters that take place outside of the child's realm of experience. Contemporary children experience fictional narratives through storytelling, storybooks, films, and television.

As a result of having heard hundreds of stories, both real-life and fictional, by four years of age, children begin to abstract an understanding of the basic components of the prototypical story, including: characters, setting, a central problem, and the character's efforts to resolve the problem (Galda, 1984). While developing plans for

pretense, the child calls upon and reorganizes experiences shaped in narratives and assimilates pieces of these narratives into imaginative pretend sequences (Kavanaugh & Engel, 1998). Galda (1984) described a pretend sequence as consisting of: (1) constructing a scene, (2) adding characters, and (3) animating the fantasy through action.

Deriving from Freud's (1958, 1959) psychoanalytic theory of play, Bettelheim (1987) emphasized that children's pretense, particularly pretense based on fictional narratives such as fairy tales, helped children to resolve conflicts and to cope with anxiety-provoking life situations. Rather than viewing fictional narratives as confining children's fantasy play, Bettelheim (1977) maintained that stories and fairy tales suggested images, in the form of characters and situations, through which children could organize their imaginations and direct their real-life experiences and trials. However, Bettelheim (1987) was referring to stories and fairy tales in their traditional form and was not addressing television or film fiction. Bazalgette and Buckingham (1995) also emphasized that it was fairy tales in their traditional and unsentimental versions that offered children fantasies through which to face fundamental anxieties and dilemmas.

Although there has been little empirical research distinguishing between real-life and fictional pretend play, Garvey and Berndt (1976) found that pretend play based on young children's daily experiences was more developed than play based on fantasy. In their frequently cited observational research, they examined the themes and roles enacted during spontaneous pretense by nursery school dyads, aged 3 to 5 years, engaged in pretend play in a living room setting. The preschoolers narrated pretense sequences based on everyday familial scripts much more elaborately than sequences of a fictional nature. However, the setting provided to the children in Garvey and Berndt's (1976)

study was a home setting, as the authors' intent was to observe what they called spontaneous pretense, under the assumption that a home environment would provide the most natural and familiar setting for young children. But, as discussed earlier, objects and setting often determine the thematic direction of pretend play (Howe et al., 1993; Petrakos & Howe, 1996). Thus, it is likely that observations of "spontaneous" pretend play in a less home-like setting would have resulted in different findings.

Fein (1995) considered the impact of including a villain or problem state figure, typical of fictional tales, in the composition of replica family figures on children's story productions while enacting the figures. She measured thematic content and story structure using Botvin and Sutton-Smith's (1977) Proppian model of structural complexity, in which stories were rated from simple, familiar event chronicles to more complex problem and resolution tales. She found that the props did impact the themes and structures of stories, with problem state replica figures resulting in significantly more villainy themes and higher levels of story structure.

The research comparing reality versus fiction-based pretend behavior provided inconclusive findings. These studies, however, generally considered fiction of a literary rather than a media-based nature.

#### *Media Effects on Children's Play*

Few studies have been able to prove empirically the effects of television and film on children's development in isolation from other cultural influences. The main argument regarding television viewing effects on the process of imagination is that television provides children with ready-made storylines and easily-recognizable characters around which they can organize their imaginative experiences. Children are

then not provided with the opportunity to develop fantasies based on their own real-life experiences, to create their own ideas, and to play out and master emotional dilemmas (Singer & Singer, 1981; Holt, 1967; Kline, 1993). Sutton-Smith (1988) suggested that character toys derived from commercial television have the same effect on imaginative experiences as television viewing, by confining the framework or content of children's imaginative play to the actions and situations scripted on television.

Studies on the effects of various forms of media suggested that television narratives encouraged more imitative imaginative responses, whereas print or audio-taped narratives elicited more creative responses. Some researchers have argued that it was the audiovisual element of television narratives that limited creativity (Greenfield & Beagles-Roos, 1988; Greenfield et al., 1986; Kerns, 1981; Meline, 1976).

In a rare experimental study on television character toy effects on imagination, Greenfield et al. (1993) looked at short-term effects of audio-visual media on children's play. Specifically, they compared children's stories told using Smurf and Troll toys following either a viewing of a Smurf program or a neutral play activity. They found that the stories following the television program condition were more imitative and less creative than the neutral condition, with the experimental condition of television related toy and television viewing resulting in the most imitative imagination. However the factor seemed to be television viewing rather than the television-related toy, as contrast group #1 (television related toy with neutral activity) stimulated more creative stories than contrast group #2 (neutral toy with television viewing). The authors were careful in their conclusions and suggested that television and television related toys perhaps changed the source of children's imagination rather than the quantity or creativity of

imagination. This study would have been interesting if it had included a fourth variable of a neutral play activity followed by a neutral toy, so that one could compare the effects of media influence with play completely unrelated to television influence.

From a cultural standpoint, the influences of mass media have moved beyond short-term audio-visual effects. Television programs and films have become simply another promotional tool. Using a technique known as media saturation, mass media, toy industries, and licensing agencies have united to inundate children's environments with shows, advertisements, videos, toys, clothes, and an array of products, creating identities in the form of licensed characters (Kline, 1993; Engelhardt, 1987). And from a marketer's perspective, if children play with the toys the way corporate industries intend for them to, rather than being objects of transformation, the toys become the child's means for being transported into the film or television program's fictional world (Kline, 1993).

A number of critics of children's culture have focused on the transcendent nature of play as an argument against viewing the child as a passive victim in a corporate world. Walkerdine (1996) argued that, although the child clearly lives in a world dominated by adults, through the process of play, the child can actively choose to acquire or resist the cultural products and ideas that he or she is provided with. Sutton-Smith (1988) stated that it was the child who controlled the toy, rather than the opposite, so that children would likely play creatively, rather than imitatively, with any toy. And although Singer (1973) was one of the original researchers to question the value of high-realism toys, he considered the relationship between toys and children's play to be interactive and not as simple as it may appear. He reasoned that if a child valued a toy, even a television toy,

his or her motivation to play with the toy would lead to varied and sophisticated levels of play. Almqvist (1994) rejected the notion that educational toys offered superior developmental experiences to children, concurring with Singer (1973) and Sutton-Smith (1988) that it was the child and not the toy who controlled and dictated the fantasy play.

The psychological research cited in this review examined the processes of pretend play and provided empirical evidence into the complex ways children encounter, emulate, and transform the various objects and ideas they are provided with.

Taking into account the developments of market industries and mass media in the last 20 years, contemporary variations of the use of objects in pretend play question could be: Do objects linked with television and film narratives affect children's imaginative play? How do boys and girls negotiate the culture of mass-marketed, media-based toys through the process of pretend play?

#### *The Present Study*

This study examined the effects of toy type (character toys derived from commercial television or film narratives versus toys unrelated to mass media) and gender (boys versus girls) on the pretend play, roles, and themes observed in children's play. Children of 5 years of age were considered as 5-year-olds have been described as being at a peak interest level in symbolic play (Piaget, 1962) and they fall into the targeted 5-8 year age range for toy marketers.

Rather than considering short-term audio-visual connections to toy play, as in Greenfield et al.'s 1993 study, this study maintained that the average child was already familiar with targeted television and film toys, as generalized social symbols with narratives that have been conveyed through a 'total marketing' system: television

programs, movies, advertisements, licensed goods, and peer influence (Kline, 1993).

Toys derived from television or film narratives were termed 'scripted toys', as these toys were designed specifically for children to re-enact the scripts depicted in programs or advertisements. Toys unrelated to these narratives were termed 'unscripted toys'.

The measures of quantity of pretend play, roles, and themes were based on observations of the stories that individual children enacted and described while playing with the objects in each toy type condition.

Four hypotheses were tested. First, based on the inconclusive findings regarding object influences on the quantity of pretense, there would be no toy type effect on the total amount of pretend play observed. This hypothesis might seem to support the arguments by Sutton-Smith (1986), Singer (1973) and Almqvist (1994) that children's capacity for imaginative play transcended the toy's influence, but the hypotheses that follow addressed the concern that the toy's influence in this study could limit children's imaginations. The second hypothesis, based on the findings that role play tended to correspond to the specific context of the setting (Howe et al., 1993; Petrakos & Howe, 1996; Dodge & Frost, 1986; Hogan & Howe, 2001) and arguments that television narratives directed and limited children's role enactments (Kline, 1993; Steinberg & Kincheloe, 1998), was that there would be a higher number of fictive roles in the scripted toy condition. It was expected that these fictive roles would be derived from the related film or television program. Third, based on the research findings that children engaged in a greater variety of themes in familiar, day-to-day settings (Howe et al., 1993; Petrakos & Howe, 1996) and arguments that television-based imaginative play resulted in more imitative imagination (Greenfield et al., 1993; Singer & Singer, 1981; Holt, 1967; Kline,



1993; Sutton-Smith, 1988), a greater variety of themes were expected to be observed in the play with unscripted toys, which could be more easily related to children's real-life experiences than scripted toys (Singer & Singer, 1981; Holt, 1967). Fourth, as promotional toys have been described as clearly gender-typed (Kline, 1993; Paley, 1984; Carlson-Paige & Levin, 1987), boys were predicted to engage in more action and villain/victim roles and more action themes, whereas girls were expected to engage in more monarchy and family roles and more domestic and entertainment themes. Similar but fewer gender differences were expected in the unscripted toy condition (McLoyd, 1983).

## METHOD

### *Participants*

Twenty-eight children (14 boys, 14 girls), five years of age (range 54-66 mos.), participated in this study. The children were recruited from three daycare centers. The parents and educators of the children also participated by filling out questionnaires. A letter was sent to the directors of the centers (see Appendix A). Letters and consent forms to sign and return were given to the children's parents (see Appendix B) and educators (see Appendix C).

### *Materials*

The objects in both toy conditions (scripted versus unscripted) were balanced for number, representation, and size. Levels of realism in both conditions were also matched so that measures were based on scripted versus unscripted differences, rather than differences in levels of object realism. For example, a Barbie doll in the scripted toy condition was matched with a realistic doll, depicting a young woman, in the unscripted

toy condition and the cartoonish Blue's Clues dog in the scripted toy condition was matched with a somewhat caricatured, rather than highly realistic, stuffed dog in the unscripted toy condition. The toys from both conditions are listed in Table 1.

Table 1.

*Description of Toy Type Conditions*

<u>Scripted</u>	<u>Unscripted</u>
Spiderman	Muscular, red male figure
Batman	Muscular, grey knight
Cinderella	Young woman in gown
Prince Charming from <i>Cinderella</i>	Young man in tuxedo
Woody from <i>Toy Story</i>	Cowboy
Princess Fiona from <i>Shrek</i>	Young woman in gown
Donkey from <i>Shrek</i>	Donkey
Powerpuff girls (3)	Girl figures (3)
Maleficent from <i>Sleeping Beauty</i>	Witch
Blues' Clues dog	Dog
Dalmatian from <i>101 Dalmatians</i>	Dalmatian
Madeline	Girl
Arthur and D.W.	Boy and girl
Harry Potter	Boy
Curious George	Monkey
Franklin	Turtle
Thomas the Tank Engine	Train

*Procedure*

Children were tested individually (a pilot-test determined that children were comfortable with this procedure). Each child was brought from his/her classroom to a separate playroom and asked to sit down at a table. Following a warm-up puzzle exercise, toys from one condition (scripted or unscripted) were set up on the table. A similar directive to the Pulaski (1973) procedure was given to the child: "You may play with anything you choose, but I'd like you to make up a story or put on a play for me." Play sessions lasted eight minutes per toy condition. After the first session, the child was offered a second puzzle task in order to change his or her focus. The experimenter then presented the child with toys from the second toy condition. Conditions were presented

in counterbalanced order: (a) scripted toys and (b) unscripted toys. Play sessions were videotaped and the children's pretend play, roles, and themes were scored.

In order to assess for a possible correlation between (1) the children's exposure to the actual films and television programs from which the scripted toys in this study were derived and (2) the types of roles and themes they engaged in with these toys, parents were given a questionnaire regarding their children's familiarity to a list of popular film and television programs (see Appendix D). In order to compare the children's scores on pretend play in this study with their level of pretend play development, a questionnaire was given to the children's daycare educators. Educators were asked to rate the children on: (1) the frequency of their solitary pretend play, (2) the frequency of their collaborative pretend play, and (3) the quality of their pretense (see Appendix E).

*Design.* The two factors, or independent variables, used in this experimental design were: (a) toy type (scripted versus unscripted), and (b) gender (boys versus girls). The dependent variables measured (play, role and theme variables) are listed in Table 2. Other role measures (such as animal and transportation roles) and theme measures (such as riding and prosocial themes) were coded, however the frequencies of these measures were so low that the measures were dropped for the analyses.

Table 2

*Dependent Variables*

<u>Play measures</u>	<u>Role measures</u>	<u>Theme measures</u>
Pretend enactment	Fictive roles	Fictive themes
Low-level pretend negotiation	Archetypical roles	Archetypical themes
High-level pretend negotiation	Reality-based roles	Reality-based themes
Other play (e.g., constructive)	Action roles	Action themes
Non-play	Monarchy roles	Domestic themes
	Villain/victim roles	Good vs bad themes
	Family roles	Entertainment themes
	No roles	No themes

Statistical analyses for the data set were based on a 2 x 2 (gender by toy type) factorial design with repeated measures on each child across levels of toy type (scripted versus unscripted). Analyses of variance, *t*-tests and correlations were performed, with a level of significance set at  $p = .05$ .

### *Measures*

*Play.* Play measures were assessed using a time sampling method in which the children's observed play was scored every 10 seconds. The coding scheme measured the number of 10-second intervals each child spent in the following types of play: pretend enactment, low-level negotiation, high-level negotiation, other play, and non-play (see Appendix F for coding scheme). A child's pretend play interval was coded as enactment when the pretense involved verbal enactment (i.e., through content of speech or exaggerated tone of voice) or physical enactment (i.e., making a toy gesture or move). An example of enactment is a child who makes a figure walk across a table and say, "Waah!" Low-level pretend negotiation was coded for intervals when the child arranged toys with some connection to pretense (e.g., a child spends two minutes quietly lining up characters for a parade). A play interval was coded as high-level pretend negotiation when the child demonstrated preparatory or procedural behaviors, initiated pretend scenarios, assigned roles, and narrated a story. An example of high-level negotiation is a child who says, "Let's say this is the princess and she is in the high tower and then she gets sad." If two or more types of play were observed in one 10-second coding interval, the type of play that predominated in length of time would be coded only. The play coding scheme was based on an adaptation and combination of (1) Rubin's (1978) play observation scale (i.e., pretend play, constructive play, manipulative play, other play, and

non-play), and (2) Doyle and Connolly's (1989) scale for pretend play (i.e., enactment, low-level negotiation, and high-level negotiation). In the analyses, the scores for constructive and manipulative play were so low that they were collapsed into the category of other play.

*Roles.* The role measurements were comprised of: (1) time spent in role play, (2) fictive, archetypical, or reality-based roles, and (3) types of roles. The coding scheme for roles is included in Appendix G.

Time spent in role play was assessed using a time sampling method. For each 10-second interval, the child was scored as engaging in role play or not engaging in role play.

The roles assumed by the children during pretend play were assessed using a frequency count. Any role that was described or enacted by the child was coded as fictive, archetypical, or reality-based. For this study's purposes, the rule for coding a role as fictive was that the role had to have a proper name (e.g., Cinderella, Shrek) or be directly related to a named story character (e.g., Cinderella's stepmother, the villains in the PowerPuff Girls), and have a unique history. The addition of the archetypical category was necessary in order to categorize roles that were neither fictive according to a known narrative nor based on a child's lived reality. For example, the Wicked Witch from the West in *The Wizard of Oz* is unique and fictive as opposed to a "mean witch", which would be coded as archetypical; the Queen from *Sleeping Beauty* is fictive while a queen with no obvious link to mass fiction is archetypical. Reality-based roles were based on the children's day-to-day reality, such as Mommy, doctor, little boy, and dog.

Finally, types of roles were also measured using a frequency count. The coding scheme was adapted from Garvey and Berndt (1976) and McLoyd (1983), and measured: action roles, monarchy roles, villain/victim roles, family roles, other roles, and no roles.

*Themes.* Theme measurements from the children's play sessions included: (1) variety of themes, (2) time spent in thematic play, (3) frequency of fictive, archetypal, and reality-based themes, and (4) types of themes (see Appendix H for coding scheme for themes).

In order to measure variety of themes, the number of different themes, including subcategories of themes, observed in the children's play sessions was counted (see Table 3). If a child enacted or described the same theme two or more times, only one event was counted.

Table 3  
*Theme Categories*

Category	Subcategories
Action themes	fighting/injuring killing/dying flying/moving at superspeed acting tough/talking tough eating another character showing special powers
Good vs bad themes	threatening/plotting/capturing casting spell/transformed by spell rescuing
Domestic themes	parenting/caring for baby or child living in a home or abode sleeping/waking living in a family attending school being sick or hurt caring for a pet shopping/grooming cooking/cleaning/gardening

Entertainment themes	marrying attending party, ball, dance, show wooing the girl/romancing dining out
Other themes	movement riding transportation prosocial animal

No theme

---

The time spent in thematic play was assessed using a time sampling method. For each 10-second interval, the child was scored as engaging in thematic play or not engaging in thematic play.

The themes observed were scored in 10-second time intervals and coded as fictive, archetypical, or reality-based. A theme was coded as fictive if the event sequence was scripted by a film or television program, for example, the Cinderella toy losing her slipper at the ball (fictive as scripted), or the unscripted girl figurine losing her slipper at the ball (fictive unscripted). A theme was coded as archetypical if the situation was clearly not reality-based but not attributed to a known narrative, for example two unscripted "bad guys" killing each other. Finally, reality themes were based on situations in children's daily lives, for example, going to a restaurant. .

Finally, type of theme (i.e., action theme, domestic theme, good versus bad theme, entertainment theme, other theme, no theme) was assessed using 10-second time intervals. If two or more themes were observed in one 10-second coding interval, the predominant theme was coded only. This coding scheme was adapted from Garvey & Berndt (1976) and McLoyd (1983).

*Parent questionnaire.* Parents were given a questionnaire in order to rate their children's familiarity to popular film and television programs (see Appendix D for parent questionnaire). Parents were asked to check off one of three categories to describe the number of times their children were exposed to each film or television program: (i) never, (ii) 1 to 2 times, and (iii) 3 or more times. For the analyses, a score per program was given by allotting each parent rating as: 0 = never, 1 = 1 to 2 times, and 2 = 3 or more times. One composite score per child was created by summing the individual program scores.

*Educator questionnaire.* Educators were asked to rate the children on: (1) the frequency of their solitary pretend play; (2) the frequency of their collaborative pretend play; and (3) the quality of their pretense (see Appendix E for educator questionnaire). Frequency of solitary and collaborative pretend play were rated on a scale of one to three (1 = never, 2 = occasionally, and 3 = frequently). Quality of pretense was also rated on a three-point scale (1 = below average, 2 = average, and 3 = above average).

#### *Reliability*

Using the videotaped play sessions, two observers were trained on the coding schemes developed for measurements of play, roles, and themes. Interrater reliability was assessed for 25% of all observations (7 of 28 participants). The percentage agreement for play was 83.0%, for roles 84.5% and for themes 85.7%. An overall *kappa* coefficient of .80 was achieved.



## RESULTS

### *Descriptive Statistics*

The descriptive data consisted of frequencies, percentages, and mean scores of the children's play, role, and theme variables by toy type (scripted toy condition versus unscripted toy condition) and gender (boys versus girls). Relevant data will be included in the results section.

Missing data resulted because 4 out of 28 children did not complete a full play session in one of the two toy conditions, therefore proportion scores were calculated for each variable within that toy condition. Proportion scores were calculated by using the following formula:  $\text{proportion score} = \text{observed score} \times (48/\text{number of intervals})$ . For example, if a child completed only 39 out of 48 play intervals and was observed to score 14 in the measurement of pretend enactment, the proportion score for pretend enactment would be:  $14 \times (48/39) = 17.2$ .

The hypotheses were tested as follows: (a) comparisons of types of play in the scripted toy condition versus the unscripted toy condition, (b) the frequency of fictive roles in the scripted toy condition compared to the unscripted toy condition, (c) the variety of themes in the scripted toy condition compared to the unscripted toy condition, and (d) comparisons of the types of roles and themes observed between boys and girls, and in the scripted toy condition versus the unscripted toy condition.

In order to measure whether age was related to any of the measured variables, a bivariate correlation was run between age and all other measures. One significant correlation was found: a negative correlation between the category of monarchy roles in the scripted toy condition and age,  $r = -.50$ , which likely occurred by chance.

### *Toy Type and Gender Effects on Play Measures*

The purpose of the first set of analyses was to investigate Hypothesis #1 that children would engage in the same amount of pretend play in the scripted toy condition as in the unscripted toy condition. For this analysis, the five measured categories of play were collapsed into three categories: (1) total pretend play (comprised of a composite score of pretend enactment, low-level pretend negotiation and high-level pretend negotiation), (2) other play (comprised of constructive play, exploratory play and other play such as games-with-rules), and (3) non-play behaviors (see Table 4 for mean scores of play by toy type and Table 5 for mean scores of play by gender).

Table 4

*Mean Scores of Three Categories of Play by Toy Type*

Type of Play	Scripted		Unscripted	
	Mean	SD	Mean	SD
Pretend Play	30.53	11.71	27.69	15.11
Other Play	8.67	7.27	9.60	9.96
Non-Play	8.88	7.06	10.72	9.65

Table 5

*Mean Scores of Three Categories of Play by Gender*

Type of Play	Boys		Girls	
	Mean	SD	Mean	SD
Pretend Play	54.54	23.72	61.89	23.89
Other Play	17.77	14.49	18.76	15.88
Non-Play	23.83	15.43	15.36	13.52

In order to examine the hypothesis that toy type would have no influence on total amount of pretend play, and to explore for gender differences, 2 x 2 repeated-measures analyses of variance were performed with the following play variables as dependent measures: (1) total pretend play, (2) other play, and (3) non-play. The within-subjects factor was toy type (scripted versus unscripted) and the between-subjects factor was gender (boys versus girls). Results of the three ANOVA's are reported in Tables 6 to 8.

Table 6  
*Analysis of Variance for Total Pretend Play*

Source	<i>df</i>	<i>F</i>	<i>p</i>
Toy type	1, 26	1.31	<i>ns</i>
Gender	1, 26	.42	<i>ns</i>
Toy type x gender	1, 26	.77	<i>ns</i>

\**p* < .05, \*\**p* < .01.

Table 7  
*Analysis of Variance for Other Play*

Source	<i>df</i>	<i>F</i>	<i>p</i>
Toy type	1, 26	.29	<i>ns</i>
Gender	1, 26	.03	<i>ns</i>
Toy type x gender	1, 26	.43	<i>ns</i>

\**p* < .05, \*\**p* < .01.

Table 8  
*Analysis of Variance for Non-Play*

Source	<i>df</i>	<i>F</i>	<i>p</i>
Toy type	1, 26	1.44	<i>ns</i>
Gender	1, 26	2.39	<i>ns</i>
Toy type x gender	1, 26	.41	<i>ns</i>

\**p* < .05, \*\**p* < .01.

*Summary.* The analyses revealed no significant toy type or gender effects on total amount of pretend play, other play, and non-play. Therefore, the null hypothesis that toy type (scripted versus unscripted) and gender (boys versus girls) would not influence the amount of pretend play was supported. Further analysis of the pretend play data follows.

#### *Toy Type and Gender Effects on Categories of Pretend Play*

As the observations of the children's play indicated some possibly interesting and unexpected toy type effects in the subcategories of pretend play, further exploratory analyses were conducted, though they deviated somewhat from the study's original hypotheses. The pretend play behaviors of the children were observed over three subcategories of pretense: (1) pretend enactment, (2) low-level pretend negotiation, and (3) high-level pretend negotiation (see Table 9 and Figure 1 for mean scores of categories

of pretend play by toy type, and Table 10 for mean scores of categories of pretend play by gender).

Table 9  
*Mean Scores of Types of Pretend Play by Toy Type*

<i>Type of Play</i>	Scripted		Unscripted	
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
Enactment	16.10	9.87	10.20	8.93
Low-level	5.94	6.46	5.64	6.35
High-level	8.49	6.91	11.85	9.50

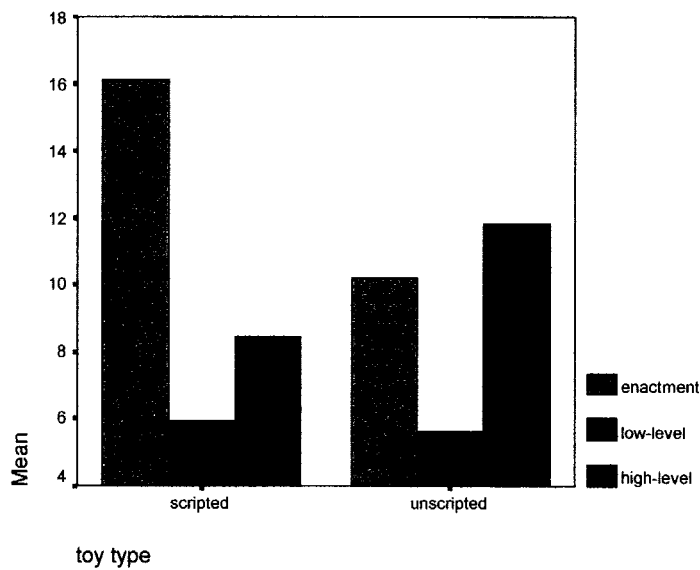


Figure 1  
Mean scores of types of pretend play by toy type

Table 10  
*Mean Scores of Types of Pretend Play by Gender*

<i>Type of Play</i>	Boys		Girls	
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
Enactment	28.16	18.93	24.44	15.90
Low-level	7.65	8.32	15.51	11.13
High-level	18.73	11.92	21.93	14.84

In order to examine the data for toy type and gender effects on the categories of pretend play behavior, repeated-measures ANOVA's were performed on the three measures of pretense: (1) pretend enactment, (2) low-level pretend negotiation, and

(3) high-level pretend negotiation. Again, the within-subjects factor was toy type and the between-subjects factor was gender.

Table 11  
*Analysis of Variance for Pretend Enactment*

Source	<i>df</i>	<i>F</i>	<i>p</i>
Toy type	1, 26	18.25**	.01
Gender	1, 26	.32	<i>ns</i>
Toy type x gender	1, 26	2.54	<i>ns</i>

\* $p < .05$ , \*\* $p < .01$ .

The results of the repeated-measures ANOVA for pretend enactment are reported in Table 11. A significant toy type effect was found on the pretend enactment variable. Significantly more pretend enactment was observed in the scripted toy condition compared to the unscripted toy condition.

Table 12  
*Analysis of Variance for Low-Level Pretend Negotiation*

Source	<i>df</i>	<i>F</i>	<i>p</i>
Toy type	1, 26	.05	<i>ns</i>
Gender	1, 26	4.49*	.04
Toy type x gender	1, 26	.05	<i>ns</i>

\* $p < .05$ , \*\* $p < .01$ .

The repeated-measures ANOVA for low-level pretend negotiation (see Table 12 for ANOVA results) revealed a significant main effect for gender, with more low-level negotiation observed with girls.

Table 13  
*Analysis of Variance for High-Level Pretend Negotiation*

Source	<i>df</i>	<i>F</i>	<i>p</i>
Toy type	1, 26	3.73	.07
Gender	1, 26	.39	<i>ns</i>
Toy type x gender	1, 26	5.42*	.03

\* $p < .05$ , \*\* $p < .01$ .

The results of the repeated-measures ANOVA for high-level pretend negotiation are reported in Table 13. A trend was apparent that somewhat more high-level negotiation was observed with unscripted toys than with scripted toys. However this

effect can be better explained by a significant interaction effect (toy type x gender) on high-level pretend negotiation (see Table 14 for gender by toy type mean scores).

Results of follow-up  $t$ -tests revealed the following interaction effects: girls in the unscripted toy condition engaged in significantly more high-level pretend negotiation than girls in the scripted toy condition,  $t(13) = 3.21, p < .01$ . There was also a trend observed that girls playing with unscripted toys engaged in more high-level pretend negotiation than boys playing with unscripted toys,  $t(13) = 1.79, p = .10$ . Results are depicted in Figure 2.

Table 14  
*Toy Type By Gender Mean Scores for High-Level Pretend Negotiation*

	Boys		Girls	
	M	SD	M	SD
Scripted	9.71	7.50	7.26	6.30
Unscripted	9.02	7.90	14.67	10.37

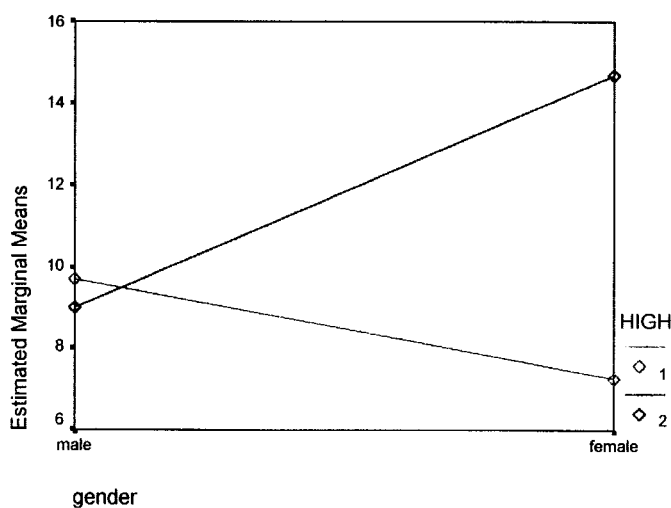


Figure 2

Toy type by gender interaction for high-level pretend negotiation

*Summary.* While the null hypothesis that toy type would not influence the total amount of pretend play was supported, the results of the separate ANOVA's on subcategories of pretend play behavior revealed that toy type and gender did influence

the three subcategories: pretend enactment, low-level pretend negotiation, and high-level pretend negotiation. Specifically: (1) more pretend enactment was found with scripted toys than with the unscripted toys, (2) girls were observed to engage in more low-level pretend negotiation than boys, and (3) a trend revealed that somewhat more high-level negotiation was found with unscripted toys than with scripted toys, as girls playing in the unscripted toy condition were observed in significantly more high-level negotiations compared to girls in the scripted toy condition.

#### *Role Measures*

Roles engaged in by the children in the play sessions were measured on three levels: (1) time spent in role play, (2) frequency of fictive, archetypal, and reality-based roles, and (3) types of roles observed. Total percentages and mean scores of observation intervals spent in role play in the two toy conditions are listed in Table 15.

Table 15

#### *Total Percentages and Mean Scores of Time Spent in Role Play by Toy Type*

	Scripted			Unscripted		
	%	Mean	SD	%	Mean	SD
Engaged in role play	(73.8)	35.44	9.46	(65.0)	31.22	12.50
Not engaged in role play	(26.2)	12.56	9.46	(35.0)	16.78	12.50

Supplementary analyses showed that in the scripted toy condition, the children were engaged in roles during 73.8% of the observations and in the unscripted toy condition, the children engaged in role play 65.0% of the time. A paired samples *t*-test comparing the mean scores of intervals spent in role play indicated that the children engaged in significantly more role-playing in the scripted toy condition compared to the unscripted toy condition,  $t(27) = 2.19, p < .05$ .

*Toy type and gender effects on fictive roles.* The frequency of fictive roles observed in the scripted toy condition was scored in two categories: (1) fictive roles that were scripted by the toys (e.g., a child enacting Cinderella with a Cinderella replica toy) and (2) fictive roles that involved a transformation of a toy's scripted identity (e.g., a child enacting Sleeping Beauty with a Cinderella replica toy). Fictive roles in the unscripted toy condition always involved a transformation of a toy's identity from a non-fictive character to a fictive character (e.g., a child enacting Cinderella with a toy that depicted a young woman). For the purposes of testing Hypothesis #2, namely that a higher number of fictive roles would be observed in the scripted toy condition, scripted and transformed fictive roles in the scripted condition were collapsed into a total score of fictive roles. Mean scores of fictive roles by toy type are listed in Table 16 and mean scores of fictive roles by gender are listed in Table 17.

Table 16  
*Mean Scores of Fictive Roles by Toy Type*

Type of Role	Scripted		Unscripted	
	Mean	SD	Mean	SD
Fictive (as scripted)	34.29	23.41	N/A	N/A
Fictive (transformed scripted)	7.11	12.38	N/A	N/A
Fictive (total)	41.40	26.27	8.03	12.69

Table 17  
*Mean Scores of Fictive Roles by Gender*

Type of Role	Boys		Girls	
	Mean	SD	Mean	SD
Fictive (as scripted)	40.21	20.49	28.37	25.35
Fictive (transformed scripted)	5.43	9.96	8.79	14.60
Fictive (total)	54.81	27.40	44.03	35.98

In order to test Hypothesis #2, as well as to explore for gender effects, a 2 x 2 repeated-measures analysis of variance was performed. The dependent variable was



fictive roles. The between-subjects factor was toy type and the within-subjects factor was gender.

Table 18  
*Analysis of Variance for Fictive Roles*

Source	<i>df</i>	<i>F</i>	<i>p</i>
Toy type	1, 26	44.35**	.00
Gender	1, 26	.80	<i>ns</i>
Toy type x gender	1, 26	.38	<i>ns</i>

\* $p < .05$ , \*\* $p < .01$ .

The repeated-measures ANOVA for fictive roles (see Table 18 for ANOVA results) showed that significantly more fictive roles were observed in the scripted toy condition compared to the unscripted toy condition. This finding supported the hypothesis that more fictive roles would be observed in the scripted toy condition compared to the unscripted toy condition.

In order to further analyse the finding that more fictive roles were observed in the scripted toy condition, separate *t*-tests were run comparing fictive roles from the unscripted toy condition with: (1) fictive roles as scripted in the scripted toy condition, and (2) transformed fictive roles in the scripted toy condition (see Table 16 for mean scores of fictive roles by toy type). Results indicated that there was no significant difference between the mean scores of fictive roles from the unscripted condition and fictive roles transformed in the scripted condition,  $t(27) = .31$ , *ns*. There was a significant difference between mean scores of fictive roles scripted by the toys and fictive roles in the unscripted condition,  $t(27) = 5.59$ ,  $p < .01$ . This suggests that the children engaged in role transformations, in both toy conditions, at a comparable frequency. The difference in the total number of fictive roles observed between the scripted and the

unscripted toy conditions was, therefore, due to the large number of fictive roles that were scripted by the toys in the scripted toy condition.

*Toy type and gender effects on archetypical and reality-based roles.* The mean scores for fictive, archetypical, and reality-based roles by toy type are listed in Table 19 and depicted in Figure 3. Mean scores of roles by gender are listed in Table 20.

Table 19

*Mean Scores of Fictive, Archetypical, and Reality-Based Roles by Toy Type*

Type of Role	Scripted		Unscripted	
	Mean	SD	Mean	SD
Fictive	41.40	26.27	8.03	12.69
Archetypical	9.36	13.95	18.98	19.80
Reality-based	12.05	17.77	32.45	30.43

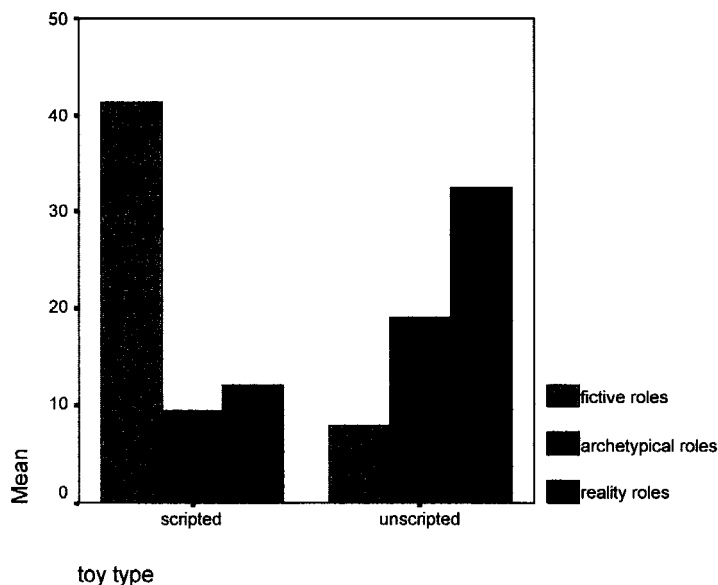


Figure 3

Mean scores for fictive, archetypical, and reality-based roles by toy type

Table 20  
*Mean Scores of Fictive, Archetypical, and Reality-Based Roles by Gender*

Type of Role	Boys		Girls	
	Mean	SD	Mean	SD
Fictive	54.81	27.40	44.03	35.98
Archetypical	36.25	28.56	20.42	28.62
Reality-based	26.90	33.73	62.10	39.12

Supplementary analyses on archetypical and reality-based roles were conducted.

In order to consider toy type and gender effects on non-fictive roles, repeated-measures ANOVA's were performed on the following dependent measures: (1) archetypical roles and (2) reality-based roles. The within-subjects factor was toy type and the between-subjects factor was gender.

Table 21  
*Analysis of Variance for Archetypical Roles*

Source	<i>df</i>	<i>F</i>	<i>p</i>
Toy type	1, 26	11.70**	.00
Gender	1, 26	2.15	<i>ns</i>
Toy type x gender	1, 26	13.17**	.00

\* $p < .05$ , \*\* $p < .01$ .

Results of the ANOVA for archetypical roles are listed in Table 21. A significant toy type effect was found, with more archetypical roles observed in the unscripted toy condition than in the scripted condition. There was also a significant interaction effect (gender x toy type) (see Table 22 for gender x toy type mean scores). Follow-up *t*-tests revealed the following interaction effects: boys enacted more archetypical roles in the unscripted toy condition than: (1) girls in the unscripted toy condition,  $t(13) = 3.51$ ,  $p < .01$ , (2) girls in the scripted toy condition,  $t(13) = 2.60$ ,  $p < .05$ , and (3) boys in the scripted toy condition,  $t(13) = 3.94$ ,  $p < .01$ . Results are depicted in Figure 4.

Table 22  
*Toy Type by Gender Mean Scores for Archetypical Roles*

	Boys		Girls	
	M	SD	M	SD
Scripted	8.21	11.90	10.50	16.12
Unscripted	28.04	21.06	9.92	13.92

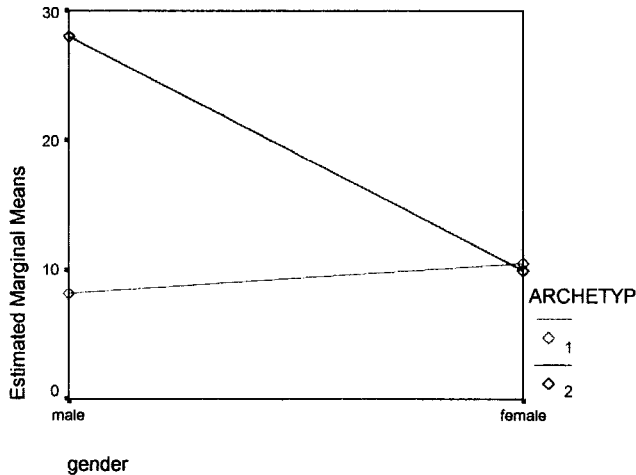


Figure 4  
Toy type by gender interaction for archetypical roles

Table 23  
*Analysis of Variance for Reality-Based Roles*

Source	df	F	p
Toy type	1, 26	14.72**	.00
Gender	1, 26	6.50*	.02
Toy type x gender	1, 26	3.90	.06

\*  $p < .05$ , \*\*  $p < .01$ .

ANOVA results for reality-based roles (see Table 23) revealed a significant toy type effect on the children’s engagement in reality-based roles. More reality roles were observed in the unscripted toy condition compared to the scripted toy condition (see Table 18 for mean scores). A significant gender effect revealed that girls engaged in more reality-based roles than boys (see Table 20 for mean scores). Finally, there was also a trend for an interaction effect (gender x toy type) on reality-based roles (see Table 24 for gender x toy type mean scores). Follow-up *t*-tests revealed the following

interaction effects: girls in the unscripted toy condition engaged in significantly more reality-based roles than: (1) girls in the scripted toy condition,  $t(13) = 3.48, p < .01$ , (2) boys in the scripted toy condition,  $t(13) = 3.81, p < .01$ , and (3) boys in the unscripted toy condition,  $t(13) = 2.59, p < .05$ . Results are presented in Figure 5.

Table 24  
*Toy Type by Gender Mean Scores for Reality-Based Roles*

	Boys		Girls	
	M	SD	M	SD
Scripted	8.50	15.14	15.59	19.99
Unscripted	18.40	24.04	46.51	30.32

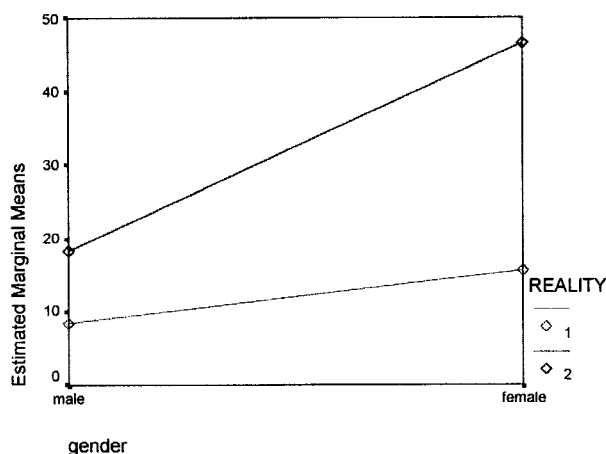


Figure 5  
Toy type by gender interaction for reality roles

*Summary.* Significant toy type main effects were found for all three measures of fictive, archetypical, and reality-based roles. More fictive roles were observed in the play sessions with scripted toys. This finding supports Hypothesis #2, that more fictive roles would be observed in the scripted toy condition compared to the unscripted toy condition, and that the fictive roles would be scripted by the toys.

The results further revealed that more archetypical and reality-based roles were observed in the unscripted toy condition. A significant gender effect was found with reality-based roles, whereby girls were observed in more reality-based roles than boys,

particularly in the unscripted toy condition. An interaction effect for archetypical roles revealed that boys engaged in the highest number of archetypical roles in the unscripted toy condition.

### *Theme Measures*

Theme measurements from the children's play sessions included: (1) variety of themes, (2) time spent in thematic play, (3) frequency of fictive, archetypical and reality-based themes, and (4) types of themes observed.

*Variety of themes.* To test Hypothesis #3 regarding the variety of themes in the toy conditions, the themes were coded based on an observational scheme of six categories (action, good versus bad, domestic, entertainment, other themes, and no themes). The thematic categories were also broken down into subcategories (see Table 3 for list of subcategories).

In order to test Hypothesis #3, namely that there would be a higher variety of themes enacted in the unscripted toy condition, the number of different themes observed in the children's play sessions was counted. If a child enacted or described the same theme two or more times, only one event was counted. All theme subcategories were included in this score. The mean total scores of different themes observed in both toy conditions are listed in Table 25.

Table 25

#### *Mean Scores of Different Themes Observed in the Two Toy Conditions*

	N	Mean	SD
Scripted toy condition	28	8.2143	3.9848
Unscripted toy condition	28	7.3214	3.7816

A paired samples *t* – test was performed to compare the mean scores of different themes observed in the scripted and unscripted conditions. No significant effect was

found,  $t(27) = 1.05$ , *ns*, thus the hypothesis that there would be a greater variety of themes observed in the unscripted toy condition was not supported.

*Summary.* The results of the analysis on thematic categories did not support Hypothesis #3 that there would be a higher variety of themes observed in the unscripted toy condition.

*Time spent in thematic play.* Total percentages and mean scores of observation intervals spent in thematic play in the two toy conditions are listed in Table 26.

Table 26

*Total Percentages and Mean Scores of Time Spent in Theme Play by Toy Type*

	Scripted			Unscripted		
	%	Mean	SD	%	Mean	SD
Engaged in theme play	(64.9)	31.15	10.67	(55.0)	26.40	14.13
Not engaged in theme play	(35.1)	16.88	10.67	(45.0)	21.65	14.13

Supplementary analyses revealed that, in the scripted condition, the children were involved in thematic play during 64.9% of the observations and in the unscripted condition, the children engaged in thematic play 55.0% of the time. A paired samples *t*-test comparing the mean scores of intervals spent in thematic play indicated that the children engaged in a significantly higher number of themes in the scripted toy condition compared to the unscripted toy condition,  $t(27) = 2.31$ ,  $p < .05$ .

*Toy type and gender effects on fictive, archetypical, and reality-based themes.*

Supplementary analyses were also performed on fictive, archetypical, and reality-based themes. The thematic play of the children was coded into the following three theme categories: fictive, archetypical, and reality-based themes (see Table 27 and Figure 6 for mean scores of fictive, archetypical, and reality-based themes by toy type and Table 28 for mean scores by gender).

Table 27

*Mean Scores of Fictive, Archetypical, and Reality-Based Themes by Toy Type*

Type of Theme	Scripted		Unscripted	
	Mean	SD	Mean	SD
Fictive	16.86	13.01	4.31	8.54
Archetypical	4.63	6.41	8.89	7.58
Reality-based	9.66	9.13	13.20	12.10

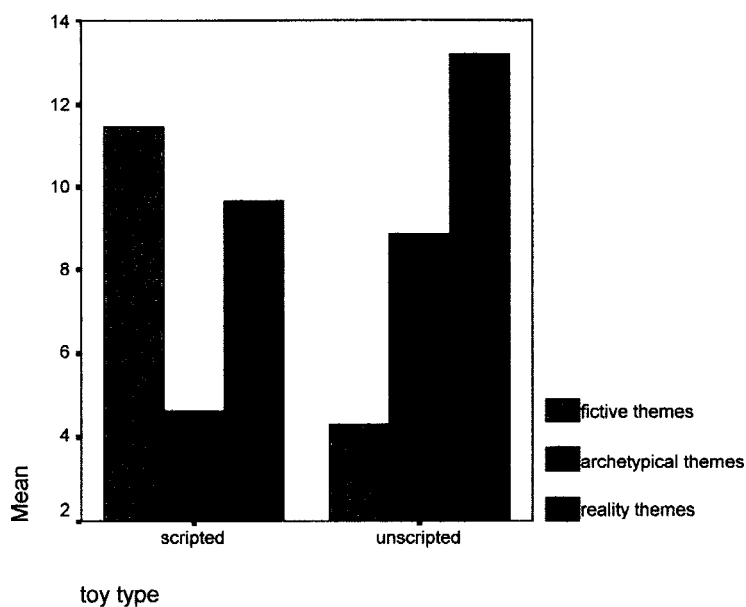


Figure 6

Mean scores for fictive, archetypical, and reality-based themes by toy type

Table 28

*Mean Scores of Fictive, Archetypical, and Reality-Based Themes by Gender*

Type of Theme	Boys		Girls	
	Mean	SD	Mean	SD
Fictive	27.30	18.58	15.05	14.71
Archetypical	16.96	13.90	10.07	11.24
Reality-based	11.29	7.68	34.44	20.04

In order to examine toy type and gender effects on fictive, archetypical, and reality-based themes, 2 x 2 repeated-measures analyses of variance were performed on the three theme variables. The three dependent measures were fictive, archetypical, and



reality-based themes. The within-subjects factor was toy type and the between-subjects factor was gender.

Table 29  
*Analysis of Variance for Fictive Themes*

Source	<i>df</i>	<i>F</i>	<i>p</i>
Toy type	1, 26	30.17**	.00
Gender	1, 26	3.74	.06
Toy type x gender	1, 26	.57	<i>ns</i>

\* $p < .05$ , \*\* $p < .01$ .

First, results of the ANOVA for fictive themes (see Table 29) revealed a significant toy type effect. More fictive themes were observed in the scripted toy condition than in the unscripted condition (see Table 27). There was also a trend for gender effects on fictive themes, with boys observed as engaging in more fictive themes than girls (see Table 28).

Table 30  
*Analysis of Variance for Archetypical Themes*

Source	<i>df</i>	<i>F</i>	<i>p</i>
Toy type	1, 26	9.18**	.00
Gender	1, 26	2.08	<i>ns</i>
Toy type x gender	1, 26	4.06*	.05

\* $p < .05$ , \*\* $p < .01$ .

Second, the results for the ANOVA on archetypical themes are listed in Table 30. A significant main effect for toy type revealed that more archetypical themes were observed in the unscripted toy condition compared to the scripted condition. There was also a significant interaction effect (gender x toy type) observed (see Table 31 for gender by toy type mean scores). Results of separate  $t$  – tests revealed the following interaction effects: boys in the unscripted toy condition were observed in significantly more archetypical themes than: (1) boys in the scripted toy condition,  $t(13) = 2.97, p < .01$ , (2) girls in the scripted toy condition,  $t(13) = 3.70, p < .01$ , and (3) girls in the unscripted toy condition,  $t(13) = 2.87, p < .01$ . Results are graphed in Figure 7.

Table 31  
*Gender By Toy Type Mean Scores for Archetypical Themes*

	Boys		Girls	
	M	SD	M	SD
Scripted	4.93	6.56	4.32	6.49
Unscripted	12.04	9.68	5.75	6.04

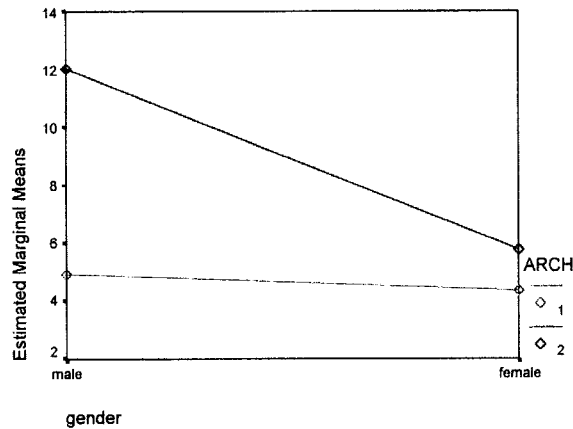


Figure 7  
 Toy type by gender interaction for archetypical themes

Table 32  
*Analysis of Variance for Reality-Based Themes*

Source	df	F	p
Toy type	1, 26	3.57	.07
Gender	1, 26	16.28*	.00
Toy type x gender	1, 26	1.26	ns

\* $p < .05$ , \*\* $p < .01$ .

Finally, ANOVA results for reality-based themes (see Table 32) revealed a significant gender main effect, with girls being observed in more reality-based themes than boys (see Table 28). A toy type trend was also apparent, with more reality themes being observed in the unscripted toy condition compared to the scripted condition (see Table 27).

*Summary.* Significant toy type main effects were found for fictive and archetypical themes, with more fictive themes observed in the scripted toy condition and more archetypical themes observed in the unscripted toy condition. A toy type trend

revealed that more reality themes were observed in the unscripted toy condition. A toy type by gender interaction effect for archetypical themes showed that boys in the unscripted toy condition were observed in the highest number of archetypical themes.

#### *Gender Effects on Roles and Themes*

The following analyses addressed Hypothesis #4, namely that boys would engage in more action and villain/victim roles and more action themes, whereas girls would engage in more monarchy and family roles and more domestic and entertainment themes.

*Roles.* The purpose of the following analyses was to test the first part of Hypothesis 4 pertaining to roles. Boys were expected to engage in more action and villain/victim roles, whereas girls were predicted to engage in more monarchy and family roles. Moreover, these differences were expected to be more pronounced in the scripted toy condition. Mean scores for the four types of roles (action, villain/victim, monarchy, and family) by toy type are listed in Table 33 and by gender in Table 34.

Table 33  
*Mean Scores of Types of Roles by Toy Type*

Type of Role	Scripted		Unscripted	
	Mean	SD	Mean	SD
Action	17.75	21.99	9.65	12.84
Victim/Villain	1.71	2.94	4.37	5.35
Monarchy	11.24	12.19	5.09	9.76
Family	6.06	14.63	9.66	14.96

Table 34  
*Mean Scores of Types of Roles by Gender*

Type of Role	Boys		Girls	
	Mean	SD	Mean	SD
Action	47.43	34.06	7.38	9.44
Victim/Villain	8.03	9.09	4.14	5.04
Monarchy	8.72	10.36	23.95	23.54
Family	4.32	9.26	27.12	31.58

A series of 2 x 2 repeated-measures ANOVA's were performed using the four role variables (action, victim/villain, monarchy, and family) as dependent measures. The within-subjects factor was toy type and the between-subjects factor was gender. Results of the ANOVA's are listed in Tables 35-37.

Table 35  
*Analysis of Variance for Action Roles*

Source	<i>df</i>	<i>F</i>	<i>p</i>
Toy type	1, 26	6.53*	.02
Gender	1, 26	17.98**	.00
Toy type x gender	1, 26	.84	<i>ns</i>

\* $p < .05$ , \*\* $p < .01$ .

First, significant toy type and gender effects were found for action roles (see Table 35). Significantly more action roles were observed in the scripted toy condition and boys were found to engage in significantly more action roles than girls.

Table 36  
*Analysis of Variance for Victim/Villain Roles*

Source	<i>df</i>	<i>F</i>	<i>p</i>
Toy type	1, 26	10.39**	.00
Gender	1, 26	1.96	<i>ns</i>
Toy type x gender	1, 26	.39	<i>ns</i>

\* $p < .05$ , \*\* $p < .01$ .

Second, the results of the ANOVA for victim/villain roles, as listed in Table 36, show a significant toy type effect. Significantly more victim/villain roles were observed in the unscripted toy condition compared with the scripted toy condition (see Table 33).

Table 37  
*Analysis of Variance for Monarchy Roles*

Source	<i>df</i>	<i>F</i>	<i>p</i>
Toy type	1, 26	9.35**	.01
Gender	1, 26	4.91*	.04
Toy type x gender	1, 26	.05	<i>ns</i>

\* $p < .05$ , \*\* $p < .01$ .

Third, the ANOVA for monarchy roles (see Table 37) indicated both a significant toy type effect and gender effect. More monarchy roles were observed in the scripted toy condition, and more girls engaged in monarchy roles than boys (see Table 34).

Table 38  
*Analysis of Variance for Family Roles*

Source	<i>df</i>	<i>F</i>	<i>p</i>
Toy type	1, 26	1.59	<i>ns</i>
Gender	1, 26	6.72*	.02
Toy type x gender	1, 26	.04	<i>ns</i>

\* $p < .05$ , \*\* $p < .01$ .

Finally, the analysis for family roles (see Table 38) revealed a significant gender effect, with girls engaging in more family roles than boys.

*Gender effects on types of themes.* The purpose of the next analyses was to test the second part of Hypothesis #4, that girls would be observed enacting more domestic and entertainment themes and that boys would be observed enacting more action themes. Moreover, both differences would be more pronounced in the scripted toy condition. Mean scores for the three categories of themes (action, domestic, and entertainment) by toy type are listed in Table 39 and by gender in Table 40. As the frequency of other themes (e.g., transportation and animal themes) were so low, the analyses for these measures were not included.

Table 39  
*Mean Scores of Types of Themes by Toy Type*

Type of Theme	Scripted		Unscripted	
	Mean	SD	Mean	SD
Action	10.26	10.28	6.06	7.42
Domestic	3.35	4.73	5.01	6.44
Entertainment	4.25	9.22	3.59	7.50

Table 40  
*Mean Scores of Types of Themes by Gender*

Type of Theme	Boys		Girls	
	Mean	SD	Mean	SD
Action	27.41	17.16	5.23	5.34
Domestic	4.34	4.42	12.37	8.99
Entertainment	1.92	2.33	13.75	19.66

A series of 2 x 2 repeated-measures analyses of variance were run on the theme measurements, with the following dependent variables: action, domestic, and entertainment themes. The within-subjects factor was toy type and the between-subjects factor was gender. Results of the ANOVA's on types of themes are listed in Tables 41-43.

Table 41  
*Analysis of Variance for Action Themes*

Source	<i>df</i>	<i>F</i>	<i>p</i>
Toy type	1, 26	14.08**	.00
Gender	1, 26	21.31**	.00
Toy type x gender	1, 26	3.56	.07

\* $p < .05$ , \*\* $p < .01$ .

First, ANOVA results for action themes (see Table 41) revealed significant toy type and gender main effects. More action themes were observed in the scripted toy condition compared to the unscripted toy condition, and boys engaged in more action themes than girls. Also, a toy type by gender interaction trend was evident for action themes, with boys engaging in more action themes in the scripted toy condition.

Table 42  
*Analysis of Variance for Domestic Themes*

Source	<i>df</i>	<i>F</i>	<i>p</i>
Toy type	1, 26	1.20	<i>ns</i>
Gender	1, 26	9.01**	.01
Toy type x gender	1, 26	.25	<i>ns</i>

\* $p < .05$ , \*\* $p < .01$ .

Second, in the ANOVA for domestic themes, a significant gender effect was found (see Table 42). More girls were observed engaging in domestic themes than boys.

Table 43

*Analysis of Variance for Entertainment Themes*

Source	<i>df</i>	<i>F</i>	<i>p</i>
Toy type	1, 26	.21	<i>ns</i>
Gender	1, 26	5.00*	.03
Toy type x gender	1, 26	.36	<i>ns</i>

\* $p < .05$ , \*\* $p < .01$ .

Finally, ANOVA results for entertainment themes (as listed in Table 43) revealed a gender effect. Girls were observed to engage in more entertainment themes than boys.

*Summary.* The results of the ANOVA's on the types of roles and themes observed partially supported Hypothesis #4 regarding gender effects. In terms of roles, ANOVA results revealed that boys did engage in more action roles, and girls engaged in more monarchy and family roles. However, there was no significant gender difference in the number of victim/villain roles observed. More action and monarchy roles were observed in the scripted toy condition, but there was no significant toy type difference in the number of family roles observed. Therefore, the results support the hypothesis, for action and monarchy roles, that gender differences would be found and more pronounced in the scripted toy condition. Gender differences were observed with family roles, but were not more pronounced in the scripted condition and the results did not support the hypothesis for villain/victim roles. In terms of gender effects on themes, the ANOVA results also offered partial support. Girls did engage in significantly more domestic and entertainment themes, and boys engaged in significantly higher numbers of action themes. More action themes were observed in the scripted toy condition, but there were no toy type effects on domestic and entertainment themes. Therefore, the hypothesis that

gender differences in themes would be more pronounced in the scripted toy condition was supported for boys, but not supported for girls.

#### *Parent Ratings on Children's Exposure to Fictional Narratives*

Through a questionnaire, parents rated the frequency of their children's exposure to the fictional narratives from which the scripted toys were derived. A total score for exposure to fictional narratives was calculated by adding up the scores per child. In order to measure the relationship between (1) parent ratings of their children's exposure the narratives from which the scripted toys were derived and (2) children's fictive role and theme enactments with the toys, two sets of bivariate correlations were run. Parent ratings were compared to scores for (1) fictive, archetypical and reality-based roles (see Table 44) and (2) fictive, archetypical and reality-based themes (see Table 45). No significant correlations were found between parent ratings on children's narrative exposure and roles or themes.

Table 44

#### *Correlations Between Parent Ratings for Narrative Exposure and Children's Roles*

Parent rating	Fictive roles	Archetypical roles	Reality roles
	(n = 28)		
Narrative exposure (2-tailed).	-.02	-.15	.20

Table 45

#### *Correlations Between Parent Rating for Narrative Exposure and Children's Themes*

Parent rating	Fictive themes	Archetypical themes	Reality themes
	(n = 28)		
Narrative exposure (2-tailed).	.05	-.06	.20

#### *Educator Ratings on Children's Pretend Play*

Using questionnaires, the children's daycare educators were asked to rate the children's frequency of solitary and collaborative pretend play, on a scale of one to three



(1 = never, 2 = occasionally, and 3 = frequently), and the quality of the children's pretense, on a scale of one to three (1 = below average, 2 = average, and 3 = above average). In order to measure the relationship between educator ratings and the children's pretend play, bivariate correlations were run between: (1) educator ratings of frequency of solitary play and the children's play measures, (2) educator ratings of frequency of collaborative play and the children's play measures, and (3) educator ratings on the quality of the children's pretend play and the children's play measures (see Table 46). No significant correlations were found between the three educator ratings on the children's pretend play and the children's play measurements.

Table 46

*Correlations Between Educator Ratings of Children's Pretend Play and Children's Play Measures*

Educator rating	Enactment	Low-level (n = 28)	High-level	No-Play
Solitary play	.23	-.10	.13	-.27
Collaborative play	-.17	.32	.15	-.24
Quality of pretense	-.22	.02	.09	.14

(2-tailed).

## DISCUSSION

The main goal of this study was to examine how children use play to emulate or transform the materials, identities, and narratives they are offered through film and television-based replica toys. The study aimed to answer the following questions: (1) How do children play with toys derived from film and television narratives? (2) What roles and themes do these toys inspire? (3) How do these toys affect boys and girls differently?

The findings and interpretations of the results as well as discussion concerning the implications and limitations of the study will be presented. The results of the children's

play sessions will be presented in terms of: (1) toy type (scripted versus unscripted), and (2) gender (boys versus girls) influences on the children's pretend play, roles and themes observed in the play sessions.

### *Toy Type Effects*

*Pretend play.* Hypothesis #1 predicted that, overall, there would be no significant toy type effect on total amounts of pretend play observed in the children's play sessions. This hypothesis was supported by the results. The finding that scripted and unscripted toys did not elicit different amounts of overall pretend play would seem to support the arguments of Sutton-Smith (1986), Singer (1973), and Almqvist (1994) that children's capacity for imaginative play transcended the influence of the play materials. However, further analyses of the play sessions provided evidence against concluding that it was the child, and not the toy, who unilaterally controlled and dictated the pretend play. There was an unexpected and significant toy type effect on two subcategories of pretend play: enactment and high-level negotiation. Significantly more pretend enactment was found with scripted toys and, with girls, significantly more high-level negotiation was observed with unscripted toys.

The play research on object use in pretense did not provide a basis for predicting differences in enactment and negotiation. In fact, the researchers who examined toy effects (in terms of high versus low-realism objects) on play did not consider these categories of pretend play. For instance, Pulaski (1973) measured "richness of fantasy" by assessing children's pretense in terms of distance from the child's reality; McLoyd (1983) and Petrakos and Howe (1993) examined solitary versus cooperative pretend play; and Elder and Pederson (1978) rated the children's pretend performances using actual

and substitute objects during experimenter-directed activities. In the present study, categories of pretend play (i.e., pretend play enactment and negotiation) were assessed using an adaptation of Doyle and Connolly's (1989) pretend observation scale (see Appendix F).

Pretend enactment takes place when the child assumes the identity of another person: speaking, moving and acting as that character (Rubin & Wolf, 1979). As an example of pretend enactment from one of the play sessions, a boy picked up the Spiderman replica toy, made the toy approach another toy, spoke in a pretense voice: "I'm going to web you now!" and then proceeded to make the Spiderman toy gesture a webbing motion with his hand. High-level pretend negotiation involves procedural behaviors: the child initiates and sets up pretense scenarios, assigns roles and tells the story (Rubin & Wolf, 1979; Doyle & Connolly, 1989). An example of high-level negotiation was a girl who announced that her next story was going to be about a wedding, assigned roles to various figures ("He's the groom. She's the bride. He's the priest.") and then narrated the marriage ("The guests show up and the priest talks.")

One could conceive of a child's pretend enactment requiring high levels of creativity and of a child's storytelling (high-level negotiation) being based on imitation of previously heard tales. However, another significant finding in this present study was that more fictive roles and fictive themes were observed in the scripted toy condition, suggesting that the enactments observed involved mostly imitations of the actions and speech of characters as scripted by the toys. This notion will be explored further following discussion of fictive, archetypal, and reality-based roles and themes in this study.

*Fictive, archetypical, and reality-based roles and themes.* Fictive roles were coded when children described or enacted actual characters from film or television (e.g., Cinderella, Cinderella's stepmother). Reality roles were roles based on the children's typical, day-to-day reality (e.g., Daddy, teacher, and cat). Archetypical roles were added to the coding scheme in order to categorize roles that were neither fictive according to a known narrative nor based on a child's lived reality. For example, the Queen from Sleeping Beauty was fictive; a queen with no obvious link to mass fiction was archetypical; and the angry mommy was reality-based. Similarly, a theme was coded as fictive if the event sequence was scripted by a film or television program (e.g., the Powerpuff Girls fighting villains and stacking the bodies up in a pile). Reality themes were based on situations in children's daily lives (e.g., going to school). And a theme was coded as archetypical if the situation was clearly not reality-based but not attributed to a known narrative (e.g., a knight rescuing a princess from an evil witch).

Significantly more fictive roles and themes were observed in the scripted toy condition compared with the unscripted toys. In order to test Hypothesis #2, namely that the children would engage in a higher number of fictive roles in the scripted toy condition and that these fictive roles would emulate the identities of the television or film-based toys, further analyses were undertaken with the data on fictive roles. The analyses revealed that the children engaged in similar numbers of unscripted fictive roles in both toy conditions. An example of an unscripted fictive role in the scripted toy condition was a child using the Princess Fiona toy to enact the role of Cinderella's stepmother. In the unscripted toy condition, an unscripted fictive role would simply be any fictive role (e.g., the young woman toy as Sleeping Beauty). The difference in the total number of fictive

roles observed between the two toy conditions was a result of the large number of fictive roles that were scripted by the toys in the scripted toy condition (e.g., Franklin, Spiderman and Princess Fiona). Therefore Hypothesis #2 was supported.

Significantly more archetypical roles and themes were coded in the unscripted toy condition compared to the scripted condition. Finally, significantly more reality-based roles were observed in the unscripted toy condition and a toy type trend revealed that more reality themes were also found in the unscripted toy condition.

The higher number of fictive roles and themes observed in the scripted toys condition implies that the scripted toys stimulated roles and themes as defined by films, television, and marketing. The results on reality-based and archetypical roles and themes will be discussed at a later point.

*Creativity: Imitative versus transformational imagination.* The findings in this study that toy type influenced pretend enactment and pretend negotiation combined with the higher number of fictive roles and themes observed in the scripted toy condition seem particularly relevant to the examination of media-influenced pretend play. One of the main arguments by researchers against television viewing is that television narratives limit children's creativity by providing them with ready-made storylines and characters around which to organize their imaginative experience (Holt, 1967; Kline, 1993). Implicit in this argument is the distinction between imitative and creative play. If children playing with scripted toys are engaged in significantly more frequent pretend enactment, fictive roles, and fictive themes, one can conclude that their play is, in large part, emulating the scripts and identities depicted by the television programs or films. If the children (in this case, the girls) playing with unscripted toys are engaged in

significantly more high-level pretend negotiation with characters not derived from television or film, it is likely that the children are transforming or creating characters and ideas.

Piaget (1962) described symbolic play as taking place when children evoked their experiences of the outside world and reinvented them in an imaginary world. Bettelheim (1977) wrote that fairy tales suggested images through which children could organize their imaginations and work through real-life anxieties and experiences. The notions of *reinventing* and *suggesting* images connote some sort of original transformation of an object or reorganization of ideas. In the scripted toy condition, rather than *transforming* the identities and narratives depicted by the toys, the children seemed to be *transported* into the prefabricated television or film world. This distinction may give insight into the differences, using Greenfield et al.'s (1993) terms, between *imitative* play and *creative* play. Imitative play elicited straightforward recall of narratives and roles by transporting the child into, for example, a Disney animated feature. Creative play involved some sort of transformative process beyond recall or reenactment of pre-scripted ideas and identities.

Greenfield et al. (1993) differentiated between imitative and creative imagination in their study on short-term effects of audio-visual media on children's play. They found that the children's play with television related toys after viewing a television program was more imitative and less creative than play not preceded by television-viewing. They concluded tentatively that television was the factor that influenced the children's imaginative play and not the toys. As the toys used in this present study were considered to represent a complex and generalized children's market, actual television viewing was

not involved in the experimental procedures. Yet the findings reveal that the toys themselves did influence the children's imaginative play in terms of pretend enactments and, for girls, high-level negotiations.

Researchers examining high versus low-realism object effects on children's pretend play have argued that high-realism toys limit the scope of children's imaginative play, specifically in directing the children's roles and themes. In taking this argument into the field of children's popular culture and mass media, it was expected that the children would emulate the roles and themes of the scripted toys. However, the toy type effects found for pretend enactment and high-level negotiation were not anticipated. A possibility for future research emerging from this study's findings is an examination of the associations between: (1) enactment and imitative pretense, and (2) high-level negotiation and creative pretense. It seems plausible to hypothesize that promotional toys derived from film and television develop children's imitative imagination rather than their creative imagination.

An ambiguity of concepts, however, arises in the usage of the words creativity, transformation, imagination, and pretense. Philosophers have historically described pretense in terms of a phenomenological duality pitting reality against nonreality, where a person moved from a real to an unreal world. Rather than imitating reality, reality was rearranged or transformed through some imaginative process (Goldman, 1998). Play researchers, such as Rubin et al. (1983) and Garvey (1976), have described children's imaginative play as taking place when children transform objects, situations or identities using "as if" behavior. When children pretend, they play at detaching themselves from real-life situations. Greenfield et al. (1993) defined imagination as "any representational

activity that creates entities or events not found in the present or immediately preceding stimulus situation” (p. 58). While the description of imagination or pretense as a transformational activity is consistent in all of these definitions, Greenfield et al. (1993) included measurements of *imitative* versus *creative imagination* in their study by comparing elements of the children’s play to the television program or game immediately preceding the play session. In fact, their definition of imagination functioned as their working definition for the entire term of *creative imagination*. Perhaps a more accurate set of distinctive terms for Greenfield et al.’s (1993) study would have been *imitative imagination* and *transformational imagination*.

Mellou (1994) argued that while transformational activity was a necessary component of creativity, the two terms were not synonymous. He wrote that a creative activity had to extend the knowledge of the creator to see things “in a new light” (p. 81). Mellou also wrote that there was no widely agreed upon definition of creativity. If future research is to consider the connections between pretend play and creativity, these ambiguities of concepts must be examined. Beyond arguing the minutiae of terms, however, it is clear that for the sake of children’s development, call it creativity, or imagination, or transformative activity, the function of this concept is to generate new ideas, to think about things in different ways, and to transcend our current situations (Singer, 1973). It is unlikely that the toys derived from popular films and television are providing children with the best tools to meet this challenge.

*Reality-based roles and themes.* Significantly more reality-based roles and a trend for more reality-based themes were observed in the unscripted toy condition. These results combined with the finding that, for girls, more high-level negotiation was found in



the unscripted toy condition are consistent with Garvey and Berndt (1976)'s observation that preschoolers narrated experiences based on their daily experiences more elaborately than sequences based on fictive themes. These findings also offer tentative empirical support to the arguments that television and television-based toys do not provide children with the opportunity to develop fantasies based on their own real-life experiences or to create their own ideas (Singer & Singer, 1981).

*Archetypical roles and themes.* The children engaged in significantly more archetypical roles and themes in the unscripted toy condition. The necessary addition of archetypical roles and themes into the coding scheme demonstrated that children's imaginative play tended to break the boundaries of their own realities. When the toys did not offer a clear fictive script for pretense, the children combined elements of a fictional nature to engage in what in this study was termed *archetypical pretense*. Archetypical play seems more in keeping with Piaget's description of "reinvention" and Bettelheim's (1977) concept of stories suggesting images for children to adapt into their play. This sort of play involved more transformational activity than fictive play.

The results on archetypical roles and themes indicate that the children were compelled to pretend in a fantastic mode beyond their daily reality. Yet their worlds have been flooded with pre-fabricated, pre-scripted identities and ideas. Does the fact that, in this study, archetypical roles were not prevalent in the scripted toy condition indicate that scripted toys were squeezing out children's opportunities to develop their own fictional identities and ideas? On the other side, the higher number of archetypical roles and themes in the unscripted toy condition also demonstrated that the same children who emulated the fictive roles and themes with the scripted toys were able to play creatively

(or with transformational capacity) with unscripted toys as well. One could argue that children's play styles are flexible enough that the occasional use of scripted toys does not pose a risk to children's capacity for creative play with other toys. Or one could contend that archetypical play with unscripted toys might diminish after the age of 5, with continued exposure to scripted toys. Of course, these conclusions are beyond the scope of this study and would require testing children over time, at different age levels, or with exposure to varying levels of mass media. However, as a main concern of this study was to examine media/marketing effects on children's imaginative development in a general sense rather than at one specific point in time, further research of a more longitudinal or developmental nature would be recommended.

The use of the categories of archetypical roles and themes, however, brings up two limitations in this study. First, a researcher could not possibly control or know of all the stories that a child has been exposed to prior to the study. For example, a scheming witch in a child's observed play session could have been based on a work of fiction previously viewed or heard by the child. While the child may have been transported into that piece of fiction and be recalling those narratives, for this study, that scheming witch would have been coded as archetypical rather than fictive. Second, the children in this study were tested during two 8-minute play sessions in one sitting. Perhaps if the children were given the opportunity to play repeatedly with the same sets of toys, they would have developed imaginative sequences beyond fictive recall in the scripted toy condition that would have approached a similar form of archetypical play observed in the unscripted toy condition, that is, with higher levels of negotiation and unscripted roles and themes. It is possible that the novelty of the toys elicited initial recall behavior from

their favorite shows. However, novelty is one of the techniques that mass marketers use to promote a consumer mentality in children. The television programs add and change characters regularly so that children “must” have the next new toy.

*Variety of themes.* Hypothesis #3 stated that there would be a greater variety of themes observed in the unscripted toy condition. Results from the study did not support this hypothesis. There was no significant difference in the variety of themes measured over categories and subcategories of themes (action, good versus bad, domestic, entertainment, other themes, and no themes) between the two toy conditions. The hypothesis was based on research on dramatic play centers, which revealed that centers set up in familiar, day-to-day settings elicited greater variety of themes compared to unfamiliar settings (Howe et al., 1993; Petrakos & Howe, 1996). It seems that the unscripted toys did not translate into the same familiar setting influence on variety of themes. This can be explained by the fact that dramatic play centers are generally focused on one context (e.g., train station), whereas the two sets of replica characters toys in this study were comprised of 19 characters, mostly unrelated. Perhaps replica toys set up in a particular context with supporting pieces, such as furniture, would have had more of a more similar effect on variety of themes as the arrangement of dramatic play centers.

More importantly, this lack of toy type effect on variety of themes may demonstrate that television and film toys do not restrict the scope of children’s imaginative play on a thematic level. While significantly more fictive themes were observed in the scripted toy condition and more archetypical themes in the unscripted toy condition, variety of themes (in terms of the total number of different themes observed per child) were similar in both toy conditions. It seems that the difference between the

two toy conditions was in terms of the source of the themes (e.g., an animated cartoon or a child's typical dinner at home) and in the nature of the pretend play (i.e., enactment versus negotiation) rather than in the variety of themes engaged in.

Finally, the lack of toy type effect may simply demonstrate that the method of measuring variety of themes in this study was not sufficiently sensitive. The child had to demonstrate themes in different categories in order to be coded with another variation. However, variations within a category would not have been coded (e.g., an action scene in which one character wins, and then the other character develops new tactics and wins).

*Number of themes.* The children engaged in significantly more total roles and themes in the scripted toy condition compared to the unscripted toy condition. This result must be combined with the findings that: (1) there was no difference in total amounts of pretend play observed between toy conditions, and (2) the children engaged in more enactment with the scripted toys and, for girls, more high-level negotiation with the unscripted toys. A plausible explanation for the higher number of roles and themes observed in the scripted toy condition is that the nature of the pretense behavior differed between the two toy conditions.

In order to attain the "as-if" quality required in pretense, both realistic and fictive roles involve a transition from reality to non-reality (Rubin et al., 1983; Garvey, 1976). Perhaps, as researchers studying high versus low-realism object effects on pretense have argued with mixed results, the transition from reality to non-reality requires less effort or time when the roles have already been defined (Woodard, 1984; McLoyd, 1983; Elderson & Pederson, 1978). As with high-realism play materials, in the case of television or film-scripted toys, the "signifier" (e.g., a Batman character toy) and the "signified" (e.g., the

Batman character) highly resemble each other and the transition into pretense likely requires less representational ability from a child than, for example, using a minimally-structured male figure as Batman or a female figure as a princess. Similarly, the higher number of themes observed in the scripted toy condition could be explained by the transitions into pre-defined and scripted situations. A child who enacts the Powerpuff girls in flying and rescuing sequences is following a pre-defined script. Following this argument, the higher number of roles and themes observed in the scripted toy condition may have resulted from the simpler transition into non-reality.

### *Gender Effects*

Gender effects were found on the children's observed play, roles and themes and for the most part, were consistent with previous research findings. The influence of scripted versus unscripted toys on amounts of high-level pretend negotiation observed affected only the girls in this study. This result corresponds to research findings that girls engage in more verbal communication than boys (DiPietro, 1981; Smith & Connolly, 1972) as high-level negotiation involves the extensive use of verbal skills for the tasks of setting up scenarios, narrating and assigning roles. Mass media's sex-typed toys encourage boys to fight, kill and dominate (Carlson-Paige & Levin, 1987; Kline, 1993), which are activities that require more physical enactment skills than negotiation or storytelling ability. It is also a finding that would impact the direction of future research examining the connections between: (1) imitative play and enactment, and (2) creative play and high-level negotiations, in that gender differences would need to be considered.

Significantly more low-level negotiation was observed with girls compared to boys. Low-level pretend negotiation involves the arrangement of props with a

connection to narrative or pretense. During the play sessions, the girls were often observed setting up intricate scenes, for example, of a parade, a ball, or a wedding. This finding supports the research that girls engage in more anticipatory and sedentary forms of pretend play than boys (McLoyd, 1980; Pulaski, 1973; Paley, 1984).

*Reality-based and archetypical roles and themes.* Girls engaged in significantly more reality-based roles and themes than boys. There were particularly more reality-based roles observed with girls in the unscripted toy condition. Toy type by gender interaction effects revealed that boys in the unscripted toy condition were observed in the highest number of archetypical roles and themes. Boys were found to prefer fantastic (as opposed to realistic) roles and action roles and when not provided with actual fictive superheroes, such as Batman or Spiderman, the muscular male figure or the unnamed knight presided over the play. Archetypical roles for girls were typically princesses, princes, bad guys, and witches. These findings support the research that boys tend to engage in fantastic, action-oriented, and violent type roles whereas girls engage in more reality-based domestic and family-oriented roles (McLoyd, 1980; Pulaski, 1973).

*Types of roles.* The results of the analyses on the four types of roles observed in the play sessions partially support the first part of Hypothesis #4, namely that boys would engage in more action and villain/victim roles and girls in more monarchy and family roles and that these differences would be more pronounced in the scripted toy condition. As expected, boys were found to engage in more action roles and girls in more monarchy and family roles, however there was no significant gender difference in the number of villain/victim roles. More action and monarchy roles were observed in the scripted toy

condition, which supports the hypothesis, for action and monarchy roles, that gender differences would be more pronounced in the scripted toy condition.

There were no significant toy type differences in family and villain/victim roles. In general, promotional character toys do not emphasize family roles, which could explain the lack of toy type effect for family roles. In this study, the only character toys representing family members were Arthur and D.W. It was expected that villain/victim roles would appeal more to boys in the same way as action roles. However, the villain/victim roles observed with both boys and girls included witches, heroes, and damsel-type princesses. These characters engaged in action of a more anticipatory or even cerebral nature (e.g., casting spells, scheming deaths by potion) than typical of action figures and seemed to appeal to all of the children.

*Types of themes.* The second part of Hypothesis #4 was also partially supported. This hypothesis stated that girls would engage in more domestic and entertainment themes and boys in more action themes and that these differences would be more pronounced in the scripted toy condition. The observed gender preferences for themes were as expected. Girls were found to engage in more domestic and entertainment themes and boys in more action themes. Although there were significantly more action themes observed in the scripted toy condition and a trend that boys engaged in more action themes in the scripted condition, there were no toy type effects on domestic and entertainment themes. Perhaps because the domestic and entertainment themes were more reality-based (e.g., caring for baby, going to a party), they were offered in both toy conditions. The effects of marketing in terms of the types of themes children pretend

seemed to be stronger for boys than girls as the scripted promotional toys clearly encouraged action themes in boys.

#### *Parent Ratings on Children's Exposure to Fictional Narratives*

The results of the questionnaire and play analyses revealed no significant correlations between parent ratings on children's exposure to the fictional narratives from which the scripted toys were derived and the children's roles or themes observed in the play sessions. This lack of correlation is interesting and a number of conjectures may explain it. First, the main point of studying television or film-based character toys was to examine the effects of a total marketing system on children's imaginative play. The toy is only one part of the combined efforts of a mass media and marketing industry's overriding inundation of children's culture with fictive promotional characters (Kline, 1993). Children do not need to see the films or cartoons of Spiderman to become familiar with the simple narrative that Spiderman fights bad guys using his web and that he swings like a spider from building to building. That image is represented to the child on his friends' T-shirts, lunchboxes, and cups, on store posters, license plates and by his friends' play. A second possible explanation for this lack of correlation is that parents may not be aware of the type and amount of exposure their children have to certain programs. If children view television on a regular basis, and studies indicate that they do (Greenfield et al., 1993; Kline, 1993), and if the television often acts as a babysitter, one would not expect a parent to be able to follow the exact shows the child is viewing. There is also the third possibility that involves the factor of social desirability. Parents want to put themselves and their children in a good light and so they may under-report



the amount of television viewing. Future studies in this area should control for the factor of social desirability.

*Implications for parents.* The findings from the parent survey indicate that parents may not be entirely aware of the media and toy industry influences in their children's lives. And while Disney-type programs enchant and entertain children in many positive ways, parents need to be aware of the messages and forms of play being encouraged by the media, toy industries and marketers. Parents can assist their children in assessing the stories and characters that contemporary culture offers them by watching the programs with the children and acting as moderator and commentator. Children first learn to develop plans for pretense from the narratives they share with their parents (Bretherton, 1989) and would likely continue to share media-based stories and play with parents.

#### *Educator Ratings on Children's Pretend Play*

There were no significant correlations between educators' ratings of the children's solitary, collaborative, and quality of pretend play and the children's play scores in this study. This may be explained by the fact that daycare centers tend to set up dramatic play areas for the children to engage in collaborative pretend play that focus on other kinds of themes (e.g., restaurant and veterinary office). The toys used in this study, as well as the combination of various figurines, particularly the scripted toys, would more typically be found in children's homes. In fact, in all three daycare centers from which the children in the study were enrolled, television or film toys were not permitted in the centers. The sort of play children engage in with these toys may be very different from what daycare educators observe in their centers.

*Implications for educators.* If 70% of toy sales in America are from promotional character toys derived from television and films, is banning these toys from daycare centers the best procedure for educators to take? Part of the goal of media education is to help children develop their critical thinking skills in what they are viewing. Perhaps educators could set up opportunities for children to talk with their peers and teachers about their favorite programs and characters. In this way, educators could help them develop more critical attitudes towards these influences, particularly if their friends are watching the same programs and playing with the same toys. As children tend to play with media-based toys alone and at home (Kline, 1993), it is possible that playing with these toys collaboratively with peers in a preschool setting would challenge the children to develop roles and themes beyond the scripts that accompany the toys.

#### *Limitations*

There were a number of limitations in the present study. A larger sample size would have resulted in more generalizable findings. Also, the children used in this study were from middle-class homes with university-educated parents. The research on television viewing indicates that children from lower-income families watch more television and play with more promotional toys (Kline, 1993). Using a sample with children from lower socioeconomic classes may have resulted in different findings.

The selection of actual toys and characters for the study would have an impact on the results. Although all efforts were made to select a range of toys to reflect children's current media/toy culture and to balance for gender and types of roles, perhaps if the study were replicated with an entirely different set of film or television-derived toys (and matched set of toys), the results would have been significantly different.

Setting factors likely contributed to the results of the study. The children were asked to play individually in order to simulate how children typically play with promotional character toys. However, testing dyads or small groups with the same toys would have added the opportunity for more complex social pretend play.

Finally, the goal of the study was to prove empirically the effects of a toy as part of a global, media saturated children's culture, nevertheless it is difficult to know exactly which effects are being tested. For example, is it the toy, the film, the marketing techniques, or all of these cultural factors that influence the children's play? It would be difficult to separate these factors particularly because part of the mass-marketing power lies in inundating children and adults with the repetitive images using sophisticated, multi-media techniques. Perhaps the more vital question is how children can learn to develop an awareness of the influence and goals of a consumer culture in which they live.

#### *Future Research Directions*

This study leads to a question regarding the connections between: (1) pretend enactment and imitative imagination and (2) high-level pretend negotiation and creative imagination. Play is a complex phenomenon and if it is through this process of play that children initially learn to emulate or transform the identities and narratives they are offered, and if we believe that children are active participants in their socialization and cultural development, further research exploring these connections may reveal significant findings on the impact of television and film-based toys.

It would also be interesting to explore the notion of archetypal roles and themes. While children seem compelled to pretend in a fantastic mode beyond their daily reality, their lives have been inundated with pre-scripted identities and ideas. Future research

could examine whether media-based toys are narrowing children's opportunities to develop their own fictional identities and ideas.

Finally, the findings that girls engaged in more high-level negotiation than boys would indicate that future research exploring the connections between pretend play and creativity should continue to consider gender differences.

### *Conclusion*

A main finding of this study was that scripted toys elicited pretend enactment with fictive roles and themes, whereas unscripted toys encouraged high-level negotiation (especially with girls) and archetypical or reality-based roles and themes. These findings suggest that television and film-scripted toys promote imitative imagination, whereas unscripted toys encourage more creative imagination in children. If one of the functions of the human imagination is to generate new ideas, to think about things in different ways and to transcend our current situations (Singer, 1973), it is unlikely that the toys derived from popular television and films are providing children with the best tools.

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Appendix A

Letter to Daycare Director

May 2002

Dear \_\_\_\_\_,

I am currently pursuing a Master of Arts degree in Child Study in the Education Department at Concordia University. As part of the program's requirements, I am conducting a thesis project under the supervision of Dr. Nina Howe. The research project, entitled *Children's pretend play with television and film-scripted character toys*, explores the effects of toys depicting popular fictional characters on the imaginative play of 5-year-olds.

Young children depend on play objects to make the transition from reality into an imaginative world. With promotional character toys – those toys depicting popular fictional characters as seen in films, television programs and books – producing approximately 70% of toy sales in America, several researchers have observed that when children today pretend, much of their play seems to be directed by the narratives of television programs and films. Other researchers have argued that pretense of a fictional nature requires more sophisticated imaginative abilities than reality-based pretense. This study is designed to compare the effects of toys depicting popular fictional characters with the effects of toys unrelated to children's fiction, such as play people and animals, on the quantity of pretense, variety of themes and types of roles enacted in the imaginative play of 5-year-olds. The study's goal is to provide parents and educators with empirical evidence on the effects of toy type in order to assist in decisions regarding the provision of play materials to develop children's potentials.

This project has been approved by a thesis committee as well as by the Ethical Approval Committee in the Education Department at Concordia University. I am presently searching for boys and girls around 5 years of age (between 54 and 66 months) to participate in this study. Testing will involve one session, approximately 25 minutes in length, in which the child will be asked to play with two sets of toys: one scripted to popular fiction, one unscripted. I am requesting your permission to contact in writing the parents of children in the 54 to 66 months age range attending your daycare and to use an area in your center to carry out the research. Enclosed are consent forms for parents and educators, a parent survey and an educator questionnaire. I have asked that parents return signed parent consent forms and completed surveys to their child's educators. I would appreciate it if these documents could be distributed to the appropriate parents and the signed forms and surveys collected so that I may pick them up at your convenience.

Your collaboration is greatly appreciated. If you have questions or concerns, please feel free to contact me by telephone at (514) 481-1048 or by e-mail at [schang@education.concordia.ca](mailto:schang@education.concordia.ca).

Sandra Chang-Kredl  
M.A. Child Study  
Department of Education,  
Concordia University

Appendix B

Letter and Consent Form for Parents

May 2002

Dear Parents,

I am currently pursuing a Master of Arts degree in Child Study in the Education Department at Concordia University. As part of the program's requirements, I am conducting a thesis project under the supervision of Dr. Nina Howe. The research project, entitled *Children's pretend play with television and film-scripted character toys*, explores the effects of toys depicting popular fictional characters on the imaginative play of 5-year-olds.

Young children depend on play objects to make the transition from reality into an imaginative world. With promotional character toys – those toys depicting popular fictional characters as seen in films, television programs and books – producing approximately 70% of toy sales in America, several researchers have observed that when children today pretend, much of their play seems to be directed by the narratives of television programs and films. Other researchers have argued that pretense of a fictional nature requires more sophisticated imaginative abilities than reality-based pretense. This study is designed to compare the effects of toys depicting popular fictional characters with the effects of toys unrelated to children's fiction, such as play people and animals, on the imaginative play of 5-year-olds. The study's goal is to provide parents and educators with empirical evidence on the effects of toy type in order to assist in decisions regarding the provision of play materials to develop children's potentials.

This project has been approved by a thesis committee as well as by the Ethical Approval Committee in the Education Department at Concordia University. I am presently searching for boys and girls around 5 years of age (between 54 and 66 months) to participate in this study. Testing will involve one session, approximately 25 minutes in length, in which the child will be asked to play with two sets of toys: one scripted to popular fiction, one unscripted. The session will take place in the daycare center while your child is in regular attendance. The play session will videotaped but please be assured that the taped session and all information provided, including a parent survey and teacher questionnaire, will remain confidential. I will be the only person to view the tape and strictly for coding purposes related to this study. Only group results will be reported and no individual results will be disclosed. While I will know the identity of the participants, each child will be assigned a number while coding data. The results of this study will be made available to you if you wish.

A short parent survey regarding your child's familiarity with certain fictional narratives and a consent form are enclosed. If you are interested in having your child participate in this study, please sign the consent form and return it with the completed parent survey to your child's educator. Your collaboration is greatly appreciated. If you have any questions or concerns, please feel free to contact me by telephone at (514) 481-1048 or by e-mail at [schang@education.concordia.ca](mailto:schang@education.concordia.ca).

Sandra Chang-Kredl, M.A. Child Study, Dept of Education, Concordia University



## **PARENT CONSENT FORM TO PARTICIPATE IN RESEARCH**

This is to state that I agree to participate in a program of research being conducted by Sandra Chang-Kredl of the Department of Education of Concordia University.

### **A. PURPOSE**

I have been informed that the purpose of the research is to compare the effects of toys depicting popular fictional characters with the effects of toys unrelated to children's fiction on the quantity of pretense, variety of themes and types of roles enacted in the imaginative play of 5-year-olds.

### **B. PROCEDURES**

The research will be conducted at the daycare center in a separate play area while the child is in regular attendance. The procedure will involve a five-minute warm-up exercise to familiarize the child with the researcher and situation in which the child will be asked to draw a picture or assemble a puzzle with the researcher. Following this, the researcher will set up one of two toy conditions on a child-sized table. The researcher will then provide the child with the following directive: "You may play with anything you choose, but I'd like you to make up a story or put on a play for me. If you want to stop playing at any time and go back to the classroom, please let me know." Play sessions will last approximately 10 minutes per toy condition and will be videotaped. During each play session, the researcher will act as a nonintrusive play partner by watching the child play, listening to his/her story and participating only at the child's request and as little as possible. After 10 minutes, the researcher will replace the presented toys with the play material from the second toy condition. The entire testing session should last approximately 25 minutes. The child is free to discontinue at any time during the session. Teachers will be asked to fill out a questionnaire providing general information on the children's pretend play at the daycare and a parent survey will be used to assist in determining the children's familiarity with certain popular fictional narratives.

### **C. CONDITIONS OF PARTICIPATION**

- I understand that I am free to withdraw my consent and discontinue my participation at anytime without negative consequences.
- I understand that my participation in this study is CONFIDENTIAL (i.e., the researcher will know, but will not disclose my identity)
- I understand that the data from this study may be published. However, only group results would be reported and no individual results would be disclosed. Videotapes will only be used for research purposes and may be erased after the completion of the study if you wish.

I HAVE CAREFULLY STUDIED THE ABOVE AND UNDERSTAND THIS AGREEMENT.

Please check one of the following:

\_\_\_\_\_ I FREELY CONSENT AND VOLUNTARILY AGREE TO HAVE MY CHILD PARTICIPATE IN THIS STUDY.

\_\_\_\_\_ I DO NOT CONSENT TO HAVE MY CHILD PARTICIPATE IN THIS STUDY.

NAME (please print) \_\_\_\_\_

SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

WITNESS SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

If you wish to have the videotaped session erased, please check here: \_\_\_\_\_

Appendix C

Letter and Consent Form for Educators

May 2002

Dear \_\_\_\_\_,

I am currently pursuing a Master of Arts degree in Child Study in the Education Department at Concordia University. As part of the program's requirements, I am conducting a thesis project under the supervision of Dr. Nina Howe. The research project, entitled *Children's pretend play with television and film-scripted character toys*, explores the effects of toys depicting popular fictional characters on the imaginative play of 5-year-olds.

Young children depend on play objects to make the transition from reality into an imaginative world. With promotional character toys – those toys depicting popular fictional characters as seen in films, television programs and books – producing approximately 70% of toy sales in America, several researchers have observed that when children today pretend, much of their play seems to be directed by the narratives of television programs and films. Other researchers have argued that pretense of a fictional nature requires more sophisticated imaginative abilities than reality-based pretense. This study is designed to compare the effects of toys depicting popular fictional characters with the effects of toys unrelated to children's fiction, such as play people and animals, on the quantity of pretense, variety of themes and types of roles enacted in the imaginative play of 5-year-olds. The study's goal is to provide parents and educators with empirical evidence on the effects of toy type in order to assist in decisions regarding the provision of play materials to develop children's potentials.

This project has been approved by a thesis committee as well as by the Ethical Approval Committee in the Education Department at Concordia University. I am presently searching for boys and girls around 5 years of age (between 54 and 66 months) to participate in this study. Testing will involve one session, approximately 25 minutes in length, in which the child will be asked to play with two sets of toys: one scripted to popular fiction, one unscripted. Enclosed are: a consent form for educators, and a brief educator questionnaire. If you agree to participate in this study, I would appreciate it if you would sign the consent form and fill out the questionnaire. I have asked that parents return signed parent consent forms and completed surveys to their child's educators. I would appreciate it if these forms and surveys could be collected so that I may pick them up at your convenience.

Your collaboration is greatly appreciated. If you have questions or concerns, please feel free to contact me by telephone at (514) 481-1048 or by e-mail at [schang@education.concordia.ca](mailto:schang@education.concordia.ca).

Sandra Chang-Kredl,  
M.A. Child Study, Department of Education  
Concordia University

## **EDUCATOR CONSENT FORM TO PARTICIPATE IN RESEARCH**

This is to state that I agree to participate in a program of research being conducted by Sandra Chang-Kredl of the Department of Education of Concordia University.

### **A. PURPOSE**

I have been informed that the purpose of the research is to compare the effects of toys depicting popular fictional characters with the effects of toys unrelated to children's fiction on the quantity of pretense, variety of themes and types of roles enacted in the imaginative play of 5-year-olds.

### **B. PROCEDURES**

The research will be conducted at the daycare center in a separate play area while the child is in regular attendance. The procedure will involve a five-minute warm-up exercise to familiarize the child with the researcher and situation in which the child will be asked to draw a picture or assemble a puzzle with the researcher. Following this, the researcher will set up one of two toy conditions on a child-sized table. The researcher will then provide the child with the following directive: "You may play with anything you choose, but I'd like you to make up a story or put on a play for me. If you want to stop playing at any time and go back to the classroom, please let me know." Play sessions will last approximately 10 minutes per toy condition and will be videotaped. During each play session, the researcher will act as a nonintrusive play partner by watching the child play, listening to his/her story and participating only at the child's request and as little as possible. After 10 minutes, the researcher will replace the presented toys with the play material from the second toy condition. The entire testing session should last approximately 25 minutes. The child is free to discontinue at any time during the session. Teachers will be asked to fill out a questionnaire providing general information on the children's pretend play at the daycare and a parent survey will be used to assist in determining the children's familiarity with certain popular fictional narratives.

### **C. CONDITIONS OF PARTICIPATION**

- I understand that I am free to withdraw my consent and discontinue my participation at anytime without negative consequences.
- I understand that my participation in this study is CONFIDENTIAL (i.e., the researcher will know, but will not disclose my identity)
- I understand that the data from this study may be published. However, only group results would be reported and no individual results would be disclosed.

**I HAVE CAREFULLY STUDIED THE ABOVE AND UNDERSTAND THIS AGREEMENT. I FREELY CONSENT AND VOLUNTARILY AGREE TO PARTICIPATE IN THIS STUDY.**

NAME (please print) \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

WITNESS SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

Appendix D  
Parent Questionnaire

## Study on Character Toys and Pretend Play

Sandra Chang-Kredl, M.A. Child Study  
Concordia University

### Parent Survey:

Parent's name: \_\_\_\_\_ Date: \_\_\_\_\_

Name of child: \_\_\_\_\_ Birthdate: \_\_\_\_\_

The goal of this survey is to gather background information on your child's familiarity with certain fictional narratives. Please check the appropriate box to describe the approximate number of times your child has heard or watched the following stories or series, either through books, films, videos or television programs. Your assistance is greatly appreciated!

	Never	1 or 2 times	More than 2 times
Arthur			
Batman			
Blue's Clues			
Caillou			
Clifford Big Red Dog			
Curious George			
Digimon			
101 Dalmations			
Disney's Aladdin			
Disney's Cinderella			
Disney's Sleeping Beauty			
Disney's Tarzan			
Franklin			
Harry Potter			
Madeline			
Monsters Inc.			
Pokemon			
Power Puff Girls			
Sailor Moon			
Shrek			
Spiderman			
Star Wars			
Thomas the Tank Engine			
Toy Story			
Transformers			



Appendix E  
Educator Questionnaire

**Study on Character Toys and Pretend Play**

Sandra Chang-Kredl, M.A. Child Study  
Concordia University

**Teacher Questionnaire:**

Teacher's name: \_\_\_\_\_ Date: \_\_\_\_\_

Name of child: \_\_\_\_\_ Age: \_\_\_\_\_

The goal of this questionnaire is to gather information on the pretend play style of children in your classroom. Your assistance is greatly appreciated.

1. How frequently do you observe this child engaging in solitary pretend play?

Rarely: \_\_\_\_\_ Occasionally: \_\_\_\_\_ Frequently: \_\_\_\_\_

2. How frequently do you observe this child engaging in collaborative pretend play?

Rarely: \_\_\_\_\_ Occasionally: \_\_\_\_\_ Frequently: \_\_\_\_\_

3. How would you rate the quality of this child's pretend play?

Below average: \_\_\_\_\_ Average: \_\_\_\_\_ Above average: \_\_\_\_\_

Appendix F  
Coding Scheme for Play Behaviors

## Coding Scheme for Type of Play

Time sampling.

The children's language and behavior during solitary or dyadic play with the researcher will be coded in 10 second time intervals using the following seven categories adapted from Howe et al's (1998) adaptation of Doyle & Connolly's (1989) pretend play enactment and negotiations strategies and Rubin's (1978) Pretend Observation Scale.

- I. Pretend Enactment
  - A. Exaggerated tone of voice (e.g. "Waah!")
  - B. Content of speech: verbal enactment of a role (e.g. "The princess says hello")
  - C. Actions and physical gestures (e.g. making a figure walk across the table)
  
- II. Pretend Negotiation – Low Level
  - A. Arrangement of props with a connection to narrative or pretense (e.g. child says "the crib will go here" and then moves crib onto floor; lining up characters for a parade)
  
- III. Pretend Negotiation – High Level
  - A. Preparatory or procedural behaviors
    - a. Clarification of rights/objects, properties, discussions of rules (e.g. "The animals can go wherever they want")
    - b. Offering of a prop (e.g. "Here's your lady")
  - B. Initiation of pretend play scenario through suggestion and/or negotiation
    - a. Invitations (e.g. « Let's play Spiderman »)
    - b. Proposing plans (e.g. "Let's say, this princess is in a high tower")
    - c. Proposing transformations (e.g. "Let's say this block is a table")
  - C. Storytelling or promotion (e.g. narrative style of talking, "And the girl gets angry and he starts to cry")
  - D. Discussion/assignment of roles (e.g. "She's the mommy, he's the daddy")
  - E. Terminations of pretend play scenario (e.g. "I'm finished the story now")
  
- IV. Constructive Play
  - A. Manipulation of objects to create or construct something (e.g. child balances one figure on top of the train figure; child lines up figures with no reference to narrative or pretence)
  
- V. Exploratory Play
  - A. Intent examination of an object to obtain information, systematic manipulation of objects, child may ask questions about objects' properties (e.g. "Is this Spiderman?" or manipulating moveable arms, legs, parts or examining)
  
- VI. Other Play

- A. Child's play is not described in the five previous categories
    - a. Functional play: child performs simple, repetitive movements with or without objects such as rolling or banging them;
    - b. Games-with-rules: child plays with pre-established rules and limits (e.g. "I'll choose one toy and then you" or making the toys play hide-and-seek)
- VII. Non-Play
- A. The child does not engage in play behavior
    - a. Unoccupied: the child is not involved in any type of play activity and lacks interest in any ongoing activity
    - b. Conversation: the child engages in verbal communication with researcher

Appendix G  
Coding Scheme for Roles

## Coding Scheme for Roles

Time sampling AND frequency count.

Fictive roles must have a proper name (e.g., Cinderella, Shrek) or be directly related to a named story character (e.g., Cinderella's stepmother) and have a unique history.

### Fictive As Scripted

In scripted category ONLY. The child assigns or enacts a role to a figure scripted by the fictional story (book, film, television program) from which the figure is derived (e.g. The figure of Fiona is used to represent the Princess Fiona).

### Fictive – Transformed Scripted (rare)

In scripted category ONLY. The child transforms a scripted figure to enact a fictive character from a different fictional story (book, film, television program). (e.g. Fiona is made to enact the role of Cinderella's stepsister, Drizella).

### Fictive – Transformed Unscripted

In unscripted category ONLY. The child assigns or enacts a role from a fictional story (book, film, television program) (e.g. the unscripted blue train is called "Thomas")

### Archetypical

In both scripted and unscripted categories. The child assigns or enacts a role unrelated to a definite fictional story but not in a child's concrete reality (e.g., the child uses either the Cinderella figure or the unscripted lady figure and says, "This is a queen")

### Reality-based

In both scripted and unscripted categories. The child assigns or enacts a role unrelated to a fictional story (book, film, television program) (e.g. the child uses either the Cinderella figure or the unscripted lady figure and says, "This is Mommy")

### Types of Roles

#### A. Action Role

The child assigns or enacts a role in which the figure's main characteristic is clearly one of physical action or combat (e.g. superhero, fighter, Spiderman).

#### B. Monarchy Role

The child assigns or enacts a monarchy role using a figure (e.g. princess, prince, queen, king, duke, duchess)

#### C. Familial Role

The child assigns or enacts a familial role using a figure (e.g. Mommy, Daddy, brother, sister, baby)

D. Victim/Villain Role

The child assigns or enacts a character with villainous intents or at the mercy of a villain (e.g., witch, damsel)

E. Animal Role

The child assigns or enacts an animal role.

E. Transportation Role

The child assigns or enacts a transportation role.

F. Other Role

The child assigns or enacts a role to a figure not described in the five previous categories (e.g. teacher)

G. No Role

The child does not enact a role.



Appendix H  
Coding Scheme for Themes

## Coding Scheme for Themes

Time sampling.

Fictive As Scripted

In scripted category ONLY. The child uses scripted figures to describe or enact a fictional story theme sequence from which the figure is derived (e.g. Fiona is being rescued by an Ogre named Shrek).

Fictive – Transformed Scripted (rare)

In scripted category ONLY. The child uses scripted figures to describe or enact a fictional story theme sequence from a different fictional story. (e.g. Cinderella is being rescued by an Ogre named Shrek).

Fictive – Transformed Unscripted

In unscripted category ONLY. The child uses unscripted figures to describe or enact a fictional story theme sequence. (e.g. the unscripted female figure is being rescued by an Ogre named Shrek)

Archetypical

In both scripted and unscripted categories. The child uses scripted or unscripted figures to describe or enact a theme that is not derived from a known fictional narrative but clearly not based on a child's lived reality (e.g., a knight rescues a princess)

Reality-based

In both scripted and unscripted categories. The child uses scripted or unscripted figures to describe or enact a reality-based story theme (e.g. the child uses either the Cinderella figure or the unscripted lady figure to go to the grocery store)

Type of themes

A. Action

The child uses figures to describe or enact a fighting, injuring, killing or dying sequence (e.g. Spiderman webs the dog; the Powerpuff girls fight the villains; the dog bites that other dog)

B. Good versus Bad Motif

The child uses figures to describe or enact a sequence that involves plots, threats, evil spells, good vs bad (e.g. the witch casts a spell on the princess)

C. Domestic

The child uses figures to describe or enact a cooking, cleaning, nurturing, caretaking, shopping sequence (e.g. the daddy figure cooks supper) .

D. Entertainment

The child uses figures to describe or enact attending a ball, party, dance or dinner (e.g. Cinderella goes to the ball).

E. Riding theme

The child uses figures to describe or enact a theme sequence in which a character rides an animal or vehicle.

F. Prosocial theme

The child uses figures to describe or enact a theme sequence that involved friendly encounters.

G. Other theme

The child uses figures to describe or enact a theme sequence not described in the above categories

H. No theme enacted

The child does not enact a theme sequence.