Merchandise and Media Effects: Young Girls’ Fantasy Play with Disney Princess Dolls

Dissertation

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By

Molly L. Sharp, M.A.

Graduate Program in Communication

The Ohio State University

2015

Dissertation Committee:

Dr. Susan L. Kline, Advisor

Dr. Daniel G. McDonald

Dr. Emily Moyer-Gusé

Dr. Amy I. Nathanson
Abstract

Media effects scholars have largely focused on the effects of viewing media while ignoring how media have infiltrated viewers’ environments in other ways. In particular, researchers should consider how merchandise from media texts may affect media effects or may produce unique media effects on their own. In this study, 41 girls ages 4-6 years were randomly assigned to play with either a doll of their favorite Disney Princess or a similar, non-media-related princess doll for ten minutes. They were then interviewed about their conceptions of their favorite Disney Princess. Using a new technique called “narrative string coding,” the content of the participants’ play was compared to the movie or movies featuring their favorite Disney Princesses. Quantitative analysis revealed that participants who played with Disney Princess dolls included more content in their play that exactly matched Disney Princess movies than did participants who played with other princess dolls. In addition, participants with more complex understandings of their favorite Disney Princesses as unique entities incorporated more content into their play that was completely different from Disney Princess movies than did children with less complex understandings of their favorite Disney Princesses. Qualitative analysis revealed that the relationship among the presence of media merchandise, the content media texts, and the aspects of their favorite Disney Princess that the participants’ most liked was associated with differences in the participants’ use of gender stereotypes in their fantasy
play. These results indicate that scholars must consider the full media environment, including merchandise, to fully understand media effects. This may have particularly important implications for cultivation and media’s effects on young children’s cognitive development. Further, parents who are concerned about children learning stereotypes from media should be meticulous in choosing exactly what merchandise with which their children should be allowed to interact.
Acknowledgments

I extend my sincerest thanks to my advisor Susan Kline for her continued guidance, patience, and support throughout not just this dissertation but my entire time at Ohio State University. I also thank Dan McDonald, Emily Moyer-Gusé, and Amy Nathanson for their assistance and advice on this project.

Special thanks to The Columbus School for Girls, Forest Park Christian School, and Clintonville Academy for their enthusiastic participation in this study.

I thank the Roundabout Players, Team Unicorn Vomit, and the Cox family for providing support, understanding, and caffeine throughout this process.

Finally, my deepest thanks to TJ Sharp for everything, including never comparing me to Laertes.
Vita

2008.............................................................B.A. Communication, Trinity University

2011.............................................................M.A. Radio, Television, and Film,

University of Texas at Austin

2011 to present ..............................................Graduate Associate, School of

Communication, The Ohio State University

Publications


Fields of Study

Major Field: Communication

Women’s, Gender, and Sexuality Studies
Table of Contents

Abstract .............................................................................................................................................. ii
Acknowledgments ............................................................................................................................ iv
Vita ..................................................................................................................................................... v
List of Tables ....................................................................................................................................... viii
Chapter 1: Introduction ..................................................................................................................... 1
Chapter 2: Review of Literature: Fantasy Play, Accessibility, Character Involvement, and Gender Schemata .............................................................................................................. 11
Chapter 3: Methods and Narrative String Coding ............................................................................ 46
Chapter 4: Quantitative Analysis and Results of H1 and RQ1 ....................................................... 72
Chapter 5: Qualitative Analysis and Results of RQ2 ....................................................................... 86
Chapter 6: Conclusion ....................................................................................................................... 113
References ......................................................................................................................................... 135
Appendix A: Tables ........................................................................................................................... 145
Appendix B: Diagram of Play Space .................................................................................................. 145
Appendix C: Example of Narrative String Coding in the Protagonist Category ......................... 150
List of Tables

Table 1. Frequencies of Favorite Princess Selections....................................................... 145
Table 2. Mean Number of Items in Each Category.......................................................... 146
Table 2. Matches, Additions, and Changes in Play Content............................................. 147
Table 3. Correlation Coefficients (Pearson r) Between Character Involvement and
 Matches, Additions, and Changes................................................................................ 148
Chapter 1: Introduction

Communication scholars have a long history of studying the effects of media on their audiences. As the landscape of media has changed over time, media effects researchers must change their work along with it. New technologies like cable television, VCRs, and online streaming have introduced a wider variety of media content and viewing experiences, and this changing environment may affect how and why media affect audiences. This dissertation will argue that the increased focus on merchandising among media companies is one such change that requires the attention of media scholars. The study described in the following chapters provides a first step for conducting such research by examining how toys designed to look like popular media characters may affect children’s lives, a necessary question in broadening media effects research to account for modern media environments.

Communication scholars, along with psychologists, sociologists, and others, have questioned how mass media affect audiences for nearly a century. In the late 1920s and early 1930s, the Payne Fund Studies raised concerns about teenagers’ attitudes towards crime and sex after watching movies regularly (Charters, 1933). Herzog (1944) examined how women react to and interact with serial radio programs. Horton and Wohl (1956) proposed that television viewers may feel interpersonally connected to the people they see on screens, especially when those screen people address their audience directly. Over the course of many studies, Bandura (e.g., Bandura, 1965; Badura, Ross, & Ross, 1963)
developed a model for how people learn to behave by observing the outcomes of media characters’ behaviors. Gerbner and Gross (1976) examined how repeated messages in media, in the absence of opposing messages, can change viewers’ perceptions of reality. Jenkins (1988) explored how communities formed around television shows and other media could help marginalized people fight against oppressive cultural structures. At the Sesame Workshop, researchers studied, among other things, how media could be used to foster positive relationships among racially and ethnically diverse children (Lovelace, Scheiner, Dollberg, Segui, & Black, 1994), and Fisch (2000) developed a model to explain how children can learn from educational television. These examples represent only a small fraction of media effects research, but even this small list demonstrates the long history and wide variety of topics explored within the media effects umbrella. Whether media are teaching prosocial behaviors or dangerous behaviors, instigating prejudice or trying to reduce it, helping people to feel more connected to others or less, the media effects tradition of communication research has tried to explain what effects of media exist, how those effects happen, and why media affect people they way they do.

Scholars’ attention to media effects is not irrational or uncalled for. Media effects research has important implications for numerous aspects of people’s lives and real-world experiences, including public policy decisions; children’s social and cognitive development; perceptions of oneself and others; and discourses about local, national, and international issues and events, among others. Given the complex nature between media, culture, and individuals, the past and continued research on media effects is not just merited but necessary to fully understand these relationships and their outcomes in
people’s lives. For those living in a media saturated environment like that of the United States, it is virtually impossible that media would have no effect on what people do, feel, and believe, so understanding human lives, as social scientists seek to do, requires research into these media effects.

This dissertation argues that media effects scholars have overlooked one aspect of media that could potentially affect audiences, media merchandise. The term “media merchandise” refers to toys, clothes, collectables, and other tangible objects depicting characters, quotes, or other symbols featured in media products. Usually these items are produced by the company that made the media text or by a company with a license to create such items, though online retailers like Redbubble and Etsy have allowed fan-made merchandise to become available as well. As explained further below, communication researchers should devote studies to understanding how the presence of media merchandise in media audiences’ lives may change media effects. Merchandise may, for example, act as mediators or moderators, reinforce ideologies from media, or cause viewers to question media content, among other possibilities. Such research may be especially important for children, due to the enormous amount of media merchandise targeted toward youth. This dissertation will argue for why this research is necessary and will report a study that beings to explore this critical area of scholarship.

**Media Effects and Merchandise**

Even with the extensive media effects research already published, significant gaps still exist. In particular, the extremity of the saturation of media in people’s environments after viewing ends has not been sufficiently explored in regards to how it may affect
media effects. To fill this gap, communication scholars must further consider the extent to which media audiences engage with media texts beyond the viewing context. This is not to say that media effects has ignored what audiences do when viewing is over; indeed, it is post-viewing experiences that media effects are primarily concerned with, asking, “What does this particular text or group of texts cause viewers to think, feel, or do at some specific point after viewing has ended?” For example, social cognitive theory predicts that watching someone in a movie be rewarded for telling the truth may cause a viewer to later tell the truth when put in a similar situation, expecting that same reward to be bestowed upon them (Bandura, 2008), and cultivation suggests that seeing repeated media images of African Americans working low wage jobs would cause a viewer to later, when they meet a new African American person, assume that the African American person works a low wage job (Morgan, Shanahan, & Signorielli, 2008). These media effects are unequivocally post-viewing experiences.

However, there is a difference between this kind of post-viewing outcome and continued post-viewing engagement with media that could moderate, mediate, reinforce, or otherwise change those post-viewing outcomes. This type of engagement involves a viewer making a decision that leads to the viewer intentionally or unintentionally continuing to interpret and understand media messages after they are over. This continued interpretation ultimately affects the effects of media because in many cases it is the interpretation of texts that determines the outcome of those effects. Using the above examples, it is possible that the viewer would not view the outcome of telling the truth as sufficiently rewarding. Maybe the movie character was rewarded with respect from
colleagues, and the viewer does not think of respect as especially important, or perhaps the character was rewarded with respect but also reprimanded with docked pay, and the viewer weighs that punishment as more important than the reward, even if this was not the message the movie’s writers intended. Either of these scenarios would likely lead to an outcome the opposite of that explained above; the viewer would not tell the truth in a similar situation. In the second example, it is possible in some circumstances that a person might not interpret all of those characters as African American. Depending upon the non-visual cues to racial and ethnic identity, a blind person may interpret that set of characters as coming from a variety of racial groups. A person from another culture where the boundaries of race are drawn differently similarly may not interpret the characters as African American. In these cases, the cultivation effects would not likely surface. Post-viewing cognitive engagement, like memory and rumination, is a key factor of some media effects theories, like social cognitive theory (Bandura, 2008). There has been little acknowledgement from scholars, though, that many people have post-viewing engagement with media that involve sources from outside of the viewer’s control encouraging post-viewing engagement that, without those outside sources, may not have occurred. Consider the following examples.

A woman witnesses her boss yelling at his administrative assistant for something that she knows was not the assistant’s fault. This is not the first time the boss’ behavior toward the administrative assistant has made the woman uncomfortable. The woman wants to step in and defend the assistant, but she fears that the boss could turn his wrath toward her. Torn, the woman returns to her desk and sees the figurine of Buffy from the
television show *Buffy the Vampire Slayer* that sits decoratively by her computer. She thinks for a moment about how Buffy fearlessly defends helpless people from monsters, even though it often means risking some harm to herself. Inspired to be like the character she loves, the woman returns to her boss to stand up for the administrative assistant.

A boy is excited to use his brand new coloring book, which features superheroes from the popular *Avengers* movie franchise. The boy flips through the pages trying to decide which picture to color first and stops on one with his favorite hero, Captain America. The boy picks up a peach colored crayon to begin coloring Captain America’s face, but he hesitates for a moment. He thinks to himself, “This is my coloring book, and I get to choose how everything looks. Why can’t Captain America look like me?” The boy puts down the peach crayon and instead colors Captain America’s face a dark brown, just like his face.

After school, a girl rushes home to play with her best friend and next-door neighbor. She changes out of her school uniform and into her favorite shirt, the sparkly one with Aurora from *Sleeping Beauty* on it. She runs outside and meets her friend. The first thing she notices is that he is wearing a shirt with Mario, Luigi, Toad, and Yoshi from the Mario Brothers video games jumping in an action pose. The kids quickly decide to play “rescue.” The girl runs up to the porch and yells, “Help! Save me!” The boy makes his way over to her while jumping and throwing pretend fireballs.

In each of these three examples, post-viewing engagement with media is sparked by media merchandise. Media effects theories would predict that this merchandise-initiated engagement would affect the effects of those media texts. In the first example, a
decorative figurine (not uncommon at many workstations) caused the woman to take pause and consider what about that media text speaks to her on a personal level, and she imitated those qualities based on a metaphor that she interpreted as embedded in the television series. Assuming that this woman identified with Buffy, that identification may become reinforced, and, if the outcome of her encounter with her boss is positive for her, this could also potentially increase the likelihood of further imitation in the future. In the second example, the boy’s newfound control over a media text caused him to consider the lack of diversity in a media text and reject the idea that people like him cannot occupy heroic roles. This could undermine potential cultivation effects from an environment of symbolic annihilation in superhero stories. In the final example, the presence of two shirts about media texts that both feature damsel in distress narratives sparked play that also relied on a damsel in distress narrative, and this could work to support cultivation effects that normalize traditional gender roles. In each of these hypothetical cases, there is potential for altered media effects due to engagement triggered by merchandise. The merchandise could potentially prime media to increase the likelihood of effects, cause viewers to reject information from media, cause them to accept mediated messages, or result in viewers taking any number of other actions.

Of course, the word “potential” is key. The whole point is that these outcomes are possible and need to be examined scientifically, which inherently means that no one can yet claim with confidence that these outcomes will occur. Nonetheless, the mundane plausibility of these scenarios demonstrates well why scientific examination is merited. If the saturation of media in a culture goes beyond the increased availability of media to a
point where reminders of media texts are an environmental constant, then the hypothetical situations described above are not by any means far-fetched. They describe simple, reasonable reactions to stimuli in the people’s immediate environments. If communication scholars accept that people’s thoughts and behaviors are affected by the world around them, and if they accept that media can have effects on audiences, then communication scholars must question and seek to explain how the infiltration of media merchandise into people’s environments ultimately affects audiences’ thoughts and behaviors.

**The Media Merchandise Industry**

The idea that merchandise may be an important part of the media effects umbrella is predicated on the assumption that merchandise actually does exist in substantial amounts in audiences’ environments. Just how common is media merchandise? Once thought to be a domain of special interest for small groups of fans, media merchandise has now become part of the mainstream.

Sales reports indicate that merchandising is an incredibly lucrative element of the entertainment industry, especially the children’s entertainment industry, and has gained an enormous global presence. In 2012, the entertainment licensing industry garnered $49.3 billion in sales (Faughnder, 2013), with three franchises—Disney Princesses, Star Wars, and Hello Kitty—reporting over $1 billion in sales (PRNewswire, 2013). An additional thirty-one properties reported sales over $100 million (PRNewswire, 2013). In 2013, media giant Disney reported $40.9 billion in licensing sales (Graser, 2014). Notably, these numbers include only merchandise that is licensed to other companies, not
merchandise manufactured by the parent companies themselves, so these numbers are likely underestimates of total sales of all media merchandise.

These numbers indicate two important things about media merchandise. First, such high sales suggest that media merchandise actually is a part of many people’s lives. This merchandise does not sit on the shelves of specialty stores gathering dust and waiting for dedicated collectors; masses of people buy media merchandise, and owning these products is a normative cultural practice. Second, such high sales indicate that media merchandise is unlikely to suddenly fade from existence. As explained above, people are willing to buy media merchandise, and companies are unlikely to abandon such a lucrative venture. While the media franchises featured in merchandise may change over time, the existence of merchandise in people’s lives will likely remain.

The understanding of media merchandise as a common and lasting facet of the public’s use of media emphasizes just how crucial it is that communication scholars examine how media merchandise fits into the larger picture of media effects. While such research may be relevant for many populations and types of merchandise, children’s toys merit specific attention. Previous research indicates that both media use and play activities may influence children’s cognitive and social development, as will be explained in chapter two, so it is important to consider how the interactions between these phenomena may contribute to these effects by bolstering them, undermining them, or both. Furthermore, the ten most profitable entertainment merchandise franchises all produce at least some products, if not most of their products, specifically for children. Again, the high sales of these products indicate that many children are, at least, being
exposed media franchise toys and, at most, playing with media franchise toys on a regular basis.

**The Following Study**

This dissertation will take initial steps to incorporating media merchandise into media effects research with a study of children’s use of media merchandise in their play. Specifically, this study explores how preschool- and kindergarten-aged girls use Disney Princess branded dolls differently in their play than they use similar generic princess dolls, meaning dolls that do not look like any particular princess in popular media. Following this introduction, chapter two will review previous literature about how children learn from play and how particular communication concepts may be useful in understanding the role of media merchandise in that learning-through-play process. The third chapter will thoroughly explain the methods of the study, which combine the event-indexing model of narrative interpretation with string edit theory in order to compare the contents of two different narratives that differ vastly in length and complexity. The fourth and fifth chapters will cover analyses of the data gathered from this method and the insights gained from the results, with chapter four focusing on quantitative analysis and chapter five focusing on qualitative analysis. Finally, chapter six will summarize how these quantitative and qualitative insights together can help scholars to begin to understand the role of merchandise in media effects and guide future research in this area.
Chapter 2: Review of Literature: Fantasy Play, Accessibility, Character Involvement, and Gender Schemata

With an understanding of media merchandise as a common and lasting facet of the public’s use of media, it becomes crucial for communication scholars to examine how media merchandise fits into the larger picture of media effects. While such research may be relevant for many populations and types of merchandise, children’s toys merit specific attention. Previous research indicates that both media use and play activities may influence children’s cognitive and social development, so it is important to consider how the interactions between these phenomena may contribute to these effects by bolstering them, undermining them, or both. Furthermore, the ten most profitable entertainment merchandise franchises all produce at least some products, if not most of their products, specifically for children. Again, the high sales of these products indicate that many children are, at least, being exposed media franchise toys and, at most, playing with media franchise toys on a regular basis.

The lack of research in this area means that these potential effects have not been sufficiently theorized and that practical concerns about children’s lives are left unaddressed. The cognitive and social processes that underlie the effects of merchandise on play remain unexplained. Models for these processes have yet to be proposed, much less empirically tested. And parents and educators are left with no guidance on to what degree play with media toys should be discouraged or encouraged.
Fully accounting for these theoretical and practical concerns will, of course, be a lengthy process that no single study could accomplish. However, scholars may begin to theorize the effects of merchandise on children’s lives by identifying particular extant theories, concepts, and phenomena with logical links to this area of study and testing how these factors may be involved. This dissertation examines how three such factors—accessibility, character involvement, and schematic knowledge—may begin to provide insight into the relationship between media merchandise and play. This chapter reviews literature regarding the relationship between children’s fantasy play and learning, followed by a review of literature that questions the role of media in that relationship. Then, I will explain how communication theories may provide further insight into why the relationships between learning, play, and media exist. Based on this literature, I will propose hypotheses and research questions that integrate two communication concepts, accessibility and character involvement, into this body of work.

**Media and Children’s Play**

Over the past few decades, researchers have examined some aspects of the relationship between media exposure, usually television, and children’s fantasy play, defined as play in which enjoyment is derived from pretending that something is something else (Smith, 2010). This type of play may include, for example, pretending that a box is a house, pretending that a plastic food is real food, or pretending to use an imaginary phone. Much of the scholarly concern with media and fantasy play has focused on fantasy play with a narrative element, play in which a child takes on a make-believe
role (e.g., firefighter, wizard) or assigns roles to other entities (e.g., using action figures to play house or war).

Often, researchers have questioned whether the growing availability of media in the home had been associated with a decrease in time spent engaging in fantasy play, a phenomenon called “displacement” (van der Vroot & Valkenburg, 1994). This is an important question that merits the attention it has been given, but it is not the only aspect of the relationship between media and fantasy play upon which researchers should focus. The effects that media may have upon the content of children’s play is also important due to the relationship between play and learning, but this has received far less scrutiny.

**Fantasy Play and Learning**

Historically, scholars have not been in complete agreement over the function of fantasy play in children’s learning. Piaget’s (1962) concepts of assimilation and accommodation, along with mixed results from empirical studies, fuel these disagreements. Piaget (1962) proposed that learning occurs through changes in schemata. In a view that combines elements of structuralism and constructivism, Piaget (1962; 1970) proposed people understand the world through cognitive structures called “schemata” that help to categorize and connect knowledge. These schemata are constructed by individuals based upon their own experiences and environments, but the course of progression of schemata that support the movement through Piaget’s stages of development are highly similar across populations. Schema construction, according to Piaget (1962), occurs through assimilation, in which a person incorporates new knowledge into pre-existing schemata, and accommodation, in which a person recognizes
that their existing schemata do not fit with new information and constructs or reconstructs schemata to fit their new knowledge.

Consider the following example. A young child is familiar with dogs and therefore has developed a schema for dogs. The schema contains the knowledge that dogs have four legs, have fur, have tails, make a barking sound, that Fido next door is a dog, that Spot in her favorite book is a dog, and other similar information. When the child sees a fox for the first time, she assumes that the fox is a dog because it shares many of the same features of dogs. In other words, she assimilates the concept of a fox into her pre-existing schema for a dog. Several days later, the child sees another fox and points out the “dog” to her parents. Her parents explain that these are two different animals and teach her the word “fox.” At this point, the child accommodates this new information by forming a new schema for foxes, which is cognitively related to her schema for dogs because of their shared attributes but is nonetheless distinct. However, the accommodation of forming the fox schema is assimilative in other ways. Because the child is in the preoperational stage, the information in both schemata is primarily physical attributes and examples of specific dogs and foxes; the child has not yet developed enough understanding of how abstract concepts work to build schematic understanding of dogs and foxes on, for example, the level of DNA, so the child’s schemata for these animals are bound by her schema for understanding reality and evidence. She has, in this sense, accommodated knowledge of foxes by assimilating to her current level of symbolic representation and reasoning. As the child’s brain itself continues to develop,
she will eventually build upon her schemata for symbolic representation and reasoning and will engage in accommodation of her fox and dog schemata once again.

Piaget (1962) viewed play as contributing primarily to assimilation processes. He used play as an indication that brain development had occurred and that foundational schemata had been formed. In other words, had the cognitive development not happened, then the play behavior would be impossible, so play functions only as a means of rehearsing what a child already knows by means of assimilation. Accommodation and the learning that occurs through accommodation, in this view, act as the cause of children’s play, not the effect. In fact, Piaget (1962) used play as an outcome variable for learning, using observations of children’s play as evidence that cognitive development had previously occurred. If a child is engaging in fantasy play, then this indicates that the child has already developed the cognitive structures that support the symbolic understanding necessary for pretending.

Vygotsky’s (1967) perspective on play is essentially the opposite of Piaget’s. For Vygotsky, cognitive development is the result of practice. From this perspective, engaging in fantasy play is what allows children to develop symbolic understanding. Vygotsky considers play to be a form of wish fulfillment that liberates children from the constraints of what they already know. Smith (2010) argues that this is highly similar to Piaget’s concept of accommodation; fantasy play functions as an act of exploration that allows children to understand the external world and adjust their previously held schemata to account for the new information. Under this interpretation, Piaget (1962) and Vygotsky (1967) mostly agree on the process that underlies cognitive growth, but they
disagree on whether or not fantasy play functions to promote the process that underlies cognitive growth.

Many studies have attempted to settle this debate by examining the links between cognitive development and play. Both Smith (2010) and Lillard et al. (2013) provide in-depth reviews of research contributing to this debate, and both conclude that neither Piaget’s nor Vygotsky’s view is clearly supported across the breadth of research from the past several decades. As Lillard et al. (2013) explain, clear support for Vygotsky’s view would require that studies find consistent, strong links between amounts of fantasy play and cognitive development, and clear support for Piaget’s view would require links between fantasy play and cognitive development only when other factors promoting development, like conversations with parents, are present in the play activities. However, neither one of these scenarios is well-supported. Across developmental domains including creativity, theory of mind, executive function, linguistic skills, and others, some studies supported Piaget while others supported Vygotsky, and the strength of such support is inconsistent (see Lillard et al., 2013 and Smith, 2010 for in-depth reviews).

Smith (2010) proposes what he calls “equifinality” as an alternative perspective that can help to reconcile these divergent results. Under this perspective play can and often does have positive effects on cognitive development, but play is one of many possible ways that such development can occur. In other words, play is capable of causing advancements in learning and development, but a child who is not engaging in large amounts of play may still achieve these same advancements through other sources, like conversations with parents, reading, or simply natural development of the brain over
time. Both Smith (2010) and Lillard et al. (2013) agree that the equifinality perspective is better supported by empirical evidence than the perspectives that play represents a crucial element of cognitive development or that play is only an outcome of cognitive development. It seems likely that fantasy play is one of several ways that children may be able to practice important social cognitive skills that allow for learning through accommodation. Taking this a step further, the use of play for accommodation does not necessarily preclude its use for assimilation. It is possible that play may function differently at different times and in different contexts.

In addition, it is important to remember that both assimilation and accommodation involve changes in schematic knowledge. The debate around learning and play has focused mostly upon accommodation because the process underlies the development of cognitive skills and because it relates to accuracy of knowledge, like the previous example of understanding that a fox is not a dog. However, much information cannot be accurately assessed as objectively right or wrong, and this information also exists within schemata. When scholars, parents, educators, and others are interested in changes in these schemata, then both assimilation and accommodation are of interest. Again, the concern becomes not whether assimilation or accommodation is occurring, but in what contexts each may occur and from where the new schematic knowledge comes.

**Fantasy Play and Media**

Previous research on the relationship between media and fantasy play indicates that media are often involved in these processes and may therefore be one factor that contributes to creating the contexts in question. This body of research supports the idea
that both assimilation and accommodation may be involved. Most of the work in this area utilizes case studies, and these studies reveal instances in which media content is assimilated into extant schemata as well as instances in which media content is questioned, adapted, and accommodated.

Several scholars have reported instances of children assimilating characters and settings from media into common scripts for play. For example, James and McCain (1982) describe a popular game in their sample of preschoolers called “Bionic House,” in which the children play a normative game of house but declare that all members of the family are bionic, like the titular character of the television show *The Bionic Woman*. Similarly, Wood and Cook (2009) describe games of house in which the children pretend to be characters from the *Harry Potter* book and movie series. Neither of these texts centers around family life, and the main storylines in these texts are built around action and adventure, as opposed to domestic conflicts, so these children are clearly transporting characters and settings into their previously formed ideas about playing house.

This is somewhat similar to observations from Dyson (1996, 1999, 2003) and James and McCain (1982) that children often combined textual knowledge with other schemata that matched the media content. Preschoolers in James and McCain’s (1982) study used Batman as an outline for fantasy play in which the “good guys” chased the “bad guys.” Scholars in the 1920s and 1930s recorded essentially identical games in which Batman and his villains were replaced with cops and robbers or cowboys and Native Americans (French & Pena, 1991), and even then this type of fantasy play was likely not new. This is another case of children assimilating media content into schemata.
However, in this case, the common play form of chasing games is highly relevant to the media text of Batman; not only do many Batman stories, especially those on television, fit within “good versus evil” tropes, but the characters sometimes engage in actual chases. While it would be difficult to deny that children’s schemata of chasing games played a role in these Batman games, the children’s understanding of the original media text and its thematic attributes also came into the picture, combining to form a highly generalized version of Batman stories.

Along the same lines, Dyson (1996, 1999, 2003) observed similar, though slightly more media-conscious and complex, patterns in first through third graders. The children in these elementary school classrooms used popular movies and television programs as inspiration during creative writing and drawing activities. This often resulted in creative works that, like James and McCain’s (1982) Batman play, resulted in a generalized and thematically aware version of the original media text, although this time closer to the original text than the Batman chases were. Dyson (1996) also reports third graders developing fantasy play for a large group by using the Greek gods and goddesses they were learning about in class. The children took on the roles of the figures from class, or made up new gods and goddesses who were family members of those figures, and engaged in fantasy play that combined traditional house and war games. Again, while these play scripts existed prior to the play, they fit well into the myths from which the characters came, as these featured both war and domestic stories. Furthermore, the combining of multiple play scripts is certainly transformative.
Other scholars, however, have reported children engaging in fantasy play that is much more transformative and that aligns very well with accommodation’s active restructuring processes. All of these cases involved conscious examination of at least one schema involved in the fantasy play, usually a schema of identity or of the original media text. In Wood and Cook’s (2009) case study, one child used the *Harry Potter* series to take on the role of a wizard casting spells on his teachers, whom he referred to as “trolls.” The authors point out that trolls in the *Harry Potter* series are strong but unintelligent, so they interpret this play as allowing the child to step into a role of superiority and power compared to his teachers, who usually have authority in the classroom. Similarly, James and McCain (1982) observed several children using media characters to confront their fears in fantasy play. When children were afraid to do something, like confront a bully or swing on a rope, the children could gain confidence to complete the task if they first took on a persona of someone they considered brave (e.g., “Now that I’m Batman, I can do anything!”). All of these instances of fantasy play allowed children to examine their own identities and accommodate their schemata to this newfound information about themselves.

Finally, some scholars have observed children reflecting upon media texts and using fantasy play to change elements of the original texts that the children found unfair or simply did not like. Marsh (2000) set up a special area in a classroom of six- and seven-year-olds called “Batman and Batwoman Headquarters,” which contained costumes, props (e.g., a Batmobile), and a writing area with journals for both Batman and Batwoman. Marsh (2000) notes that while women in comic books and other superhero
stories typically fill passive roles, the girls in the classroom utilized the Batwoman role in their play to enact roles that are usually reserved for boys’ play. Girls transformed the Batman texts they already knew so that they could be in the hero role, ultimately changing their understanding of superheroes and of women as well as forcing the boys in the class to see that girls may sometimes want to play parts that they had previously thought were just for boys. Along similar lines, Wohlwend (2009) observed kindergarten girls changing elements of Disney Princess stories during semi-structured story-telling activities. For example, one girl directed a play of Disney’s *Sleeping Beauty* with herself in the role of Princess Aurora. She intended to follow Disney’s version of the story as closely as she could remember, but once she reached the part of the story where Aurora stayed asleep, she found the role boring and changed the story so that Aurora could help Prince Philip fight the dragon. In these examples, girls changed the original media texts very consciously with the specific intention of exploring new roles for characters of that shared their gender. These kinds of transformative fantasy play activities bring children to understand the media texts and/or themselves in new ways, triggering accommodation of new schematic knowledge in these domains.

Thus, the body of literature examining how media are used in fantasy play supports the idea that both assimilation and accommodation act upon schematic knowledge during such play. However, this literature has a number of limitations that stop it from understanding what circumstances may produce these varying types of play. First, these studies all utilize observational case study methods. Of course, this is useful and has provided a crucial depth of information about these play behaviors. However,
these methods need to be triangulated with quantitative coding measures and samples from across multiple classrooms in order to improve external validity. Second, all of these studies involve group play. Again, this is useful and logical, as the amount of group fantasy play in which children engage increases over early childhood (Smith, 2010). However, this is not the only environment in which children engage in fantasy play, and solitary fantasy play must be added to the research in order to understand the full range of media in play behaviors. This is especially the case when one considers that children may be more likely to stick closer to common scripts in groups because these scripts may be similar among all members of the group, enabling easier group interactions. Finally, the fantasy play in this body of literature excludes play with media merchandise. It is possible that the inclusion of objects clearly designed to represent certain media characters would sway children toward either assimilation or accommodation in their fantasy play. Certain concepts and theories from communication literature may help to shed light on these possibilities.

**Accessibility, Character Involvement, and Media Play**

Theories from communication and related fields may be helpful in delving into why differences in children’s fantasy play involving media texts exist. In fact, it is not unreasonable to place these questions within the realm of media effects. Ultimately, trying to understand how children may use media in their fantasy play boils down to the unique contribution of media to play. In other words, the question is whether play would be substantively different without media influence, and if so, to what degree and in what ways. How do media affect the play? It is logical, then, that concepts from studies of
media may be useful in answering these questions. In particular, accessibility and
counter involvement may be important factors and provide an excellent framework for
continuing research in this area, and examining schematic knowledge in one particular
domain that is known to be heavily influenced by media, in this case gender, may provide
further insight.

**Accessibility and Related Concepts**

Accessibility and the closely related concept of sufficiency help to explain how
exposure to particular ideas may influence later judgments or behaviors unconsciously. In
addition, these two concepts form the foundation of cultivation, which is an important
factor in the formation of beliefs. Each of these is discussed below.

**Accessibility.** Accessibility refers to how easily a person is able to recall
something from memory, with high accessibility meaning that an item is relatively easy
to recall and low accessibility meaning that an item is relatively more difficult to recall
(Wyer, 2004). These “somethings” may be virtually anything—physical objects, abstract
concepts, events, or anything else a person may be capable of remembering. An object’s
accessibility is affected by the frequency and recency with which the object was
cognitively activated. When a person is reminded of an object, it becomes temporarily
more accessible (Wyer, 2004). In other words, more recently activated objects have
higher accessibility, which lowers over time. For example, in one of the most well-known
studies of accessibility, Higgins, Rholes, and Jones (1977) asked people to form an
impression about a person with a goal that could be interpreted as either adventurous or
foolish. In a previous task, the participants were exposed to either positive adjectives
(e.g., independent, confident) or negative adjectives (e.g., reckless, conceited), and their judgments of the goal tended to match the adjectives to which they had been exposed. The recent activation of positive or negative traits made these traits and their valence accessible and affected the participants’ later judgments.

Somewhat similarly, when a person is reminded of an object frequently, it also becomes more accessible, but this effect does not gradually decline over time like the effects of recency (Wyer, 2004). In fact, once frequency of activation reaches a high enough point, an object may become chronically accessible, making the object very easy to recall all the time (Wyer, 2004). For example, when people were presented with a story about what could be interpreted as either a card game or a band practice, music majors were more likely than students studying unrelated topics to understand the story as a band practice, presumably because the idea of playing music was chronically accessible to these students (Anderson, Reynolds, Schallert, & Goetz, 1977).

In addition to the objects themselves becoming more accessible, the activation of an object can make similar objects and related knowledge more accessible as well (Wyer, 2004). For example, activating knowledge of terrorist events can make death in general as well as one’s own death more accessible (Das, Bushman, Bezemer, Kerhof, & Vermeulen, 2009). Similarly, activation of one stereotypical trait can make other stereotypes about the same group accessible (MacRae & Martin, 2007). The process even holds true for concepts that are related by virtue of being opposites; activating “honesty” or “kindness” may make “dishonesty” or “unkindness” accessible (Park, Yun, Kim, & Wyer, 2001).
**Sufficiency.** As will be explained below, accessibility often combines with the principle of sufficiency to produce patterns in cognition and behavior. Sufficiency refers to the idea that people tend to stop expending cognitive effort if a goal has been reached adequately (Wyer, 2004). If a person has a question or problem that requires a solution, that person will likely stop considering alternatives once they find the first sufficient solution unless they are highly motivated to continue thinking. As sufficiency is closely intertwined with accessibility, this principle is actually apparent in the studies of accessibility above. For example, in Anderson et al.’s (1977) study of chronic accessibility, when asked what the story was about, why would many or most of the participants not respond that the story is unclear and could be about either a card game or a band practice? The answer is sufficiency; once the participants had come up with an idea that, to them, answered the question sufficiently, they stopped thinking of alternative possibilities. The goal of answering the question had been achieved, so they had no motivation to continue trying to complete the task. Thus, accessibility and sufficiency generally affect decision-making and judgments such that people will think of the most accessible possibilities first, and then, if these are deemed sufficient and motivation to continue considering alternatives is low, they will stop thinking of possibilities and settle upon that most accessible possibility as their solution to the task at hand (Wyer, 2004).

**Cultivation.** Notably, Shrum (2008) proposes that the combination of accessibility and sufficiency described above is the process that drives cultivation. Cultivation views media as a system of messages whose shared themes work together to create ideologies in viewers (Morgan, Shanahan, & Signorielli, 2008). Based in the idea
that media content tends to be relatively homogenous, cultivation posits that heavy viewers of media will come to perceive the repetitive messages in their media as a reflection of reality (Morgan, Shanahan, & Signorielli, 2008). This process occurs unconsciously and over long periods of time. For example, content analyses by Smith and Cook (2008) and Smith, Choueiti, Prescott, and Peiper (2012) reveal that female media characters are likely to be very thin, so the more media children watch, the more frequently they will be exposed to images of very thin women. Over time, children who are heavy viewers will, without conscious effort, come to believe that women are supposed to be very thin. In essence, cultivation predicts that when an object or an association between two objects appears frequently in media, heavy viewers of that media will develop chronic accessibility toward that object or that association due to frequent exposure (Shrum, 2008). Studies have found support for such cultivation effects in people’s beliefs about a wide variety of topics, including crime rates (Shanahan & Morgan, 1999), the trustworthiness of strangers (Signorielli, 1990), rape myths (Kahlor & Eastin, 2011), and gender roles (Lafky, Duffy, Steinmaus, & Berkowitz, 1996; Saito, 2007), among many others.

**Accessibility and Play.** Fantasy play requires that children make up a story, and what they choose to put into that story may be due at least in part to accessibility and sufficiency. The goal of fantasy play is for the playing child or children to entertain themselves, so sufficiency suggests that as children progress through any particular instance of play, they will continue to add parts to the story that they consider sufficiently fun enough to achieve the goal of being entertained. Accessibility suggests that out of the
infinite number of possible people, places, things, and actions that could become part of the child’s play, the child will think of more accessible things first. If those things are sufficiently fun, they will be incorporated into the play.

All toys will be related to schematic knowledge in some ways. A ninja toy, for example, may be related to objects like throwing stars, Japan, or masks. However, media merchandise is likely schematically related to things that have much weaker connections to their generic counterparts, meaning toys or other objects that are not intended to represent a character or other object from a specific media text. A Teenage Mutant Ninja Turtle toy should activate knowledge about Teenage Mutant Ninja Turtle television shows, movies, and/or comic books, meaning that things like pizza (the turtles’ favorite food) or April the reporter (the turtles’ friend) will be much easier to recall than they would be from a generic ninja toy. It is certainly possible, if not likely, that the fact that the Ninja Turtles are ninjas means that a Ninja Turtle toy would also activate generic ninja knowledge and that the generic ninja toy would activate Teenage Mutant Ninja Turtle knowledge. However, these would not be activated with equal strength; Teenage Mutant Ninja Turtle knowledge would be much stronger for a Ninja Turtle toy and weaker for a generic ninja toy, meaning that Ninja Turtle knowledge would come to mind with greater ease. The opposite would be true for the generic ninja toy; Ninja Turtle knowledge may be more accessible than knowledge about something completely unrelated, like hamburgers, but it would be less accessible than generic ninja knowledge. Thus, is it possible that play with media merchandise may be very different from play
with similar toys that are unrelated to media due to differences in the schematic knowledge that becomes activated by the toys.

**Character Involvement**

Along with accessibility, character involvement may be an important factor in the relationship between media and fantasy play. Character involvement is an umbrella term for a number of distinct cognitive, affective, and behavioral responses to media characters (Rubin & Perse, 1987). The word “character” here is applied loosely and, in addition to the normal meaning of fictional entities like Lisa Simpson of *The Simpsons* or Cliff Huxtable of *The Cosby Show*, may apply to news anchors, talk show hosts, celebrities, or any other real people whom viewers come to know only by observing them in media (Giles, 2002). This dissertation examines two particular types of character involvement, parasocial relationships and wishful identification, in relation to their possible interactions with media merchandise during fantasy play.

**Parasocial relationships.** Parasocial relationships are enduring feelings that the viewer has formed an interpersonal relationship with a media character (Dibble & Rosaen, 2011; Giles, 2002; Moyer-Gusé, 2008). This is distinct from another closely related form of character involvement called parasocial interaction, which refers to a transient feeling that a viewer is experiencing interpersonal interactions with a media character during the time of viewing (Hartmann & Goldhoorn, 2011; Rosaen & Dibble, 2011; Schramm & Hartmann, 2008). It is important to note that these two terms are often confused in character involvement literature because the distinction between them is a relatively recent development. The original concept of a one-sided pseudo-relationship
with a media character, what is now called a parasocial relationship, was proposed by Horton and Wohl (1956) and termed “para-social interaction.” This phrase was used to describe both forms of character involvement for several decades. More recent perspectives, however, differentiate the concepts and propose that parasocial interactions occur first with the potential to lead to parasocial relationships, which develop over time.

Reeves and Nass (1996) explain the development of parasocial relationships as part of a phenomenon they term “the media equation.” According to this perspective, people respond to stimuli with social characteristics as though those stimuli are real people, probably because modern technology was unavailable during most of human evolution and there was no need to develop a separate cognitive function for the purpose of interpreting socially realistic images on screens. In other words, because audience members recognize that media figures behave in much the same way that real people do, the audience members understand those media figures in the same ways that they understand real people. While viewers are almost always fully aware that they do not actually know the media character in real life, viewers nonetheless feel as though they do. During the time that media viewing occurs, this takes the form of parasocial interactions, the feeling that an interpersonal interaction is occurring (Dibble & Rosaen, 2011; Hartmann & Goldhoorn, 2011; Schramm & Hartmann, 2008). As viewers experience many parasocial interactions with the same character over time, they may develop the feeling of an interpersonal relationship with that character, just as a person might develop a friendship or other relationship with a real person with whom they have frequent,
meaningful contact (Eyal & Dailey, 2012; Rosaen & Dibble, 2011;). This would be a parasocial relationship.

Giles (2002) points out that little research has been done on children’s parasocial interactions. What little research does exist has certain important limitations. First, the measures used in these studies are mostly measures designed for parasocial relationships in adults that have been adapted in language only (e.g., Hoffner, 1996). This means that these studies are measuring adult relationships in children, ignoring that children’s perceptions of social relationships with peers and behaviors within them develop over time, typically in a pattern from more concrete, ephemeral, and unilateral in early childhood toward more abstract, long-lasting, and two-sided in adolescence (Furman & Buhrmester, 1985; Gershman & Hayes, 1983; Gleason & Hohmann, 2006; Rotenburg, 1995; Vaughn et al., 2000). Second, research on children’s parasocial relationships has tended to focus more on predictors of these relationships than their outcomes (e.g., Hoffner, 1996; Rosaen & Dibble, 2008). Of course, research into these predictors is certainly valuable, but research on both predictors and outcomes is necessary for an understanding of the phenomenon in children’s lives. Much research on adults’ parasocial relationships has focused upon whether these relationships may take the place of real life relationships and/or offer the benefits of real relationships to viewers, and this body of work has generally found that this is only the case for individuals for whom real relationships produce anxiety (Derrick, Gabriel, & Toppin, 2008; Eyal & Dailey, 2012; Greenwood & Long, 2011; Nordlund, 1978; Rubin, Perse, & Powell, 1985). However, keeping in mind that children’s real life social relationships differ qualitatively from
those of adults, scholars should not assume that patterns in adult relationships extend to children, especially since young children’s social relationships, like parasocial relationships, are often one-sided. Scholars therefore need to fill this gap in the literature.

**Wishful identification.** Wishful identification is the feeling of wanting to be more like a media character, sometimes coupled with the behavior of trying to become more like that character (Hoffner, 1996; Moyer-Gusé, 2008). Like parasocial relationships, wishful identification is often conflated in literature with a closely related concept, identification, which refers to the temporary feeling of taking the place of a media character (Hoffner, 1996; Moyer-Gusé, 2008). Again, this is largely the result of the two concepts being separated several decades after the idea of identification appeared in communication research (Cohen, 2001; Hoffner, 1996). Nonetheless, Cohen (2001) points out that maintaining the distinction between these concepts is crucial because identification indicates a loss of self in a media character while wishful identification necessitates a recognized difference between the self and the media character; a person cannot wish to obtain a quality if they believe they already have that quality.

Unlike parasocial relationships, wishful identification has a long history as a variable of interest for children. Wishful identification may be particularly important for persuasion and/or learning purposes (Lional & Vanauken, 1986), which is supported by the fact that children tend to have better recall of what a character says and does when they wishfully identify with that character (Maccoby & Wilson, 1957). Wishful identification can also affect young people’s career aspirations, particularly among working class children (Hoffner et al., 2006; Maccoby & Wilson, 1957).
Character Involvement, Accessibility, and Play. Like the potential differences in children’s play with media merchandise and generic alternative toys, degrees of character involvement may constitute one condition under which changes in play behavior will occur. A child who is very strongly involved with a particular media character may find different things sufficiently fun than someone who is weakly involved. For example, a child with a strong parasocial relationship may feel as though they and the character should share interests, as friends often do, and therefore may get the most enjoyment out of a pretend story in which the character is doing things that the child likes to do or in which the child and the character do something together. A child with a weaker parasocial relationship may not feel as much of a desire to share interests with the character and would not develop a story highlighting those shared interests. As another example, a child with strong wishful identification toward a certain character may want to ensure that only good things happen to the character because they too want to have positive, happy experiences, and negative experiences would cause the child anxiety and be less fun. A child with a weak wishful identification toward that character may be less anxious about bad things happening to the character or may even find such negative experiences entertaining. In these examples, the strength and kind of character involvement affects what can fulfill the goal of entertaining oneself and, therefore, affects the fantasy play.

These potential effects, however, are still closely related to accessibility and sufficiency. First it is possible that these differences will only exist among media merchandise; it may be that play is affected only when knowledge of the character is
activated by the child seeing or otherwise interacting with a toy of that character, but
children’s play with generic toys would be very similar regardless of their involvement
with a character that shares certain role characteristics. However, it is also possible that
very strong character involvement could override expected patterns of accessibility. If,
for example, a child has a very strong parasocial relationship with Donatello, of the Ninja
Turtles, then Donatello may be accessible enough that even a generic ninja toy could
cause the child to immediately think of Donatello. In this case, that child’s play with a
Donatello toy and a generic ninja toy would likely be very similar, and it would be the
type and strength of the character involvement, not the type of toy, that causes changes in
fantasy play.

Second, it is possible that children with stronger character involvement may have
schemata for that character that tend to be different from those of children with weaker
character involvement. Whenever knowledge of the character is activated, whether that
be only when playing with media merchandise or also when playing with generic
alternative toys, the elements of the character or media text that drive the relationship
may be more accessible than other aspects. For example, if a child wishfully identifies
with Donatello primarily because the character is smart and works with machines, then
the child may make up a story in which Donatello fixing or inventing something is a
central component. Other children, in contrast, may have higher accessibility toward
things that happen more frequently in Teenage Mutant Ninja Turtle media, like fighting
or meeting with April, because, as explained above, frequency tends to increase
accessibility. In this case, the character involvement would change the fantasy play
through the means of changing what parts of the schema for the character are more accessible.

**Gender Schemata and Media**

As explained above, it seems logical that media merchandise and character involvement may be linked to the content of fantasy play. In addition to examining these as variables, this dissertation will also analyze how schematic knowledge from media may be represented in play by focusing on one particular domain of knowledge with established links to media, gender. Because of this, it is necessary to briefly review relevant research on gender schemata in children and how they relate to media.

Even very young children have schematic knowledge of gender. Preschoolers are able to answer questions about the meanings of gender categories and how to identify them, indicating that children in this age group already have gender schemata (Bem, 1989; Oliver & Green, 2001; Skrybalo & Ruble, 1999; Tenenbaum, Hill, Joseph, & Roche, 2010). Two-year-old children recognize that some behaviors are deemed more appropriate for boys or girls, as boys of this age actively avoid modeling play behaviors they recognize as feminine, like putting a diaper on a teddy bear or cooking pretend breakfast (Bauer, 1993).

However, young children’s gender schemata are simple, at least compared to adolescents’ and adults’ gender schemata (Calvert & Huston, 1987), and television can be instrumental in molding these schemata into the complex forms they take later in life. Typically, television activates gender schemata by including gender-related information (sometimes just the identification of characters as men or women is enough), and then the
information the television show provides about gender is adapted into the existing gender schema (Calvert & Huston, 1987). For example, if a television show establishes that one character is a woman, perhaps by giving her gendered clothing or the role of mother, and then shows the woman cleaning her home, children (and adults) who can comprehend the established gender and the actions may incorporate the depicted behaviors into their gender schemata (i.e., cleaning is something that women do). However, when that information counters the information already stored in the schema, viewers typically adapt their schemata in ways that allow the original attitudes and beliefs to stay in tact (Calvert & Huston, 1987), or viewers may selectively ignore that information (Bauer, 1993; List, Collins, & Westby, 1983). To extend the previous example, if a viewer saw a television show with a woman cleaning a house first and then saw a program in which a man cleaned a house, viewers may adjust their gender schema to incorporate that men might clean a house when there are no women to do the chore, allowing the viewer to maintain the original schema, or the viewer may simply not encode the seemingly contradictory information, leaving the original schema in tact with no adjustments at all. The more ingrained the original schema is, the less likely it is that the new information will challenge the schema in a substantive way (Calvert & Huston, 1987).

As mentioned above, children’s gender schemata are relatively simple, and because of this, it is easier to use counterstereotypical information to adjust their gender schemata than it may be for adults (Calvert & Huston, 1987). There is less information stored in children’s schemata to begin with, so their schemata are less resistant to change. This emphasizes the importance of how gender is portrayed in children’s television. If
gender is portrayed such that all people, regardless of gender, engage in masculine, feminine, and gender neutral behaviors, then children’s gender schemata will follow these patterns. The media environment, however, quite simply does not portray men and women engaging in masculine, feminine, and gender neutral behaviors. Children’s television, as well as other children’s media, tends to be highly gender stereotyped. For example, female characters are more likely than male characters to be young, to be thin, to wear clothing that reveals their skin, to be identified as attractive by other characters, and to have unrealistic body shapes (Smith et al., 2012; Smith & Cook, 2008). Women are also more likely to be portrayed as frail and less likely to give instructions to other characters (Aubrey & Harrison, 2004). Notably, children’s favorite programs tend to be more gender neutral than industry norms (Aubrey & Harrison, 2004). However, these favorite shows represent the exception to established standards, and it is unlikely that children would be able to completely avoid exposure to stereotyped texts. In part because of this media landscape, children’s early gender schemata often do reflect gender stereotypes (Bauer, 1993; Calvert & Huston, 1987; List et al., 1983; Szkrybalo & Ruble, 1999).

The homogeneity of this content helps to drive cultivation and chronic accessibility, and it emphasizes the importance of understanding the relationship between schematic knowledge and play. It may be that ideas already cultivated by media in children will be incorporated into the play due to their chronic accessibility. In a cyclical manner, engaging with these already highly accessible ideas would likely reinforce them, contributing to cultivation effects. This may be especially likely for media merchandise
that comes from a highly normative media text. For example, if a child is playing with a Wilma Flintstone toy, then in addition to having the idea of women in domestic roles already accessible through cultivation, that idea would be even more accessible because Wilma Flintstone fills that role on her television show. Because of this, the child may be likely to play with Wilma such that she fills a role similar to that shown for her on her television show, meaning that the child is engaging in assimilative play that reinforces the extant gender schema. However, it is also possible that playing in this way would cause a child to pause and consider that traditional gender role, ultimately undermining those cultivation effects. Perhaps the child does not find playing in this way very much fun and chooses to give Wilma something else to do, like the girl who changed Aurora’s role in Sleeping Beauty in Wholwend’s (2009) study. Or perhaps the child finds Wilma’s domestic duties to be so much fun that they decide Fred Flintstone should join in. Either way, this accommodation of new ideas into the child’s gender schema may serve to actively push against cultivation effects.

Similar changes to gender schemata may be possible when media texts stray from normative ideas and present counterstereotypes. For example, if a child has a Tinkerbell toy, Tinkerbell’s role as an engineer may become accessible, and the child’s fantasy play may involve this non-traditional role. This assimilation to the Tinkerbell schema could then in turn cause an accommodation to the gender schema. However, it is also possible that the child never encoded the counterstereotypcial knowledge of Tinkerbell’s engineering or that the child’s cultivated ideas about traditional gender roles are so chronically accessible that they come to mind more easily than the child’s knowledge of Tinkerbell’s
movies. In this case, the child may choose to place Tinkerbell in a traditional domestic role, bringing accommodation to the Tinkerbell schema and assimilation to the gender schema.

The fact that children’s gender schema are relatively flexible makes it crucial to understand how media and play may be interacting to affect schematic knowledge. Whether messages from media confirm or undermine gender stereotypes and other schematic gender knowledge along with how children use the information from those messages in their play may ultimately affect the content of the gender schema that children develop. The gender-related content of the play may be incorporated into gender schemata while children’s schemata are less developed and more malleable. They may then become held more rigidly as the children age.

The Current Study

Hypotheses and Research Questions

The study proposed here intends to integrate the above concepts of accessibility and character involvement into the extant body of research on the relationship between media and fantasy play, using a mixed-method approach to triangulate previous methods. The literature on accessibility seems to suggest that the concept may affect play with media merchandise in ways that it would not affect play with alternative toys that are generic, meaning not intended to represent a character or other object from a specific media text. If the cognitive activation of an object can activate related objects, then logically, seeing a toy that is designed to closely resemble a media character will make settings, other characters, plot points, and other elements of the media product accessible.
Furthermore, because the goal of the play is to have fun, and using those now accessible elements of the original media text can sufficiently achieve that goal, the playing child is likely to decide to use those elements in their play. A generic alternative toy, however, is not likely to make any particular media text accessible but rather to activate more generalized schemata (e.g., a schema for “princesses” rather than “Princess Anna”), so the child would be no more likely to use a particular media text in their play than they would be to make up any other story.

H1: When a child is presented with a media merchandise toy, the child’s fantasy play will be more similar to the original media text than when a child is presented with a generic toy.

When a child plays with a toy that clearly resembles a media character, the type and intensity of involvement with that character may also affect the content of the child’s play. It is difficult, however, to predict exactly what form such effects might take. For example, Maccoby and Wilson (1957) found that children have better recall for information about characters with which they wishfully identify. This could allow children to preserve the original media text in their play, but it could also allow children to better ruminate about what they do and do not like in the original media text and make changes to the original media text in their play. For children with parasocial relationships with the characters that the media merchandise represents, feeling as though the character is a friend could help the child to understand the character as less tied to a specific story, just like real people can go many places and do many things, and cause the child to stray from the original text. However, it is also possible that a child who feels less connected to
a character would be more likely to stray from the original text simply because they have little motivation to preserve anything about a character or story that does not interest them.

RQ1: How will parasocial relationships and wishful identification with a media character affect fantasy play with media merchandise featuring that character and with generic alternative toys?

The above hypothesis and research question should help to provide insight into the conditions under which assimilation and accommodation may occur in play, but they address schematic learning less directly than research that examines a specific knowledge domain. Therefore, to supplement the results of the above questions, this study will also examine the fantasy play content in a single domain more in depth. This may be especially important in the context of cultivation. If the content of a child’s fantasy play repeats schematic knowledge that is frequently presented in media, then the play itself may serve to bolster cultivation effects. If a child’s fantasy play stands in opposition to repeated messages, then the play may help to counter cultivation effects. As explained above and expanded upon below, this study will use gender to explore how schematic knowledge may manifest in the relationship between media and play. Thus, the final research question is:

RQ2: How do children use schematic knowledge about gender in play with highly gendered media merchandise as opposed to a generic alternative toy?
Disney Princesses

These questions will be explored through the Disney Princess franchise. The official Disney Princesses are a subset of Disney movie characters who, in addition to being marketed for their individual movies, are marketed together as a set in toys, games, clothing, school supplies, and a myriad of other products. Notably, the brand name “Disney Princesses” refers to a specific set of characters rather than all princess characters owned by Disney; the set of characters excludes several Disney girls and women who fit the general princess mythos and includes several characters who are not technically royalty. The Disney Princesses are eleven characters who have appeared in eleven theatrical films and ten direct-to-video sequels/prequels collectively: Snow White (Snow White and the Seven Dwarfs); Cinderella (Cinderella, Cinderella II: Dreams Come True, Cinderella III: A Twist in Time); Aurora (Sleeping Beauty); Ariel (The Little Mermaid, The Little Mermaid II: Return to the Sea, The Little Mermaid: Ariel’s Beginning); Belle (Beauty and the Beast, Beauty and the Beast: The Enchanted Christmas, Beauty and the Beast: Belle’s Magical World); Jasmine (Aladdin, The Return of Jafar, Aladdin and the King of Thieves); Pocahontas (Pocahontas, Pocahontas II: Journey to a New World); Mulan (Mulan, Mulan II); Tiana (Princess and the Frog); Rapunzel (Tangled); and Merida (Brave). In addition, Anna and Elsa from the recent Disney film Frozen, while they have not yet had an official “coronation” into the brand, are featured in lines of Disney Princess merchandise. Furthermore, as the results of the study confirm, the overwhelming majority of young girls think of these two characters as
Disney Princesses. For these reasons, Anna, Elsa, and their movie will be considered part of the franchise for the purpose of this study.

Limiting the study to just the Disney Princess brand does mean that the results of the study must be taken with caution, and further research with other merchandise will be necessary before researchers can generalize the results with confidence. However, focusing on the Disney Princesses provides several benefits that will ultimately make this an excellent choice for beginning to examine the relationship between media merchandise and play. First, the Disney Princess brand is immensely popular and ubiquitous among young children, evidenced by the fact that the brand has been the highest-earning entertainment licensing franchise for the past several years (EPM Communications, 2011; Goudreau, 2012; PSRNewswire, 2013). This means that children are already engaging with these characters, making it possible to examine a range of character involvement and play behaviors that have developed naturally in the participants. A novel stimulus would not be able to provide these insights and therefore would be better suited for later, more explanatory research.

Second, the Disney Princesses offer a necessary balance between a limited number of media texts and a range of character choices for the participants. The media from which the Disney Princesses come are a finite set of relatively few movies. This allows for direct comparisons between the original media product and a child’s play with a character from that product. This would be much more difficult for many other texts. For example, while superheroes are currently very popular among children, as Disney Princesses are, these characters have existed across comic books, television, and movies
over the course of several decades, creating hundreds or, in the case of the most popular characters, even thousands of original texts to analyze for comparison. While it is hypothetically possible to find and analyze all of these texts, it would be highly impractical to do so, making the Disney Princesses a more manageable choice. Within this relatively small set of movies, however, there are still a full thirteen different princess characters. It is true that the Disney Princesses all share certain important characteristics (e.g., all are thin and traditionally beautiful, all show kindness), but they have enough uniqueness that the characters and their stories are not interchangeable, and having a favorite princess could be a meaningful choice for young children. This diversity of characters is necessary to be able to explore the role of character involvement in play; it allows at least the possibility that the participants may feel substantially differently about their favorite Disney Princess versus the other Disney Princesses. Thus, the Disney Princesses offer a practical balance between variety among characters and the number of media texts for analysis.

Finally, the Disney Princess brand and its content are highly gendered, which allows for an examination of how children’s media preferences may be associated with schematic knowledge. The Disney Princesses are all women and girls, and, with the exception of Jasmine in *Aladdin* and its sequels, they are the central protagonists of their films. Furthermore, Disney Princess merchandise is advertised almost exclusively to young girls, with girls featured in commercials and toys that are typically gendered as feminine, like fashion-style dolls, baby dolls, and tea sets. The characters, however, promote a wide range of stereotypes and counter-stereotypes across many domains of
gendered traits. This is not to say that the princesses cover the full range of girls’ possible identities and interests; the number of possible stories that Disney Princesses could tell is infinite, and the traits that none of the thirteen characters have are innumerable. However, there are several domains in which gender stereotypes exist that different princesses address in very different ways, such as marriage, domestic tasks, education, and thirst for adventure. The combination of varying gendered content with strong associations between the Disney Princess brand and femininity makes the franchise an excellent area to examine the relationship between children’s fantasy play with merchandise, media texts, and gender schemata.

Thus, this dissertation will make a first attempt to explore how media merchandise may fit into the media effects tradition by examining the role of Disney Princess toys in young children’s fantasy play. If merchandise itself is an influential agent on children’s play, then the norms of accessibility predict that play with a media toy would be more similar to the original media text than play with a similar but generic toy, meaning that, in this case, a child’s play with a Disney Princess doll will be more similar to movies featuring that princess than play with a generic princess doll. If character involvement is more influential than merchandise, then one would expect that play would differ among children depending upon the type and strength of involvement a child feels regardless of the type of toy, media branded or generic, that the child is playing with; how similar the play is to the movies featuring a particular Disney Princess would depend upon the strength of the child’s parasocial relationship or wishful identification with that particular princess more so than it would depend upon the type of doll. In either case, the
child’s choices about what content from media to include in their play and what content
to leave out or change may contribute to the effects of that particular media product,
particularly in terms of cultivation effects, as these play activities may affect children’s
schemata for things that are heavily culturally constructed, like gender. Through the
methods described in the next chapter, this dissertation will attempt to parse out some of
the relationships among these variables in order to better understand how the licensing
and merchandising industry relates to media effects.
Chapter 3: Methods and Narrative String Coding

To examine the relationship between media merchandise and play, this study utilized observation, interviewing, and content analysis in a mixed-method, quantitative and qualitative, approach. The basic design is as follows. Young children were randomly assigned to play with either their favorite Disney Princess doll or a similarly designed generic princess doll, and they were asked a short series of both open-ended and Likert-type questions about their favorite Disney Princess. Their play was later coded and compared to the movies featuring their favorite Disney Princess, and their interviews were coded as measures of parasocial relationship and wishful identification strength. This allowed for an analysis (described in chapter 4) in which the amount of similarities and differences between the play and the movie(s) were compared between the Disney Princess doll and generic princess doll groups (for H1) and between varying strengths and types of character involvement (for RQ1). For RQ2, a qualitative analysis of the gendered elements of the play and responses to the open-ended interview questions were analyzed.

In this chapter, I will begin by describing the participants, materials, and procedures for data collection. I will then describe the measures used for character involvement. Following this, I will describe the procedures for coding and comparing the movies and play. Without a large pre-existing body of research examining media merchandise and play, exploring these concepts together poses certain methodological
challenges, specifically that there are no clear, well practiced procedures from other research that can be easily followed. I have used a process that I call “narrative string analysis,” which combines the event-indexing model and string edit theory, both of which are further described subsequently in this chapter. Because this method is new, I will describe in depth how it works and why I chose to analyze the data in this way.

**Participants**

The participants of this study were 41 girls ages 4-6 years with interest in Disney Princesses, as reported by their parents. During recruitment, 48 parents provided permission for their children to participate. The study was open to boys as well as girls, but the parents of only two boys responded. As explained in chapter 2, the Disney Princesses are highly gendered, so play may differ substantially between boys and girls. A sample of 2 boys and 46 girls cannot adequately account for those differences, so the boys were excluded from the study. In addition, 5 girls chose to drop out of the study, leaving a final sample of 41 girls. The participants were randomly assigned to either the Disney condition, in which they played with a Disney Princess doll (n=19) or the generic condition in which they played with a generic princess doll, meaning a princess that does not come from an entertainment franchise (n=22).

I chose to work with children 4-6-years-old because fantasy play typically peaks approximately during kindergarten (Smith, 2010), so children in this age range are likely to be comfortable engaging in fantasy play. Furthermore, this makes studying fantasy play specifically during these years very important, as it reflects the children’s real experiences.
Participants were recruited from three schools with preschool and kindergarten classes, Clintonville Academy (n=8), Forest Park Christian School (n=6), and the Columbus School for Girls (n=27). Parents were asked to report each participant’s race and household income. 53.7% of participants were white, 22% were black and/or African American, and 24% were multi-racial. Household income was reported in a series of ranges. The median response was “$100,000-$149,999,” and the mode response was “over $200,000.” It is important to note, however, that 8 parents (about 19.5% of the sample) chose not to report their annual household income.

**Stimuli and Other Materials**

**Dolls.** For the Disney condition, this study used a line of plush dolls approximately 21 inches long. These dolls are currently available through the Disney Store, Toys ‘R’ Us, Target, Amazon, and other toy sellers. The dolls are made entirely of soft fabric with embroidered faces, not unlike a ragdoll or stuffed animal. Fitting with the Disney Princess brand, each doll’s dress is sparkly and/or shiny, and its clothes cannot be removed.

For the generic condition, two dolls were commissioned to match the style of the Disney Princess dolls. One doll had blue eyes, brown hair styled in a long ponytail, and a blue-green and gold gown with teal shoes and a gold crown. I will refer to this doll as the “blue princess.” The other doll had gray eyes, blonde hair styled in a bob, and a red and silver gown with silver shoes and a silver crown. I will refer to this doll as the “red princess.” Both dolls were approximately 21 inches long, made of soft fabric, and had sparkly and/or shiny clothes. In order to emphasize that the dolls represent princesses,
each doll was introduced to the participants with a name that begins with “Princess” and sounds “princessy” but that the children are likely to have no previous associations with. The blue princess was “Princess Illyria,” and the red princess was “Princess Delphine.”

**Play Space.** The participants were invited to play with the dolls and other toys (described below) within a defined space in a room at the participant’s school. These included a library, a “media room” (i.e., a multi-purpose room with a projector), a computer lab, and offices not currently in use. Depending on the room the schools had available, these spaces varied from approximately 24 square feet to 49 square feet and were designated by walls, rugs, or chairs placed around the perimeter.

A number of toys were spread around the play space for the participants to use along with the princess doll. These were provided for two reasons. First, having a variety of unrelated toys should help children to feel that they can engage in any type of story during the play sessions; having just a princess doll may have made children feel that telling traditional princess stories was necessary and artificially inflated the similarities between the play and the Disney Princess movies. Second, the variety of toys helps to simulate children’s real life play environments, as most children have more than one toy available to them at home. The toys included: a plush dragon, a plush pink dog, a plush giraffe, a plush alligator, a girl doll, a boy doll, a teddy bear, a plastic horse (large enough to fit with any of the dolls), a toy telescope, a play food set, a set of plastic tools (saw, hammer, and screwdriver), a large plush car, an inflatable NASA space shuttle, and a plastic boat. None of the toys came from a media franchise. Along with these toys, three paintings were set up in the play space to act as backdrops, a castle, a forest, and a
suburban house. Again, none of these represented scenes in any media franchise. Appendix B contains a diagram of the play space.

Adding these toys and paintings to the playspace does pose two important problems that should be addressed. First, the paintings could encourage children to limit their play to only these three types of locations. However, this ultimately does not affect the analysis because the comparison of locations was specific, and the generic nature of these paintings made it such that the castle, forest, and house could exist anywhere. For example, the house could easily be the home of the dwarfs in *Snow White and the Seven Dwarfs*, or it could just as easily be the home of a made-up friend of the princess. Often, the children placed these settings in places that they had visited, like Florida or Mexico. As will be explained more in depth below, the dwarfs’ house and a house in Florida were not coded as being the same, even though they are both houses. The question of interest goes beyond simply, “Do children in the Disney and generic group both use the house,” but rather, “Does a child in the Disney group who likes Snow White use the house differently than a child in the generic group who also likes Snow White,” and the coding can account for those differences.

Second, providing children with many new toys could make them want to play with those other toys instead of the princess doll, especially for participants who are not avid princess fans. Notably, there was only one participant who opted not to play with the princess dolls at all. Nonetheless, the principles of accessibility would predict that the act of choosing a favorite princess, being presented with a doll, and having that doll in the play area, even if it is not being actively used, should be more than enough to trigger
memories of princesses and princess stories. Because of this, the analysis should not be substantively affected.

**Other materials.** For the measures of character involvement, described below, participants were asked to rate their opinions on a Likert-type scale. When this occurred, they were presented with one side of a two-sided chart to visualize their responses choices of “a little bit,” “some,” or “a lot.” When the participant answered “yes” to a question, they were shown three increasingly happy faces, as happy and sad faces are frequently used to allow young children to self report their evaluations of topics such as television shows and characters (Wainwright & Linebarger, 2007), anxiety about dentists (Buchanan, 2005), and extra-curricular activities (Zhang et al., 2002). To help further communicate the meaning of the options, the faces were coupled with stars—one star for “a little bit,” two stars for “some,” and three stars for “a lot.” The reverse side was similar but used for “no” responses. It featured increasingly unhappy faces and the letter “X” instead of stars.

Finally, a laptop computer placed on a chair was used to record the play sessions and interviews.

**Procedure**

Each school designated a play space away from the other students for data collection. Prior to starting data collection with each participant, the researcher reset the play area so that the toys were displayed in approximately the same way, though this varied slightly depending upon the specific space available. The researcher retrieved the participant from their class, and brought them to the play area. The researcher followed a
script to introduce herself, tell the participant what to expect, and make sure the participant knew that they could stop participating at any time. While shyness did, of course, vary somewhat among the sample, the participants were overall talkative, excited to participate, and had good rapport with the researcher. Students in the schools very quickly learned that leaving the class with “Ms. Molly from OSU” meant that they got to play with new toys, which they generally saw as a fun, positive experience. In addition, the fact that princesses were brought up at the very beginning of the procedure through the doll choosing process, described below, may have helped participants to feel comfortable and excited, as parents had reported that all participants liked Disney Princesses as part of the recruitment process. Because the participants spoke to their classmates about their experiences, as evidenced by how quickly children figured out that participating meant playing with toys, all participants in the generic condition were called to participate before any children assigned to the Disney condition at the same school. This way, no one in the generic condition entered the play session anticipating the opportunity to play with a Disney Princess doll.

In the Disney condition, the researcher asked the participant, “Can you tell me some of your favorite princesses?” If the participant named more than one Disney Princess, the researcher asked the participant to pick one that was her “very favorite.” If the participant named only one Disney Princess, then that was the princess used for the rest of the procedure. There were no instances of participants who did not name any Disney Princesses. The researcher told the participant that she has a doll of that princess, and the participant could play with it, along with all the other toys. The researcher took
the doll out of a bag, handed it to the participant, and instructed the participant to stay within the play area. The researcher told the participant that she could play for ten minutes and set a timer. Then, the participant was allowed to start playing, with the researcher saying that she would join the participant “in a few minutes.” If the participant asked for another doll, they were told that they can only have one, with the following exception. If the child picked Anna or Elsa, who are sisters in the movie *Frozen*, and asked for the princess’ sister, the participant was allowed to play with both dolls. Because the characters come from the same movie, denying the participant both if they want both could encourage them to deviate from the story of the movie. The opposite, however, is not true; having both dolls would not encourage adherence to the movie’s story if the child intended not to do so. For these reasons, requests for both dolls from *Frozen* were granted. However, this never occurred; a few participants did ask for a second doll, but none had originally chosen Anna or Elsa.

In the generic condition, the researcher told the participant that she could choose a princess doll to play with, along with all the other toys. The participant was introduced to Princess Illyria and Princess Delphine and asked to pick one. The participant was then given the same instructions as the participants in the Disney condition, described above. There were a few instances of participants asking to play with both princesses after playing with just one for a little while. Because of the popularity of *Frozen*, these requests were granted for the reasons described above. The participants in the generic condition were asked to name their favorite princesses after the play had ended, using the same procedure as the participants in the Disney group.
In both conditions, the researcher sat out of the play and busied herself with fake paperwork for approximately two minutes, watching for a break in the play where she could cut in without being overly disruptive. At that point the researcher moved toward the participant and asked them to “tell me about what you’re doing.” The researcher continued to probe the participant to “play out loud” and talk about what the participant was doing during the play. Some participants asked the researcher to join in the play with them, and the researcher always obliged these requests, even if they occurred before the original two-minute mark. In these cases researcher was careful to let the child direct the play.

When the timer stopped at the end of the play, the researcher ended the play asked the participant to “help me put the toys away.” This served to punctuate the ending of the play and also helped to limit distractions during the interview that followed. The researcher asked if it would be okay if she asked the participant a few questions and had the participant sit in front of the laptop. She instructed the participant that there were no right or wrong answers and that the participant just had to tell the researcher what the participant honestly thought.

The researcher began the interview with the open-ended questions, then followed those with the Likert-type questions, both of which are described in the “Measures” section of this chapter. All responses in the interview were recorded in the same video file as the play session. Before answering the Likert-type questions, the participants were given two practice questions, “Do you like to eat apples” and “Do you like to go outside when it’s very cold?” This allowed the participants to become familiar with the process
and let the researcher check that the participant understood how to answer before proceeding with the rest of the items, presented in a fixed random order. After the interview, the researcher thanked the participant and walked her back to her classroom.

**Measures**

The study involved measures constructed through coding the play sessions and Disney Princess movies, interviews with the participants, and a brief survey for parents. The content of each of these is explained below. Rather than reviewing these in chronological order, I begin with the measures that are more well-developed in the previous literature and move toward measures that will require more explanation.

**Character Involvement.** Measures of character involvement were derived from the interview portion of the data collection process. As explained in the “Procedure” section, the interview began after the play session ended and the toys were put away. All questions were about the participant’s self-reported favorite Disney Princess. All character involvement items were read verbally to the participant, and the researcher repeated the participants’ responses back to them, which acted as a check for clarity and also ensured that the recording would include all responses at an appropriate volume.

**Parasocial relationships.** Two different measures of parasocial relationships were used for the study. The first used five Likert-type items, as Likert-type scales are a common way of measuring this type of character involvement. The items reflected the elements of friendship that are most central to social relationships in this age group—playing, sharing, and disclosing information about oneself (Gleason & Hohmann, 2006; Rotenburg, 1995). Each item began as a yes or no question: Do you ever pretend that you
and [Princess] are friends; If you could, would you want to invite [Princess] to your birthday party; If [Princess] were in your class here at school, would you play together; If [Princess] were in your class here at school, would you tell her things about yourself; If [Princess] lived in your neighborhood, would you share your toys with her? After the participant responded with a “yes” or “no,” the researcher asked the participant to qualify their answer as “a little bit,” “some,” or “a lot.” For example, for the question “Would you want to invite [Princess] to your birthday party,” the researcher would ask, “Would you want/not want to invite to invite her a little bit, some, or a lot?” The researcher used the visual aids described in the “Materials” section to help the participant understand these qualifying ratings. The response to each item was converted into a 1-6 scale, with “no-a lot” as 1, “no-some” as 2, “no-a little bit” as 3, “yes-a little bit” as 4, “yes-some” as 5, and “yes-a lot” as 6. The average of the 1-6 score for the five items, recorded later from the participant’s video file, was used as the parasocial relationship measure for each participant.

Parasocial relationships are understudied in young children (Giles, 2002), and because of this, the specific items listed above have not undergone rigorous validity testing. Therefore, a second measure of parasocial relationships was included for comparison. Sharp and Kline (2014) found that for children ages 6-11, children whose descriptions of their favorite media characters were relatively more complex tended to have stronger parasocial relationships with those characters. A simplified version of this task was included. The researcher first asked the participant, “I don’t know much about [Princess]. Can you tell me about her?” Following this, the researcher asked, “What do
you like about [Princess],” then “Is there anything you don’t like about [Princess]?” If the participant responded that there were things she did not like, the researcher asked her what those things were. The responses to these three open-ended questions were coded together for complexity by counting the number of unique items the participant named, following the procedures of Crockett (1965). Five participants’ responses, approximately 10% of the sample, were coded for reliability, and the coders had 100% agreement.

Wishful Identification. The researcher measured the intensity of the participant’s wishful identification with their favorite Disney Princess using a three-item Likert-type scale. The items followed the same format as the items for parasocial relationships described above and were coded the same way. Two of these questions have been adapted from Hoffner’s (1996) measure of wishful identification for children in elementary school: Do you ever wish you could be more like [Princess]; Would you want to do the things [Princess] does in her story? The third item was: Would you want to wear [Princess’] clothes? Like the first measure of parasocial relationships, wishful identification was measured as the average of the 1-6 scores, recorded later from the participant’s video file, on these three items.

Parent Survey. A parent of each participant was asked to complete a survey about their participating child. These surveys were sent home with the recruitment materials and returned along with the parents’ permission forms. The surveys were used to keep track of the participants’ demographic information, which was reported in the “Participants” section of this chapter, and to measure two variables that may need to be controlled in
analysis, prior exposure to Disney Princess movies and prior exposure to Disney Princess merchandise.

**Exposure to Disney Princess movies.** Parents were provided with a list of the titles of all Disney Princess movies. Because repeated viewings of the movies may affect accessibility toward them, parents were asked to estimate how many times the participant had, to the parent’s knowledge, watched each movie in the last 30 days: 0 times, 1-2 times, 3-4 times, 5-6 times, or 7 or more times. It is true that this is a less precise measurement than a series of open response questions asking parents to write down their estimate exactly. However, because there are twenty-two movies, some parents may find such a task overwhelming. Selecting one of the five choices above will capture which children have relatively greater exposure to Disney Princess movies in a manageable way. The responses were converted to a 0-4 scale, with “0 times” as 0 and “7 or more times” as 4. The responses were added together into a single score such that lower numbers represented relatively less exposure to Disney Princess movies and higher numbers represented relatively more exposure to Disney Princess movies.

**Exposure to Disney Princess merchandise.** Parents were asked to estimate how much of several types of Disney Princess merchandise the participant uses in their home: dolls, board games and card games, electronic games (console video games, computer games, smart phone apps, and tablet apps), other toys (not dolls or games), shoes, other clothes (not shoes), tableware (placemats, plates, cups, forks, knives, and spoons), and bedroom furniture and decorations. For each type of merchandise parents were asked to choose if their child uses the product “never,” “rarely,” “sometimes,” or “almost all the
time.” The only exception was the question asking how much of the furniture and decorations in the child’s bedroom featured Disney Princess, for which the answer choices were changed to “none,” “a little bit,” “some,” or “almost all of it,” as these choices make more sense for the question wording. While this is not a comprehensive list of all Disney Princess merchandise available, these items should provide insight into the degree to which such merchandise is present in the participants’ daily lives, which could also affect accessibility. The responses were converted into 0-3 scores, with “never/none” as 0 and “almost all of the time/almost all of it” as 3. The scores of each of the 8 questions were added together for the measure of exposure to Disney Princess merchandise in general such that lower scores represented relatively less exposure to merchandise and higher scores represented relatively more exposure to merchandise.

**Play and Movie Coding.** Each participant’s play and all of the Disney Princess movies were coded for their narrative elements so that those elements could later be compared. The hypothesis and research questions for this study deal with whether certain factors, like the type of toy or intensity of character involvement, may affect the degree to which memories of a specific movie will be recalled and incorporated into a child’s play. Therefore, both the play and movie were analyzed across the elements through which narratives are understood and stored in memory.

The event-indexing model provides excellent guidance in this area, as it explains the dimensions across which people follow and cognitively store narratives, and is has received enormous support in previous research (for reviews, see Therriault & Rinck, 2007; Zwaan, 1999; and Zwaan & Radvansky, 1998). According to the event-indexing
model, viewers track narratives across five dimensions: time, space, protagonist, motivation, and goal (Zwaan, 1999), all of which are reviewed below. These dimensions are organized into “events,” which center upon specific actions (Zwaan, 1999). This means that while actions are not typically explicitly stated as a dimension of the event-indexing model, the model implies that viewers do keep track of this information and store actions in memory. Thus, based upon the event-indexing model, both the Disney Princess movies and the play sessions were analyzed across time, space, protagonist, motivation, causation, and action.

**Time.** The time dimension refers to relative temporal relationships between events in a narrative (Zwaan, 1999). For example, the event in which Cinderella loses her shoe occurs “after Cinderella dances with Prince Charming” and “before the Fairy Godmother’s magic wears off.” However, much of the research on the event-indexing model has focused upon adults’ narrative comprehension, and research with children has indicated that those in the 4-6 age range often have difficulty with narrative sequencing (Wright et al., 1984). Also, relative temporal relationships are often implied, rather than explicitly stated, in narratives, and children in this age range also tend to have difficulty making inferences about stories (Collins, Sobol, & Westby, 1981; Collins, Wellman, Keniston, & Westby, 1978; Hoffner & Cantor, 1985). Therefore, for the purpose of this study, the time dimension was split and measured as two dimensions. “Relative time” refers to the relative temporal relationships usually measured with respect to the event-indexing model, and “concrete time” refers to non-relative time-related information. For example, in the example above of Cinderella losing her shoe, the concrete time might be
“at midnight” or “on the night of the ball.” Recording both of these ensured that the time dimension of children’s play from their perspective was present in the coding, regardless of how advanced they were in narrative interpretation and memory.

**Space.** The space dimension refers to relative spacial relationships between actors or objects in a narrative (Zwaan, 1999). For the same reasons that I split the time dimension, I also split the space dimension into relative and concrete space. Relative space, then, refers to the relative closeness of important people, places, or things; for example, when Cinderella loses her shoe, she is “far from Lady Tremaine’s house.” Concrete space refers to non-relative spacial information, like “at the castle” or “on the stairs.”

**Protagonist.** The protagonist dimension refers to characters and objects that are important to the action of an event in a narrative (Zwaan, 1999). For example, a person may encode Cinderella, her shoe, and the clock along the protagonist dimension.

**Motivation.** Sometimes called the “goal” dimension, motivation refers to the reasons that protagonists perform the action of an event, organized hierarchically according to their importance to the narrative and pertinence to the specific event at hand (Zwaan, 1999). For example, Cinderella’s motivation for running from the ball may be primarily that she does not want Prince Charming to see her gown change to rags, secondarily that she does not want her step-family to know she is at the ball, and finally that she needs her carriage to remain a carriage long enough for her to get home.

**Causation.** The causation dimension refers to cause/effect relationships between events in the narrative (Zwaan, 1999). These deal only with direct cause and effect
relationships, not events that merely allow others to happen. For example, Cinderella losing her shoe is the effect of her rushing out of the ball when the clock strikes midnight, and Cinderella losing her shoe causes Prince Charming to search the kingdom for the shoe’s owner. Both of these would be part of the causation dimension. However, the design of Cinderella’s shoe (e.g., not having a strap) merely allows the action to occur and would not be part of the causation dimension.

**Action.** The final dimension coded in this study was action, meaning the activity or activities that the protagonists enact. When Cinderella runs down the stairs away from ball and loses her shoe, “run away” and “lose” would be the actions. When actions have objects, those objects were recorded as well, as this adds detail that helps with the later coding. For example, “lose” would actually have been coded “lose shoe.” In any given event, there are also a number of actions that occur constantly throughout the story, such as breathing, thinking, or talking. These were coded only when they were the central action of the event; if the purpose of a scene is for two characters to exchange information in a conversation, then “discussing” would be the action, but if two characters talk in order to provide exposition for another action that they are performing, then “talk” would not be included as an action.

**Coding process.** Based on the above explanations, both the Disney Princess movies and the play sessions were coded for relative time, concrete time, relative space, concrete space, protagonist, motivation, causation, and action.

**Movies.** Two undergraduate research assistants coded the Disney Princess movies. The coders learned to code by practicing with other Disney movies, first as a group, then
alone. They both coded a randomly selected approximately 10% (2 movies) of the sample for reliability before coding on their own. Reliability for each category was calculated separately except for the time and space dimensions. Due to the relatively small number of items in these categories, relative and concrete time were considered together in one category, as were relative and concrete space. The Cohen’s Kappas for the categories were as follows: .552 for protagonist, .851 for time, .880 for space, .723 for cause/effect, .855 for motivation, and .680 for action. Rietveld and van Hout (1993) consider Kappas between .41 and .60 as indicating moderate agreement and Kappas between .61 and .80 as substantial agreement. The reliability for all but one category fell above the minimum Kappa for substantial agreement. The moderate agreement in the protagonist category can be explained by one coder’s inclusion of less important objects that a main character interacts with in the movie. Both coders agreed on the most important characters and objects, and one coder included additional objects beyond that. Because, as will be explained later in this chapter, the inclusion of items from the movies that are not included in participants’ play do not affect the analysis, the fact that that coder’s movies would have included these less important objects did not substantively impact the study.

Because movies may contain hundreds of events, the coders used scenes as their units. While this does not align exactly with the event-indexing model, this should not pose problems for the study, as the study is more concerned with the content of the narratives than with the process of narrative organization. Scene changes were defined as changes in two of the following three things at once: characters, time, and place.
**Play.** One undergraduate research assistant and the researcher coded the play sessions for the elements of the event-indexing model listed above. Because there were no instances of play outside of those coded for the study, the coders trained using several of the play sessions for the study. They both coded a randomly selected approximately 10% (5 participants) of the play sessions, none that used for training. Because the elements of the children’s play tended to fall mostly into the character and action categories and because the coders agreed that almost everything that participants made explicit during their play sessions merited coding, Cohen’s kappa and other tests of categorization reliability cannot adequately capture the coder’s reliability. Guetzkow’s $\kappa=.08$ for the two coders, and there were no disagreements among what categories elements of the participants’ play should fall under.

Only elements of the story that were explicitly stated or clearly indicated through the participant’s behavior were coded. For example, if a princess rode a horse, this would only be coded if the participant explicitly stated, “The princess is riding the horse,” or if the participant clearly picked up an object that she had previously and recently established was a princess, put that object on top of a horse, and moved the horse in a riding motion. This ensured that the coding reflected the participants’ ideas as closely as possible and minimized the coders’ assumptions about the participants’ intentions. Because of this the researcher’s probes during the play, as described in the “Procedure” section above, were often important.

Navigating the probing process during the play sessions opened some important questions and potential problems. Fantasy play is inherently a narrative activity, and
children in this age range typically have difficulty understanding complex narrative structures and people’s internal states. They can, on average, comprehend clear and concrete elements of storytelling, like characters, places, and actions, but they are less able to understand abstract or complex things, like motivations (especially when they are concealed from other characters), cause-and-effect relationships separated by time, and implied information (Collins et al., 1978; Collins et al., 1981; Richert, Robb, & Smith, 2011). This means two things. First, the participants in this study would likely be unable to respond to probes for these things regarding the stories told in their play. Second, probes during play could cause the participants to divert cognitive energy to things that they normally would not consider during their play, meaning that the data collected would reflect actual play behaviors poorly. This may be especially problematic if children rely on Disney Princess movies to answer the probe questions, not because they made a choice to incorporate the movies into their play but because they simply had not thought about those things and reverted to the media text for the purpose of answering questions. This would artificially inflate the number of similarities between the play and movies in a way that does not reflect children’s usual play behaviors. Because of these difficulties, the probing process was carefully crafted to encourage children to speak what they were doing out loud rather than asking them to consider things that they were not already doing.

The key to ensuring that the probing process worked correctly was to ensure that the probes worked on the level of the mundane, meaning within the norms of everyday interactions (Schutz, 1967; Schutz, 1970). For 4-6-year-olds, play is often a social activity
(Gangon, et al., 2014; Smith, 2010), and this necessitates that children frequently communicate about their play with others as the play occurs (e.g., James & McCain, 1982; Wholwend, 2009; Wood & Cook, 2009). For decades, scholars have argued that play is important in large part because of the opportunities for peer communication that it provides (see Rubin & Coplan, 1998 for review). In fact, children with disorders affecting communication specifically and children without those disorders have difficulty playing together in social environments (Guralnick et al., 1996), which emphasizes the importance of communication as a natural facet of young children’s play activities. If communication during play about play is a normative part of young children’s lives, then it should be possible to probe children to talk about their play in ways that reflect their normal play behaviors as long as cautions are taken to keep questions within the mundane realm.

To accomplish this, the researcher chose probe questions that align with the highly concrete elements of fantasy play that most children in this age range comprehend and communicate about easily, unless the child spontaneously demonstrated more advanced skills. For example, it is common for young children playing together to establish characters (e.g., “These two are sisters.”), actions (e.g., “She brought the snacks in her car.”), and places (e.g., “This is their house.”) (e.g., James & McCain, 1982; Wholwend, 2009; Wood & Cook, 2009). This makes sense, as these things align with typical narrative comprehension at this age (Collins, et al., 1978; Richert, Robb, & Smith, 2011). Along these lines, most common probes in the study were: “Does he/she have a name,” “Where are they going,” and “What happens next?” Some children did
spontaneously make statements regarding motivations, cause-and-effect relationships, and character’s emotional states. In these cases, the researcher asked for clarification on these statements when they were ambiguous or otherwise unclear. However, the researcher did not ask questions about these kinds of narrative components without the participant bringing up those elements on their own. In addition, it is worth noting that many participants required little probing at all. It was not uncommon for children to begin narrating everything they did after one or two probing questions, and some children even did this after just being asked by the researcher to “tell me what you’re doing.” It seemed that many participants took the first few probes as a cue to talk about their play, and this was very easy for them to do.

**Narrative String Coding.** Once the movies and play had been coded, measures of the similarities and differences between the coded elements of the movies and the play were formed through a process based on string-edit theory. I call this modified use of string-edit theory with the event-indexing model “narrative string coding” because the strings normally analyzed with string-edit theory are replaced by strings of narrative elements, and those elements are coded into categories based on certain types of relationships used in string-edit theory.

Usually applied to language, string edit theory allows for comparison between similar elements of a sentence in four ways: changes, matches, additions, and deletes (Dennis & Kintsch, 2007). Consider, for example, the sentence “Mulan saves China.” By breaking this sentence into its components—princess, verb related to rescuing, and place—this sentence may be compared to any other sentence. When a word stays exactly
the same or has exactly the same meaning, it is called a “match,” symbolized in the example below as “=.” When a word is replaced by a word that is qualitatively different but categorically similar, it is a “change,” symbolized as “~.” When a new word is added in the second sentence with no comparison to the words in the first sentence, it is an “addition,” symbolized as “+,” and when a word from the original sentence is taken out and replaced with nothing, it is a “delete,” symbolized as “-.” Thus, if the first sentence is “Mulan saves China,” and the second sentences is “Anna saves Elsa,” the comparison would read as follows:

```
Mulan     ~     Anna
saves     =     saves
China     -     +     Elsa
```

“Mulan” to “Anna” constitutes a change because both are princesses performing the action; they are two different characters, but they fall into the same category and serve the same purpose in the sentences. “Saves” to “saves” is a match because these are the same word with the same meaning. Had the second sentence used the word “rescues” instead of saves, the comparison would still be a match because the meanings of these words are exactly the same. While “China” and “Elsa” are both the objects of the saving action, they are categorically different; China is a place and Elsa is a person (or Disney Princess, for the purpose of a study like this), so these two elements of the sentences are not treated as matches or changes but rather as an addition and a delete.
The same logic can be applied to the elements of narratives. In that application, the contents of the narrative would be displayed according to their category in the event-indexing model, and the information from the above sentences would look like this:

Protagonist: Mulan ~ Anna
Protagonist: China -
Protagonist: + Elsa
Action: Saves = Saves

Note that in this specific instance, China is listed as a protagonist rather than a space. This is because China is acting as an important character in this sentence; it serves the purpose of being saved by Mulan rather than describing the area in which the saving occurs. As it happens, China is also the location of this scene, so it would be listed as a concrete space as well.

To analyze the similarities and differences between the participants’ play and Disney Princess movies, the coders began with a participant’s coded play narrative. Using the protagonist dimension as an example, each individual protagonist featured in the participant’s play was compared one-by-one to all protagonists in the movie or movies in which the participant’s favorite Disney Princess is featured. If a protagonist matches any protagonist in the film(s), it was coded as a match. If it acts as a change for any protagonist in the film(s), it was coded as a change. If there is nothing exactly or categorically similar to the protagonist in the film’s protagonist dimension, it was coded as an addition. Each protagonist was only counted once, so, for example, if the princess doll acts as a protagonist multiple times, it received only one code. This was particularly
important in the action category, as it was fairly common for multiple protagonists in a child’s play to perform the same actions. Because the time difference between the film(s) and play sessions necessarily means that most elements from the movies will not appear in the play narratives, deletes were not assessed. Appendix C shows an example of how this coding appeared. The coders coded 5 play sessions (approximately 10% of the sample) for reliability in categorizing matches, changes, and additions. Cohen’s kappa for the two coders on this sample was .732, and the two coders split the remaining play sessions for coding.

Once all of the narrative string coding was completed, the categorizations were used to form measures of the similarities and differences between the play sessions and the movies featuring the participants’ favorite Disney Princesses. The total number of instances in each of the three categories were counted then divided by the total number of elements the participant’s play and multiplied by 100. This formed a three measures per participant: a match score, the percentage of a participant’s play composed of matches; a change score, the percentage of a participant’s play composed of changes; and an addition score, the percentage of a participant’s play composed of additions. For example, if a participant’s play contained 30 items and 15 of those items were additions, then that participant’s addition score would be 50 because 15 is 50% of 30 (i.e., \((30/15)*100=50\)). Because matches represent content in a play session that is exactly the same as content in a Disney Princess movie, matches were interpreted as indicating high similarity between the play and the movie. Additions were interpreted as showing high dissimilarity between play and the movie because these were coded when an element of
the play was completely different from anything featured in the Disney Princess movie. Changes were interpreted as falling somewhere in the middle; items coded as changes were more similar to the Disney Princess movie than an addition but less similar to the movie than items coded as matches.

Thus, the measures derived from the procedures described in this chapter ultimately allowed the researcher to analyze the degree of similarity between a participant’s play and the movie or movies featuring that participant’s favorite Disney Princess. The study’s design and measures permitted an examination of whether that degree of similarity is dependant, at least in part, upon the type of doll used in the play or the strength and type of character involvement the participant feels for their favorite Disney Princess, as well as providing information about previous exposures that may require statistical control. The analyses performed on these measures and their results are discussed in the following chapter.
Chapter 4: Quantitative Analysis and Results of H1 and RQ1

This study utilized a mixed method design to examine how media merchandise and character involvement may be related to the content of children’s fantasy play. This chapter will report and discuss insights from the quantitative half of the study, specifically addressing H1 and RQ1. This chapter will begin by briefly describing the participant’s choices of favorite Disney Princess. Then, the results of H1 will be reported, followed by the results of RQ1. This will include consideration of unexpected results regarding the complexity variable. The chapter will conclude with a discussion of what the results in their totality suggest about the relationship between fantasy play, media, and merchandise and about future directions in research regarding the place of merchandise in media effects scholarship.

Results

This analysis will begin with a description of the participants’ choices of favorite princesses. When participants were asked to name “some of their favorite princesses,” all thirteen princesses were named at least once. There were also seven instances of princesses other than Disney Princesses being named, which included Fiona, Tinker Bell, Princess Pea, Dora the Explorer, Princess O, Princess Rabbit, and Grace, who the participant said she made up with a family member. When participants were asked to pick their favorite Disney Princess, all but two princesses, Merida and Mulan, were named at least once. The most frequently chosen princess was Elsa, who was selected by
11 girls, followed by Aurora and Rapunzel, who were chosen 7 and 6 times, respectively. The frequency with which each princess was chosen is reported in Table 1.

**Differences Among Conditions**

The tests of H1 and RQ1 depended upon the numbers of matches, changes, and additions in each participant’s play session. As explained in the previous chapter, each play session was coded according to a modified version of the event-indexing model. The number of items per play session ranged from 10 to 50. The mean number of items in each category, with duplicates in the same category removed, in both the play sessions and the movies are reported in Table 2. The mean number of items in the play sessions did not significantly differ between the Disney condition ($M=31.94$, $SD=9.77$) and the generic condition ($M=28.86$, $SD=11.17$), $t(39)=.934$, $p=.356$. Each of the coded items were compared to the movie or movies featuring the participant’s favorite princess and then were categorized as a match, change, or addition using narrative string coding. For each participant, three separate scores—a match score, a change score, and an addition score—were calculated by finding the percentage of matches, changes, and additions coded in that participant’s play session. In other words, a participant’s match score was the percentage of that participant’s total number of items in their play session that were categorized as matches. For example, if a participant’s play session included 40 items and 10 were matches, then that participant’s match score would be 25. Change and addition scores were calculated following this same procedure.

H1 predicted that, on average, children’s play with media toys would more closely reflect the movie or movies from which that toy came than play with generic
princess dolls. Independent samples t-tests were conducted to compare the mean match, change, and addition scores between groups. On average, the percentage of play comprised of matches was higher in the Disney group ($M=18.26, SD=12.45$) than in the generic group ($M=9.35, SD=7.34$), $t(39)=2.867, p=.007$. As matches represent elements from movies that are exactly replicated in the participant’s play, this supports H1. For additions, the opposite result would support H1; because additions represent elements of the play that are completely distinct from elements of the movies, more additions in the generic group than the Disney group would suggest that play with generic toys was more different from the Disney Princess movies than was play with Disney Princess toys. This was not the case. On average, the percentage of play comprised of additions did not differ significantly between the Disney group ($M=68.74, SD=12.56$) and the generic group ($M=69.14, SD=16.63$), $t(39)=-.084, p=.933$. Changes were interpreted as a middle ground between matches and additions; they are more different from the original media texts than matches, and they are more similar to the original media texts than additions. No specific results in any direction necessarily show support or lack of support for H1 on their own, but information about changes can help provide insights into how to interpret all the results for matches, changes, and additions together. On average, the percentage of play comprised of changes was higher in the generic condition ($M=21.51, SD=13.68$) than in the Disney condition ($M=14.46, SD=7.46$), $t(39)=-2.030, p=.049$. These results are reported in Table 2.
Character Involvement

RQ1 questioned whether the participants’ parasocial relationships and/or wishful identification with their favorite Disney Princesses would affect the degree of similarity between their play and Disney Princess movies. As explained in chapter 3, measures of parasocial relationships and wishful identification were constructed by averaging scores on Likert-type items, all of which were scored on a scale ranging from 1 to 6. Across all participants, the mean parasocial relationship score was 5.24 (SD=.72) and the mean wishful identification score was 5.09 (SD=1.01). Because scores of 4-6 resulted from “yes” answers to the items and scores of 1-3 resulted from “no” answers, these mean scores indicate moderate positive feelings about the characters. Six different Pearson r correlations were calculated comparing each participant’s parasocial relationship score and wishful identification score to their match, change, and addition score. Wishful identification correlated with only one of the three categories of comparisons between play and movie content. There was a moderate correlation between wishful identification and the percentage of play comprised of changes ($r(38)=.386, p=.015$). Wishful identification was not significantly related to the percent of play comprised of matches ($r(36)=-.224, p=.169$) or additions ($r(36)=-.253, p=.121$). Parasocial relationships were not significantly related to the percentage of play comprised of matches ($r(37)=-.218, p=.183$), changes ($r(37)=.273, p=.093$), or additions ($r(37)=-.070, p=.673$). These results are reported in Table 3.

In addition, a second measure of parasocial relationships, complexity of the participants’ descriptions of their favorite princesses, was used as a validity check.
However, complexity was not significantly related to parasocial relationships ($r(37)=-.035, p=.832$). Interestingly, higher complexity was significantly correlated with both a smaller percentage of play comprised of changes ($r(38)=-.470, p=.002$) and with a higher percentage of play comprising additions ($r(38)=.379, p=.016$).

The lack of relationship between complexity and the Likert-type measure may be because one of these two measures is invalid for studying parasocial relationships, or it may be because both are invalid. Because complexity has only been found as significantly related to parasocial relationships in one study and because the Likert-type items were designed specifically to mirror young children’s social relationships, it is likely that the Likert-type measure provides a better representation of the participants’ parasocial relationships. Therefore, the Likert-type measure is the one that will be considered in discussing the results of the study. However, this does mean that results about parasocial relationships should be taken with caution.

Nonetheless, a different noteworthy result emerged. Based on independent samples t-tests, participants in the Disney group ($M=7.95, SD=3.52$) had, on average, higher complexity than participants in the generic group ($M=5.43, SD=3.17$), $t(38)=2.381, p=.022$. However, participants in the Disney group ($M=4.91, SD=.72$) also had significantly less intense parasocial relationships than participants in the generic group ($M=5.52, SD=.59$), $t(37)=-2.918, p=.006$. Of course, it may be that the random assignment happened to place children with less intense parasocial relationships and more complex conceptions of their favorite princesses in the Disney group. However, it is also possible that the act of playing under the two different conditions played a role in
how participants responded to interview questions, especially considering that the complexity measure came earlier in the interview process. Perhaps playing with a Disney doll made more attributes of the princess accessible and therefore allowed participants in the Disney group to give more complex descriptions of their favorite princess. One of the questions in the complexity measure was, “Is there anything you don’t like about [Princess]?” Being better equipped to reflect on these negative things could have caused the participants to evaluate their favorite princesses slightly more negatively in the parasocial relationship questions. The fact that the participants were describing a favorite character could contribute to this; it is easier to name things one likes about a favorite character than things one does not like, and several participants could not name anything they did not like about their favorite princess. Further research should seek to replicate these results and, if these differences exist across multiple studies, should examine how play with media merchandise may affect children’s understandings of media characters in the long term.

**Exposure to Merchandise and Movies**

As explained in chapter 3, exposure to Disney Princess merchandise and to Disney Princess movies were measured through parent surveys. It is possible that frequent exposure to Disney Princess merchandise or movies at home could cause chronic accessibility to Disney Princesses and affect the degree of similarity between the participants’ play and Disney Princess movies. If this were the case, these variables would need to be controlled. For both of these measures, parents’ estimations of the amount of time their children spend using Disney Princess merchandise and of the
number of times their children had watched Disney Princess movies in the previous thirty
days were converted to ordinal scales. The sum of all of the scores in each category
became each participant’s merchandise exposure and movie exposure score. Exposure to
Disney Princess merchandise at home ($M=10.34, SD=3.70$) was not significantly related
to the percentage of play comprised of matches ($r(39)=.123, p=.444$), changes ($r(39)=-.016, p=.919$), or additions ($r(39)=-.031, p=.846$). Similarly, exposure to Disney Princess
movies at home ($M=6.63, SD=7.51$) was not significantly related to the percentage of
play comprised of matches ($r(39)=-.046, p=.773$), changes ($r(39)=.103, p=.520$), or
additions ($r(39)=-.020, p=.900$). It is also possible that exposure to just the movies
featuring each participant’s favorite princess, rather than all Disney Princess movies,
could affect accessibility. Therefore, parents’ reports of the number of times their
children had watched just the movies featuring the princess each participant reported as
her favorite were also examined as potential confounding factors. Like the movie
exposure measure, favorite princess movie exposure was measured by adding the scores
from the ordinal scale for just the movies featuring the participant’s favorite princess.
Exposure to movies featuring the participant’s favorite princess ($M=.95; SD=1.18$) was
not significantly related to the percentage of play comprised of matches ($r(39)=.077,
p=.633$), changes ($r(39)=.262, p=.097$), or additions ($r(39)=-.143, p=.371$). Because none
of these three kinds of exposure were significantly related to the degree of similarity
between the participants’ play and Disney Princess movies, they will not be considered
further.
Discussion

Overall, the data suggest that whether or not a toy is branded for a media product plays a role in what the child does with that toy while a child’s involvement with media characters does not. It is true that stronger wishful identification was significantly associated with an increased percentage of play comprised of changes. However, the lack of relationships between wishful identification with matches or additions indicates that, on the whole, wishful identification’s role in the participants’ play was minimal. Parasocial relationships were not related to matches, changes, or additions, indicating that this type of involvement was even less important to fantasy play content. Of course, as explained in chapter 3, the measures used in this study are new and not well tested, so making broad generalizations from these results would be hasty. Still, these data seem to indicate that, in answer to RQ1, these two types of character involvement are unlikely an important consideration in understanding children’s use of media merchandise in play.

The findings about complexity, however, are intriguing and may merit further consideration in future research. Complexity was the only variable in the study significantly related to additions; while other variables were unrelated to play content or were related to play being more similar to Disney Princess movies, more complex understandings of the favorite princesses was related to play being completely different than Disney Princess movies.

It is entirely possible, if not extremely likely, that complexity is related to other cognitive skills, which could help to explain why this variable functioned the way it did. Higher complexity in descriptions of real people is significantly related to children’s
advancement in a number of cognitive skills, like social perspective taking (Hale & Delia, 1976), persuasion and argumentation (Delia, Kline, & Burleson, 1979), and comforting strategies (Burleson, 1982). Further, evidence suggests there are important similarities and meaningful connections between how people understand real and fictional people (Babrow et al., 1988; Reeves & Nass, 1996). For children specifically, development in understanding other entities during middle childhood tends to advance toward increased differentiation and abstraction at similar rates for both peers and fictional characters (Babrow et al., 1988). Based on this, it is reasonable to think that complexity of character descriptions would also be related to certain sets of cognitive skills in both social domains, and it may be one of these skills or the combination of several of these skills that ultimately equips young children to use media merchandise such that they are more willing and/or able to stray from the stories in the original media texts. Future research should examine this possibility.

This does, however, raise questions about why character involvement did not function the same way, as character involvement is based in relating to fictional characters interpersonally. In particular, one might expect parasocial relationships to function similarly to complexity since the measure of parasocial relationships in this study was based upon young children’s conceptions of friendship, as explained in chapter 3. However, the measure of complexity, the number of distinct constructs a child uses in describing a character and what they do and do not like about that character, involves additional cognitive processes that are less important for parasocial relationships. With the exception of a child simply making up things about their favorite character (which
only one participant did), a relatively higher score in complexity requires that a child comprehended at least some parts of what they saw on the screen and that they are able to remember those things. Parasocial relationships, on the other hand, deal more with a child’s personal feelings in ways that do not rely upon specific information; for example, when deciding whether or not they would want to invite their favorite princess to their birthday party, it would be possible for the child to make that decision without basing it in specific attributes of the princess or specific events from her story. The child could, therefore, have a high score in parasocial relationships regardless of narrative comprehension and memory. The same is not true for complexity. This distinction is especially important in the context of cognitive and social development. Narrative comprehension and recall of media content tend to increase along a similar trajectory as many of the social and cognitive skills associated with complexity (Richert et al., 2011; Wright et al., 1984). Again, this seems to point toward the advancement across these social and cognitive domains as a potential cause of additions in play, and future research should examine whether such a causal relationship may exist.

The inclusion of comprehension and recall as part of complexity when dealing with fictional characters also indicates a level of intentionality in the level of additions in children’s play. If a child can remember more about the character and their story, then they should be better able to replicate the movie in their play; this might lead one to expect the opposite result, that children with higher complexity would include fewer additions and more matches in their play. The fact that this was not the case seems to suggest that children with greater complexity were actively changing the stories that they
knew for their favorite characters, either because those things never came to mind, which seems unlikely considering that half of the children were using media merchandise at the time, or because the children remembered those things but evaluated them as not sufficiently fun and decided to do something else. Therefore, along with questions about how cognitive and social development may affect the inclusion of more additions in play, scholars should question how decision making fits into this complex equation.

Finally, the differences between the two conditions must be considered. Overall, the data show support for H1, though in an unexpected way. The basic prediction in H1 was that play with media merchandise would more closely resemble the media texts from which that merchandise came than play with a similar generic toy. The significant difference in the mean percentage of matches between the Disney and generic conditions supports this idea. Perhaps the most obvious show of support for H1 in the other two categories would be for children in the generic group to show a higher percentage of additions and for the percentage of changes to be similar among the two groups. This would demonstrate a clear direction on the similarity-difference continuum such that merchandise yielded strong tendencies toward the similarity end and generic toys yielded strong tendencies toward the difference end.

However, the fact that the data did not indicate this does not mean that H1 is entirely unsupported. Changes are more different from the original media texts than matches. If the percentage of additions were the same but the Disney group averaged a higher percentage of matches and the generic group averaged a higher percentage of
changes, then the group who played with media merchandise did indeed tend to play in ways more similar to the media texts from which those toys came.

Another potential challenge to the support for H1 is that in both groups the average percentage of additions was higher than the average percentages of either other category, indicating that most of the play was different from the original media text regardless of the kind of toy used. However, it is notable that the difference in the number of matches between the two groups was quite large. The mean percentage of the play comprised of matches in the Disney group was approximately double the mean percentage of matches in the generic group. Further, in the Disney group, the mean percentage of matches was greater than the mean percentage of changes. Both of these results indicate that there were substantial and meaningful differences between the groups in terms of the degree of similarity between the content of the children’s play and the original media texts. Overall, then, though different results could have arguably shown stronger support for the idea that the presence of media merchandise is related to similarities between play and media texts, the differences between the two conditions in the percentages of matches and changes support the idea that the type of toy is related to play content.

Still, the fact that the generic group had, on average, more changes but not more additions is intriguing and important. It may be that the generic doll condition was associated with changes because those changes reflect generic constructions in fairy tales and princess stories. Because all of the participants in the study were already interested in Disney Princesses, they presumably already had a schema for what “princess” means. As
these children live in a country without any official monarchy, their exposure to real princesses is likely limited. Their schemata for princesses are probably composed primarily from princess stories in movies, television, and books, and the most accessible parts of those schemata would be elements that are shared frequently among those stories. Disney Princess movies are princess stories and often contain very specific versions of those common princess story elements, so a child could change those specific elements to more generic versions. Consider the following example. Many princess stories contain a dragon as an obstacle standing between a prince and a princess. The movie Sleeping Beauty contains this common story element, but the dragon is very specific. The dragon is actually an evil fairy, the same evil fairy who put the princess in peril in the first place, who used magic to become a dragon and fight the prince. A girl whose favorite princess is Aurora might replicate that exact dragon in play (a match) when she plays with an Aurora doll because her schema for Aurora contains that specific dragon, and the doll made that dragon accessible. When given a generic princess doll, the same girl might simply include a generic dragon (a change) because a generic princess made dragons in general more accessible than the specific dragon in Sleeping Beauty. This may be particularly important in the context of cultivation. If the previous is, in fact, the case, a generic princess would be very likely to contribute to cultivation effects, as would media merchandise for a princess that follows the tropes of princess stories very closely. However, a princess that subverts those tropes may allow a child to combat those cultivation effects if they replicate the parts of the story that are unlike other princess stories. Of course, this is speculative and cannot be confirmed by the data from this study.
alone, but the results suggest that future research in the relationship between media merchandise and accessibility of specific and generic narrative elements would be useful for understanding the effects of media on fantasy play and how those effects relate to other media effects theories.

Taken together, the results of the study indicate that the presence of media merchandise toys does play a part in children replicating media texts in their play. Involvement with those media characters, however, does not seem to be an important factor in play content. This suggests that future research in media and play should increase focus on merchandising. The implications of children replicating media content in play are an especially important consideration. Which specific elements of media texts that children replicate is a major aspect of how these results fit into the larger body of research about media effects, and this will be considered further in the next chapter.
Chapter 5: Qualitative Analysis and Results of RQ2

As explained in chapter 4, the quantitative analysis of the data revealed that when playing with media merchandise, as opposed to generic alternative toys, children are more likely to replicate elements from the original media text in their play. The implications of that, however, cannot be understood without further examination of what parts of those stories were replicated and what parts were changed. Are children rehearsing previously acquired knowledge, much of which comes from media, or challenging that knowledge? Do the choices of what to keep and change from a media text differ based upon the presence of merchandise or lack thereof, or do generic toys offer similar learning through play opportunities and/or limitations?

To examine these questions, I utilized Corbin and Strauss’ (2008) strategies for qualitative analysis. After watching each play session and interview on video, I wrote memos summarizing the play sessions. These memos also included notes about parts of the play that related to gender constructs, parts of the play that related to specific Disney Princess movies, and anything unusual or otherwise noteworthy about the play activities (e.g., use of the participant’s own experiences for inspiration, trouble using the toys, participants’ questions, etc.). I took a grounded approach and reviewed the memos using constant comparison to see where patterns emerged. I then reviewed the memos again, taking note of the ways that each participant did and did not fit within those patterns.
This chapter explains the results of this qualitative analysis in order to provide insight into how children’s schematic knowledge of culturally constructed subjects, like gender, may be affected during these play processes. First, apparent influences on the play sessions will be considered. These are things that were present in both the Disney and generic groups that could not be controlled but clearly influenced participants’ decisions about what to include in their play. Next, common themes in the play session will be discussed. These are aspects of the play that were driving parts of the participants’ narratives and that appeared frequently across the play sessions. Finally, I will discuss a pattern showing a key difference between participants regarding the relationship between media, interpretation, and gender stereotypes. This will highlight the complexity of how media effects on play may come to be and where merchandise falls in that equation.

**Influences**

Two factors seemed to influence participants’ play in both the Disney and generic groups. Both the toys themselves and children’s personal experiences appeared to affect the participants’ choices of what stories to tell in their fantasy play. Neither of these are unexpected, but they nonetheless merit discussion, as they provide context for instances in which other decisions may be related or unrelated to these influences.

**Toys and Their Affordances**

The toys available during the play sessions had obvious influence toward the participants’ play decisions in that all participants were more likely to use the toys in front of them than to imagine invisible objects. For example, 13 participants included cooking actions in their play, and 8 included building and/or fixing things with tools. This
is almost certainly because toy food and toy tools were among the available toys. In some ways this did limit the play sessions, as it provided a relatively small number of possible actions for children to explore, at least in comparison to the infinite possibilities of imagining invisible objects. However, this limit also makes comparisons between participants easier. Instead of asking questions about each individual object and action, the researcher can consider the toys in relation to each other. Instead of asking, “Did the participant have cooking in her play,” “Did the participant have building,” and “Did the participant have [every other conceivable action],” the researcher can ask, “Did the participant choose cooking or building or both or neither?” The implications of those particular choices can then be considered within the larger context of media effects and schema building.

Beyond this expected result, though, the toys themselves seemed to influence play in other related but distinct ways. First, the participants tended to have very rigid ideas about how the toys could represent entities in their play. This is best exemplified by one particular participant who could imagine that the dolls could pretend but who would not or could not imagine that the things the dolls pretended were simply part of the play. For example, the dolls could “play ballerina,” but they could not be ballerinas, only a princess and a girl pretending to be ballerinas. Similarly, the dolls could see the castle backdrop and pretend that it was a real castle, but a painting could not simply stand in for a castle. This is an extreme example, but many participants seemed to share the general feeling that a toy that already represented a real thing could not represent something else. For 5 participants, the girl doll could not be a princess or queen; rather these participants asked
for a second princess doll to take on that role. A similar situation occurred multiple times with the apple juice in the food set. The juice container was a carton rather than a bottle. Several participants stated that the characters in their play were using milk, then later realized that the toy was supposed to represent apple juice. Every time this happened, the participant changed the object to juice instead of allowing the toy to be milk. Only two participants imagined the toys as entities clearly different than they appeared. In both cases, the participant was part of the Disney group and was actively trying to replicate certain parts of the movie from which their doll came. When making these adjustments, the participant always reasoned through why each specific toy was allowed to become something new. For example, one girl retelling *The Little Mermaid* reasoned that the plush alligator could be Flounder because, like a fish, an alligator can go underwater. This seems to indicate that the toys available to a child during play truly can limit their play decisions, and a breadth of toys may be helpful in encouraging children to stretch the content of their fantasy play.

Second, the affordances of the toys affected participants’ play decisions. Approximately 32% of the participants had trouble getting the toys to function the way they wanted. This was most apparent with three toys in particular: the car, the horse, and the plastic food. The car was plush, and the fluffy design sometimes made it difficult to fit the dolls inside. In order have the dolls sit in the car as a person would, the participants had to stuff the dolls’ legs under the dashboard, which proved tricky for many girls. In addition, the car had ribbon seatbelts that buckled with Velcro, and many were determined to use them to buckle the dolls safely into their seats. This made the already
troublesome car even more difficult to use. The horse was a large, hard plastic horse, not unlike one that may come in a Barbie set. The horse fell over easily, and the dolls, being made of soft fabrics, were nearly impossible to balance on top. Finally, the hard plastic food did not have any traction against other food pieces, so the meat and vegetable pieces of the hamburger tended to squirt out from the middle when participants tried to hold the fake sandwich together.

When faced with these problems, the participants tended to do one of two things. Some simply abandoned what they were doing and did something else instead. For example, several participants who could not get the hamburger to “work” had their dolls eat the chicken leg, and one girl had the princess get inside the stove because she could not fit in the car. In other instances, the participants simply continued trying to make the toys do what they wanted the toys to do, sometimes for well over a minute. In many cases this did not end until the researcher suggested a way around the problem, like holding the princess on top of the horse and moving them together. This raises questions about, in the former case, how much of the play was the participants’ second or third choice of activity and, in the latter case, how the time spent dealing with those toy troubles would otherwise have been spent.

Thus, beyond the availability of the toys being an inevitable tacit form of encouragement to use them, various features of the toys also seem to affect what the participants chose to do in their fantasy play. This means that in addition to the merchandise itself, the combination of other toys surrounding that merchandise is an important consideration for understanding media effects on play.
Personal Experiences

Like the toys, the participants’ personal experiences affected some participants’ play decisions. About 20% of the participants explicitly stated that they incorporated elements from their own lives into their play. While this is certainly a minority, it is possible that other participants did this as well but did not feel it necessary to share that information. Even if that is not the case and only a small number of participants did this, knowing that using personal experiences was an active choice makes it worth a brief discussion.

Participants’ use of their own experiences occurred primarily in three ways: relationships, activities, and locations. As will be discussed in the subsequent section, interpersonal relationships with peers were a common element of the play sessions, and several participants used people in their own lives as inspiration for the people in their play. This was particularly common for cousin relationships; more so than for friends or siblings (based upon those participants that offered this information), the princesses had cousins that shared names, ages, and genders of the participants’ cousins. It did not seem that the participants conceived that the play cousins stood in for their actual cousins. These were not the same people, just people with the same names and other features.

In terms of activities, several participants had princesses do things that they like to do or that they had done recently. For example, playing tag, playing fetch, and pretending to be ballerinas were all activities that princesses did because their participants like to do them. Similarly, one classroom from which participants came had been building a treehouse that semester, and two participants from that class included building a
treehouse in their play sessions. One participant said that her princess needed to go to Florida for a “princess lunch,” which she had attended when visiting Florida recently. This is likely a reference to “character meals” offered at Walt Disney World, in which actors dressed as Disney characters, often princesses, walk around a restaurant and interact with patrons as they eat a meal.

As the previous example alludes, three participants had their princess travel to places that they had recently visited. These locations included Florida, California, and Mexico. This was especially common in the days following spring break. It seems, then, that some participants intentionally included aspects of their own lives in their play, meaning that personal experiences may influence play decisions, especially in the short term. This could serve to reinforce information learned through these experiences, though that claim cannot be made from these data alone and will require future research.

**Play Themes**

Two themes appeared frequently in the play content, travel and relationships. Neither of these themes was more common among either the Disney group or the generic group.

**Travel**

Approximately 46% of the participants included travel as central parts of their play. Almost all of the participants had location changes of some kind in their play, but these travel-themed play sessions were unique in that the location changes were central elements of the participant’s play narrative. For some participants this is because the princess took a trip over a very long distance, indicated by the use of real places that are
far away from the participants’ homes or the need for air travel to get there, and the actions performed along the way or in the new setting were the direct result of the travel. For example, two participants had their princesses go to Florida for the specific purpose of doing things that people could do in Florida but presumably not in the place where the story began. These things included visiting people who lived in Florida, riding on boats, and attending the aforementioned princess lunch. Of course, it is not possible to know for certain whether these location changes were necessary for the story. Because the participants made up the original location, it could hypothetically, for example, have had a body of water capable of sustaining a boat or been a place that the people in Florida could have come to visit. Indeed, because this was fantasy play, the possibilities for how to accomplish the tasks described above are endless. While it may be tempting to conclude that the endless possibilities mean that the travel is not central to the play at all, since those activities could have been imagined literally anywhere, this ignores the participant’s ability to control the story. It is the fact that the participants chose for traveling long distances to proceed the activities that makes the travel important; while other participants chose to, for example, simply have the princess hop on a boat, these participants made the decision that traveling to a place near lots of water, like Florida, needed to happen first. In this way, travel was a key element of these participants’ play because it was a prerequisite for the rest of the story to unfold.

For other travel-themed play, the locations were not necessarily far away, but the act of changing locations took up a significant portion of the play. Several participants established two, three, or four locations and spent more than two minutes of the play
session simply moving one or more characters between these locations. Usually, little or nothing was done at each location before moving to the next one, meaning that the travel itself was the most central action to that part of the child’s narrative. Participants who engaged in these frequent location changes often switched off using different forms of transportation based on the toys available to them: car, boat, horse, and rocket, which was usually dubbed an airplane. It seems that the combination of several locations and vehicles offered participants a sufficiently entertaining mode of fantasy play.

The travel theme may relate to princess stories, and by logical extension the participants’ schemata for princesses, in certain ways. First, some fairy tales, and more specifically princess stories, do involve traveling. For example, a prince or knight may have go on a quest to find and rescue a princess. Travel is an important part of several Disney Princess movies, likely because lengthening short tales into full-length movies requires more complex story telling. For example, while most versions of “The Frog Prince” do not involve substantive travel over long distances, Disney’s *The Princess and the Frog* involves Tiana and Naveen traveling from New Orleans through swamps of Louisiana and back. Similarly, Mulan travels through China with the army, Elsa runs away from her home to build an ice palace in the mountains, and Pocahontas sails to England in *Pocahontas II: Journey to a New World*. It is possible, then, that the instances of travel in the Disney Princess movies and other fairy tales made such journeys accessible to the participants and that these ideas seemed like a good fit for princess toys.

Second, it is possible that, even when travel is not present, the locations in princess stories make travel accessible. Many fairy tales, including most Disney Princess
movies, take place in non-descript or explicitly fictional far away lands. The idea of a place that is far away from where the viewer is may bring up concepts related to travel in the viewer’s mind, even if travel is not an important aspect of the story, because the distance between the viewer and the setting of the story is clearly apparent.

Finally, it is notable that many princess stories make travel impossible for princesses by locking them up, often in towers of castles. Among the Disney Princesses, Aurora, Cinderella, Belle, and Rapunzel are physically locked away, and Jasmine and Merida are emotionally locked away by having their clearly explicit desire for freedom denied by their parents’ insistence on adhering to outdated traditions and laws. In fact, the narratives in *Tangled* and *Brave* use imprisonment as a main source of conflict. The captivity in princess stories may have important implications for the focus on travel on the participants’ play. There is some evidence that opposites can make each other accessible (Park et al., 2001), so if imprisonment is a common theme among princess stories that has become part of children’s schemata for princesses, then that may make travel accessible to children playing with princess toys. It is also possible that some of the participants who engaged in travel stories did so as an active choice to deviate from other princess stories; it may be that the children did not like the idea of princesses being locked away from the world and decided to change that part of the story. The fact that none of the participants’ play sessions involved princesses or other characters being locked up lends credence to this idea, as does the fact that when asked what they do not like about their favorite princesses, many participants spoke about moments of conflict in a princess’ story. Regardless of the reason for its existence, the travel theme may subvert
the common trope of princesses being imprisoned, which is especially important for the active/passive distinction discussed later in this chapter.

Relationships

Relationships between people were also a common theme in the participants’ play sessions. About 70% of the participants featured relationships of some kind prominently in their play sessions. Interpersonal relationships do drive many princess stories, but the relationships that the participants focused upon tended to be different in type from relationships commonly featured in princess stories. Princess stories tend to feature certain kinds of relationships prominently. Antagonistic relationships are very prominent, as these drive the conflict in many narratives. Most often these relationships exist between the princess and either a witch or parental figure (or both). Belle, Anna, and Elsa are the only Disney Princesses who do not have such relationships, with the primary antagonists for these princesses having suitor relationships to the young women. Romantic relationships, particularly heterosexual romantic relationships, are also extremely common, as the princess in the story is frequently married or otherwise involved with a prince by the end of the story. Among the Disney Princesses, only two, Elsa and Merida, have not participated in a love story by the end of their movies. Even so, it is notable that romance still plays a role in their movies, as Brave focuses on Merida’s active avoidance of betrothal, and Anna begins dating Kristoff at the end of Frozen. Romance is, therefore, an extremely common element in Disney Princess movies.
It is notable that romantic relationships were rare in the participants’ play sessions. Only one participant had her princess get married during her play session, and no participants featured dating, kissing, or other romantic indicators. One participant in the Disney group who picked Ariel as her favorite princess attempted to reenact *The Little Mermaid*, and she did include Ariel’s prince. She did not reach the point in the story at which Ariel tried to make the prince fall in love with her, but it is likely that this would have been included in the play had the participant had more time. In addition, one of the participants in the Disney group who picked Belle featured the Beast in her play, but no explicit romance was present between the two. Belle and the Beast ate meals together, which could be conceived as a date and does happen during the courting process in *Beauty and the Beast*, but in the participant’s play Belle ate similar meals with her father. No other participant included anything resembling a romantic relationship, which stands in opposition to almost every Disney Princess movie and to many other princess stories.

Unlike most princess stories, participants’ play narratives that included relationships tended to focus on positive peer relationships. While 12 participants included an antagonist of some kind, only 5 participants included antagonistic relationships between characters that also occupied other interpersonal roles. Three participants included a negative relationship with a mother figure, one included a “mean girl” type of peer, and one included an older sister who physically attacked two younger sisters and a younger brother. Overwhelmingly, though, interpersonal relationships existed between siblings, cousins, or friends, and the stories featured no conflict at all.
between these parties. Such relationships always existed between the princess doll and the girl doll, who was sometimes also joined by the boy doll and/or teddy bear as additional siblings, cousins, or friends. There were no instances of the boy doll acting as a family member or friend to the princess in the girl doll’s absence.

This is particularly interesting within the context of princess stories in general and Disney Princess movies in particular, as positive peer relationships are few and far between, especially between two girls. The most obvious exception is *Frozen*, in which Anna and Elsa are sisters and their sisterhood is a driving theme of the movie. Three princesses are featured in stories with positive peer relationships but to a much lesser degree. Both Pocahontas and Tiana have one close female friend, though in both cases that friend spends most of the movie off screen. Ariel has several sisters who are shown only briefly in *The Little Mermaid* and act much like a chorus in *Ariel’s Beginning*. None of the other Disney Princesses have any positive relationships with female peers.

Some of the interpersonal relationships featured in the participants’ play seemed to have very direct links to their favorite princesses. Every single one of the participants who decided to give their princess at least one sister picked either Elsa or Anna as their favorite princess, and these are the only princesses for whom sisterhood was central to the original media text. In addition, one participant in the Disney who picked Pocahontas as her favorite princess chose to give her Pocahontas a close female friend (Mulan), a mother, and a grandmother. Parts of this narrative are not exactly like the Pocahontas movies. Pocahontas’ friend in the media texts is not Mulan, and Pocahontas’ mother dies prior to the beginning of the first Pocahontas movie. However, in both Pocahontas
movies, the character relies on the women in her life, specifically Grandmother Willow, for support and guidance. She grows to trust her love interest in both movies over time, but the rest of the men in her life try to control her, try to hurt her, or engage in violence against her wishes, or some combination of those three. It is notable, then, that this participant chose only to allow Pocahontas to have positive relationships with women. Based on these participants, it seems that for some children and/or in some instances, specific aspects of relationships in a particular movie may be reflected in play featuring the same or similar characters.

This cannot, however, explain the other interpersonal relationships because, as noted above, friendships between girls are rare in Disney Princess movies, and cousins are absent. This probably has to do with a combination of many factors. As explained previously in the chapter, the toys themselves seemed to influence the stories that the participants told using those toys. The dolls appeared young, like the princess, so it is logical that the participants largely conceived of these dolls as fairly rigidly occupying a peer relationship to the princess doll. Further, peer relationships are likely accessible to children because the play sessions took place at school; the participants had just come from classrooms full of their peers. Of course, the children also have contact with teachers in those classrooms, but these relationships likely seemed less viable to the participants because of the dolls’ apparent ages. As also previously noted, when describing what they liked and did not like about their favorite Disney Princesses, many participants made clear that they did not like points of conflict in the movies. Given that this is the case, it would make sense that they would focus their own stories on harmony
among the available toys. Collectively, these conditions could have produced imagined positive peer relationships.

It is difficult to say whether the toys or the participants’ feelings about the original media texts had a larger influence on the final outcome. Either way, the outcome indicates a subversion of common princess story tropes. The participants’ stories tended to include positive peer relationships that are uncommon in princess stories while excluding romantic relationships and antagonistic relationships are extremely common in princess stories. Like with the travel theme, this could potentially undermine cultivation effects regarding the kinds of people that princesses specifically and girls in general can trust. While girls and young women in princess stories are often portrayed such that they can trust men, especially boyfriends, and expect to fight with other women, especially mothers and witches, the participants’ play seemed to often make female peers the most reliable and trustworthy people in the princess’ lives. Further, the emphasis on romance across princess movies could hypothetically lead viewers to believe that these are the most important relationships in girls’ lives, but the participants’ play often rejected this idea by excluding romance all together.

Overall, then, the patterns among the themes of travel and interpersonal relationships suggest that play could potentially work to counter media effects if certain conditions regarding accessibility and/or children’s personal storytelling preferences are met. Further research into the processes that produce the girls’ decisions would be extremely helpful, as will be explained further in the following chapter, but these data do indicate that children may intentionally or unintentionally fight against dominant,
repetitive media messages in their play with both media merchandise and similar generic toys.

**Media, Merchandising, and Gender**

One of the key elements of this study is that use of a highly gendered stimulus, the Disney Princesses, allowed for the examination of how children may reinforce and/or undermine their knowledge of gender in their play activities, which, as explained in chapter 2, ultimately affects gender schemata during formative years. As described above, a few common themes did emerge. The common elements of play content do relate somewhat to gender norms and stereotypes. Participating in positive social relationships is understood as a traditionally feminine trait, and while travel is somewhat gender neutral, it necessarily involves entering the public sphere, which pushes travel toward the masculine area of the gender spectrum. There are likely some implications for gender schemata from children’s choices to include these elements in their play, but these are complicated by the larger context of princess stories in general and Disney Princess stories in particular. Including interpersonal relationships may reinforce the idea that these relationships are inherently feminine, but they also fight the equally problematic stereotype that women must rely on men when in need, which is clearly present among most Disney Princess movies. While the travel theme falls more firmly on the side of countering a stereotype, that stereotype was culturally weak to begin with, which means this particular stereotype may function differently from many others. Further, it is not clear whether the inclusion of travel was related more to images of travel and far away places in media or images of imprisonment, so it is difficult to place the theme within a
broader, more generalized understanding of the relationship between play and schematic knowledge.

The way in which these themes arose, however, indicate how a media text, the interpretation of that text, and the presence of merchandise may combine to show differences in gendered information held within fantasy play. The participants’ descriptions of their play as it occurred contained subtle but clear differences in how they envisioned the events of the story, specifically those events in which the princess was directly involved. Just over half of the participants, 22 participants total across both conditions, phrased their descriptions of what was going on, or phrased the princess’ words in instances where the participant spoke for the princess, such that the princess was conceived as active in the physical activities and the imagined decisions behind those activities. In such instances, the participant perceived the princess as a subject of action. The princess would, for example, go in search of something, build something, cook something, or go visit someone, and she would do these things on her own terms. She might, for example, have a responsibility to do something (e.g., her horse ran away, and she has to find it; she must make sure everyone is safe; her parents need a new house), clearly state a desire to do something (e.g., she loves to build things; she was sad when the bad guys cut trees down and told them to stop), or decide what a group of people should do (e.g., she states that everyone should ride the boat; she decides to go the forest, and someone else tags along). In each of these play sessions, the participant in some way imagined that the princess was in control of the things that happen to her; the princess was an active agent pushing the narrative forward.
This stands in opposition to the other 19 participants who envisioned only things happening to the princess. In these play sessions, the princess was an object of action. For example, some participants conceived another character in the play as deciding what everyone, including the princess, should do. Others had princesses do things that princesses are “supposed to do” with the lack of any other context demonstrating desire or responsibility. The things that the princesses did in these play sessions were not substantively different than the things the princesses described in the previous paragraph did, but the participants imagined these princesses as lacking control of what happened to them. These princesses took passive roles in the narrative.

This difference has very large implications for schematic knowledge of gender roles within a larger media landscape because women are frequently seen taking passive roles in narratives, to the point that men as active and women as passive is a very common gender stereotype. A complete discussion of this binary could be a dissertation in itself, so time and space do not permit such an examination of media. Suffice it to say that there are numerous media tropes that describe the various ways that female characters can take passive roles in media texts, often by existing for the purpose of driving someone else’s story forward. To name just a few, the “damsel in distress” describes a woman being locked away and awaiting rescue from a man because she incapable of exerting any control over her own situation (as opposed to male characters who, when locked away, almost always find their own way to freedom). “Fridging” involves creating a female character whose sole purpose in a story is to die, usually gruesomely, in order to provide motivation for a male character. The “manic pixie dream
“girl” describes narratives in which a two-dimensional female character, with quirkiness as a masquerade for characterization, exists for the purpose of bringing light to life of a brooding man. Again, these are just a few examples. Notably, all of them are present in varying degrees among the Disney Princesses, with the damsel in distress being the most clearly prominent. Within the larger media landscape, the fact that these are tropes means that, by definition of the word, they are extremely common narrative structures.

In fact, several “low bar tests” have become popular in fan communities over the past few years as a means of bringing light to how often women take passive roles in media. The point of these tests is to provide an incredibly simple, easy to follow guideline (i.e., a “low bar”) for avoiding placing women in very passive roles, and then to point out that a shockingly high number of media texts fail to pass that low bar. For example, media texts pass the Bechdel Test, named for Alison Bechdel, if two female characters with names discuss something other than a man (Bechdel, 1985). Comic book writer Kelly Sue DeConnick described the Sexy Lamp Test, which media texts fail if a female character can be replaced by a sexy lamp without substantively changing the story (Yehl, 2013).

Again, this discussion of tropes and low bar tests barely scratches the surface of the relationship between gender and active and passive roles in narratives, but their existence does demonstrate just how prominent that relationship is in popular media. It is virtually impossible that a child in the United States (or many other countries, for that matter) could grow up without having frequent contact with the woman/passive-man/active dichotomy, and this is precisely why this specific difference among the
participants is so important. This pattern in the play sessions indicates that play with media characters has the potential to both reinforce and undermine even the most frequently encountered stereotypes in media. The frequency of these portrayals in media could make that information in gender schemata very rigid, so the fact that play could potentially counter that information is crucial.

This begs the question: What are the differences between the participants whose princesses were active and those whose princesses where passive? In these data, those differences seem to be a complex combination of the original media text, the viewers’ interpretation of that text, and the presence of media merchandise. The most noticeable difference between those with active and those with passive princesses was their responses in the person description task that was coded for complexity. Among all but two of the children with passive princesses, their reasons for liking the princesses focused primarily on appearance. They liked princess’ clothes, hair, shoes, or other visual attributes, and the most common first response to the “what do you like about [Princess]” question was that she was pretty or beautiful. Among all but one of the children who had active princesses, their reasons for liking their chosen princesses centered on things that the princesses do in their stories, like performing magic or swimming, or on internal states with clear, concrete explanations in the media text, like being brave or wanting freedom from traditions. Many of these children mentioned the princess’ appearance as well, but it was typically not the first thing they named, and they often elaborated more upon non-appearance features.
In other words, the children’s preferences for what drew them to their favorite princess characters in the first place was related to how they imagined princesses during play. When children liked the things that princesses did, which necessarily implies action, they tended to conceive of more active princesses. When they liked the way that the princess looked, which not only emphasizes the traditionally feminine trait of beauty as important but also is something beyond the characters’ fictional control, the participants tended to conceive of more passive princesses.

However, this relationship goes beyond the participants’ reasons for liking the characters. A pattern also emerged in the selection of princesses that took on the active and passive roles. Every participant who chose Aurora, Cinderella, and Snow White as their favorite also played such that their princess was passive and discussed liking the princess’ appearance. The only exception was one girl in the Disney group who played with a passive Cinderella and liked that Cinderella got “another mother” (the Fairy Godmother) and kissed a prince. This pattern makes sense when one considers that these three princesses take on passive roles in their stories and leave viewers with few actions or counterstereotypical traits to like. Of course, individual interpretation is important, and it is certainly possible for children and adults alike to have interpretations with little or no clear basis in the text. For example, one participant explained that Aurora slept for six weeks, though the time frame in the movie is much shorter, and another thought that Elsa’s magic powers came from her shoes. Still, interpretations come from texts that contain a finite amount of specific information, and it is reasonable to expect that most interpretations will be based on things shown in the movie rather than things the viewer
completely makes up. When the movie *Sleeping Beauty* shows fairies giving Aurora the 
gifts of beauty and song and then makes her only role to speak a few lines of dialogue to 
a stranger in the woods and fall asleep, it is completely understandable, if not likely, that 
a young child would interpret that Aurora’s best quality is that she is pretty. It is much 
less likely that a young child would interpret that Aurora’s best quality is being an 
excellent spy who plays dead very well. Because of this, the fact that the list of princesses 
who became passive in the participants’ hands is flooded with the two-dimensional 
princesses who are depicted as very passive in their movies is unlikely to be a 
coincidence. That these participants liked the princess’ appearances more than anything 
else is almost certainly related to the fact the movies featuring these princesses portray 
the princesses as pretty and little else.

While there are valid critiques to be made about all of the Disney Princesses, 
some of the more recent princesses do have more active roles in their movies and have a 
greater number of concrete traits beyond their appearance, at least in comparison to the 
earliest Disney Princess movies. Out of the 11 participants who chose Elsa as their 
favorite princess, 9 played such that their princess was active, and all of them spoke of 
Elsa’s ice powers first when describing what they liked about that character. The list of 
participants who played actively also included every instance of Ariel, Jasmine, and 
Pocahontas. While, again, these characters certainly perpetuate gender stereotypes in 
many ways, like their need to be saved by men, they are all depicted as making decisions 
to control their own lives and are characterized through concrete actions as adventurous 
and brave. In addition, 4 out of the 6 children who chose Rapunzel as a favorite
conceived of active princesses in their play, as did 1 of the 2 children who chose Belle. Again both of these princesses have clear, action-based characteristics beyond their appearance in their movies, like Belle’s love of reading and Rapunzel’s desire to leave her tower, and both choose to take on savior roles in their respective stories. Just as the participants who told stories about passive princesses, the participants telling stories about active princesses may be related to an interaction between the information available to them in the movies featuring their favorite princesses and their interpretations based on that information. Thus, it seems that the participants’ understandings of the characters alone do not explain the active-passive dynamic because if they did, the participants’ choices of favorite princess would not be so clearly divided. Rather, the participants’ ability to choose certain traits that they liked was bound, in part, by the media texts themselves.

However this leaves in question the 7 instances of relatively more active Disney Princesses who, in a participant’s hands, became passive. One of these participants chose Tiana as her favorite princess. Tiana is certainly depicted as making active choices about her life and doing many physically active things in her movie, but she does fill other gender stereotypes, like the narrative’s emphasis on romance being the most essential part of a woman’s life. It is possible that this could push a child’s fantasy play toward passivity if that child held the woman-as-passive stereotype very strongly already; if this were a rigid part of the pre-existing gender schema, then it could be highly accessible for all princesses, or even all women dolls, during play. However, a perhaps simpler explanation could be this participant’s very shy nature. She was hesitant to play at all,
and this could have translated into a princess who did not seem to show imagined active
decision making. Had she been playing in a more familiar environment and/or without
the presence of a stranger, she may have made difference choices in her fantasy play.

The remaining 6 instances of participants with relatively more active favorite
Disney Princesses who imagined passive princesses share an important characteristic. All
6 of these participants were in the generic group. Given that the participants demonstrated
rigidity in the symbolic representations their toys could occupy, as discussed previously
in this chapter, it may be that, even if their favorite princess became accessible when they
used the generic doll, the participants did not assign any of their favorite princess’
attributes into a doll that was clearly a different princess. Rather, the participant would
rely on common princess themes and tropes, which could include passivity, in imagining
an entirely new princess. This is a particularly compelling possibility in the case of one
participant who chose Elsa as her favorite princess and reported Elsa’s magic powers as
her favorite thing about the princess. This explanation posits that had this participant been
assigned to the Disney group and had an Elsa doll, the participant’s play may have
reflected more of Elsa’s active nature. However, a doll that did not look like Elsa and was
not named Elsa was clearly not Elsa, so the participant would be less likely to use Elsa
specifically as inspiration in her play.

The other 5 cases of participants having relatively more active favorite princesses
but imagining passive princesses in their play also occurred within the generic group. It is
possible that these participants’ play activities were affected by the fact that the doll was
not their favorite princess, just as in the case described above. In addition, these 5
participants also, like the majority of participants who imagined passive princesses, reported that they liked the appearance of their favorite princess. For three of these, the character in question had a unique aspect to their appearance, and the participant focused their responses in the character description task specifically on that one trait. For Rapunzel, two participants spoke about liking her very, very long hair, and for Anna, one participant liked that her hair had a white streak in it. It seems, then, that even when princesses are depicted as active agents in their own story, some children may still focus in on the character’s appearance as their best quality, and this is perhaps more likely to happen when the character has some sort of unique, attention-grabbing physical feature. As the previous paragraphs explain, such participants would be likely to conceive of more passive princesses. For these girls, it may be either or a combination of both their interpretations of the text and the generic princess doll that yielded play with passive princess characters.

Overall, then, it seems that following pattern emerged. Fantasy play with highly gendered princess dolls was not inclined to promote or to question stereotypes across situations. Rather, such play could do either one of these things depending upon a number of factors. When children liked stereotypical aspects of their favorite Disney Princess, feminine beauty in particular, they tended play in ways that supported the gender stereotype of women as passive objects of action. When children liked aspects of their favorite characters that were counterstereotypical or not related to common stereotypes, like actions or personality traits that were grounded in explicit actions in the princess’ movie or movies, they tended to play in ways that challenged the common stereotypes by
making their princesses active subjects of action. More well-rounded and
counterstereotypical princesses seemed to provide better opportunities for children to
appreciate something about the characters other than common stereotypes, so the choice
of favorite character may also contribute to play decisions. However, this is not always
the case, as most media characters fit at least some stereotypes, especially in a very
complex domain like gender, and viewers may focus on these traits. In addition, it is
possible that when a child prefers a relatively counterstereotypical princess over more
stereotypical others, having merchandise for that favorite princess may act as
encouragement to incorporate counterstereotypical elements into princess fantasy play.

This seems to suggest that schemata for culturally constructed concepts are,
indeed, related to fantasy play. Certain gender stereotypes that are extremely common in
popular media did exist in the participant’s fantasy play. This information was almost
certainly held within the participants’ schemata for women, princesses, or likely both, as
princesses are highly gendered and therefore probably share much information.
Otherwise, it would not have been accessible during play. However, at other times, these
stereotypes were not present. It may be that information from the schema about a specific
princess outweighed the schemata for princesses and women in general.

This tension may have implications for learning through play. Returning to the
learning processes discussed in chapter 2, differences between general princesses and a
favorite princess may encourage accommodation within activated schemata. Logically,
this would occur either by changing the schema for general princesses to fit the favorite
princess or by changing the schema about the favorite princess to fit the general
princesses. The data suggest that the former is more likely to be case when the attributes causing the tension are highly valued. On the other hand, when there is little tension between the general and specific princess schemata, the princess play seems more likely to encourage assimilation; the shared information is repeated in play, which should serve to make that part of both schemata more rigid. As will be discussed further in the following chapter, further research could help to clarify these outcomes. Fully understanding this phenomenon may have very important implications for countering stereotypes in young children, whose schemata are more susceptible to change than adults, as explained in chapter 2.

Thus, young children’s fantasy play with toys is affected by a number of situational variables, like personal experiences and attributes of the toys themselves. Among these variables, media texts may influence play behaviors through complex combinations of accessibility of general tropes and accessibility of specific stories. These things work together to produce play behaviors that sometimes support and sometimes undermine media messages. This matches well with Smith’s (2010) concept of equifinality and indicates that both assimilation and accommodation of information learned from media may be possible through fantasy play with media merchandise and other related toys. As will be discussed in the following chapter, this may have important implications for media effects research, especially in the domain of cultivation effects.
Chapter 6: Conclusion

The study described in the previous chapters raises a number of important considerations about what the relationship between media merchandising and play means for children, parents, and media effects researchers. This chapter will begin by summarizing the study and its results and then delving into what those results might mean for researchers, children, parents, and toy companies. Following this, important limitations to the study will be discussed. The chapter will conclude with a discussion of directions for future research that may provide the best next steps for studying media merchandising from a media effects perspective.

Summary of Results and Implications

This study hypothesized that when a child is presented with a media merchandise toy, the child’s fantasy play will be more similar to the original media text than when a child is presented with a generic toy. In addition, the study posed the following research questions. First, how will parasocial relationships and wishful identification with a media character affect fantasy play with media merchandise featuring that character and with generic alternative toys? Second, how do children use schematic knowledge about gender in play with highly gendered media merchandise as opposed to a generic alternative toy? Girls ages 4-6 years old were randomly assigned to play with either their self-reported favorite Disney Princess doll or a similarly designed generic princess doll for ten minutes. Their play was coded for its narrative elements according to a modified version
of the event-indexing model. The items in the play were compared to items in the movie(s) featuring the selected favorite princess and coded as matches (meaning the content in the play was exactly the same as in the movie), changes (meaning the content in the play was similar in type to content in the movie), or additions (meaning the content in the play was completely different from the content in the movie).

To briefly summarize the results presented in chapters 4 and 5, young children replicated more of the content of media texts in their fantasy play when they were playing with media merchandise than when they were playing with generic alternative toys, and when they played with generic toys, they tended to incorporate play elements that were similar to things in related media content but were not exactly the same. In addition, children who gave more complex descriptions of their favorite media characters tended to add more completely new elements to their play related to that character than children with less complex descriptions of the favorite media characters. The affordances of the toys themselves and children’s personal experiences, particularly recent experiences, were also related to play behaviors. Parasocial relationships and wishful identification were not important factors in fantasy play behaviors. Fantasy play with media merchandise was not more or less likely than play with generic alternatives to be used in ways that support gender stereotypes, but qualitative analysis did reveal certain differences regarding gender stereotypes in princess play. Whatever attributes of their favorite characters children latched onto tended to be more closely related to the content that was manifested in their play. Children who liked unique or counterstereotypical attributes of their favorite princesses tended to create play content that challenged
common cultural constructions related to the domains in which those attributes exist. In contrast, play from children who liked attributes that aligned with common cultural constructions tended to contain content that supported related common cultural constructs.

**Theoretical Implications**

The combination of these results has certain implications for communication research. It seems clear that merchandising does have a place in media effects research. The quantitative results clearly indicate that media merchandise has its own effects on play behaviors. Because merchandising was the manipulated variable in the study, the finding that merchandise tended to produce fantasy play that more closely mimicked media texts should itself be considered a media effect. Merchandising is a prominent factor of profitability in media industries, is based on media content, and its outcomes in the study were directly media-related. In short, media merchandising is part of media, and when it produces effects, those effects should be understood as media effects. Knowing that merchandising does, in fact, produce effects beyond the effects of just watching media means that media effects scholars should begin to take merchandising seriously in their work.

The study did not test accessibility directly, but the differences between the two conditions in the study do support the idea that accessibility and sufficiency are in some way involved in play. It is likely that the media merchandise either made elements of the movies more accessible or made things from the movies seem more sufficiently fun, or possibly both. Accessibility could also explain the results of the generic group; if a
specific princess doll makes the stories for that specific princess accessible, then it would make sense that a generic princess would make the general concept of princesses accessible. This would explain why the generic group had, on average, more changes than the Disney group but not more additions. It is impossible to know for sure to what degree accessibility and sufficiency drive these play behaviors, but this is, perhaps, the most logical explanation, and it merits consideration due to the potential impacts on cultivation.

Accessibility and sufficiency are the driving forces behind cultivation (Shrum, 2008), so if the results of the study are, indeed, the result of these processes, this may have important implications for cultivation. Cultivation posits that over time, people will come to believe that repetitive messages in media represent reality (Morgan et al., 2008), and the results do show some support for this process. The qualitative analysis showed that certain internalized stereotypes were present in some of the children’s play. Those stereotypes were ones that related to the specific play materials, in that they were gender stereotypes that commonly take clear roles in princess narratives. The children’s beliefs were not measured, but the girls who used these stereotypes in their play did not seem to find them objectionable and did not state that they disliked these qualities in the character description task. This suggests that these children may have internalized certain roles for princesses and/or women from repeated exposure to princess media (and possibly other media), which is what cultivation would predict. Based on this, it seems at least possible, if not likely, that cultivation effects influence play behaviors with media merchandise and
with toys related to types of characters that are popular and frequently encountered in media, like princesses currently are.

In addition to being a potential cause of play behaviors, cultivation may also be affected by play behaviors. If one accepts Shrum’s (2008) explanation of cultivation processes, then the additional repetition of elements of media in play could contribute to those cultivation effects. That is, if cultivation is based in repetition of media messages, then repeating the media messages in play could act as one such repetition, making that information more accessible and sufficient with each instance of it in play. From the data in this study, that seems especially likely to occur under two scenarios. First, because using media merchandise in play increased the instances of replicating media texts during that play, using media merchandise is likely to function to support cultivation effects as described above. Second, the data indicate that children tend to veer toward drawing inspiration from their most preferred media texts, so when children prefer media texts that fit with common tropes, which would be the kind of frequently encountered information that typically produce cultivation effects, they would be more likely to repeat that frequently encountered information. Instances in which both of these scenarios are met, meaning a child playing with media merchandise of a preferred character that fits common tropes of the genre, may be especially related to reinforcing these cultivation effects.

However, the notion of preferred texts as an important factor does challenge certain assumptions of cultivation. Cultivation is based on the assumption that media content is homogenous and that time spent viewing is the primary force behind
developing worldviews based on media content (Morgan et al., 2008; Shrum, 2008). Because media present a very limited set of similar worldviews, spending more time viewing media means receiving greater exposure to those particular worldviews. That greater exposure builds the viewer’s schemata such that the frequently presented information is highly accessible and deemed more sufficient than it would be for those who view less media. In this study, though, the number of times participants had recently viewed Disney Princess movies was not related to their replication of movie content in their play with media merchandise. Further, the fact that different preferences, which were related to movie content, were associated with different play outcomes indicates that the texts were not completely homogenous. It is also notable that the media texts in this study are movies while cultivation was originally conceived to describe effects of television viewing.

The latter two of these three issues are relatively easy to reconcile with cultivation. Several scholars have already argued that media content is not homogenous but that cultivation effects can and do still exist at the genre or program level (e.g., Hawkins & Pingree, 1981; Lee & Niederdeppe, 2011), and these data follow these reasoning for the particular sub-genre of princess stories. In fact, the addition of branding and merchandise as part of media effects could contribute to the argument that the homogeneity assumption in cultivation is unnecessary. Part of the point of branding is to establish the product as distinctive, and brand loyalty could encourage people to consume repeatedly certain media products, and by extension their messages, in the absence of
others. The process of cultivation would predict cultivation effects from just these particular brands in such cases.

The challenge to the focus on television is similarly easy to reconcile. The conception of cultivation predates VCRs, DVDs, Blu-Rays, and movie streaming services. At that time, it made sense that messages viewed on a regular basis in the home, meaning television, would be different from other effects. The technologies mentioned above have made movies easily viewable in the home on a regular basis, like television. Therefore, it makes sense to consider movies as part of the cultivation equation in modern media environments.

That viewing time was not an important factor, however, is a much more direct challenge to cultivation. This certainly is not to say that viewing time should never be an important factor or even the primary factor in most cultivation studies; the abundance of evidence for cultivation effects based on viewing time completely overwhelms this singular anomaly, especially considering that the viewing time was measured by estimate rather than viewing journal. This study does, however, indicate that there may be certain specific instances in which other factors moderate or otherwise affect cultivation effects.

Notably, the outcomes in the study were not unlike Greenberg’s (1988) drench hypothesis. Greenberg proposed that the general process of cultivation could be disrupted by the inclusion of just a few counterstereotypes. The counterstereotypical characters would draw viewers’ attention because they violate viewers’ expectations for what media will show them. That increased attention would then increase the counterstereotypes’ influence over the viewer. In other words, one single counterstereotypical character
would be internalized to a greater degree than any one single stereotypical character, so the introduction of a few of these counterstereotypes into a person’s schemata could decrease cultivation effects.

Along these lines, the participants in this study whose favorite princess were in some way counterstereotypical tended to present less stereotypes in their play, which seems to suggest that their schemata about princesses specifically and possibly women in general included counterstereotypes more prominently. However, it does not necessarily appear that this is because those children pay more attention to their favorites than other children. That is a possibility, but in the absence of a measurement of attention during viewing, it would be hasty to assume that this difference exists. This is especially the case given that approximately 79% of participants had watched Frozen at least once, and often much more, during the previous 30 days. Rather, it seemed that the particular counterstereotypical attributes that the participants liked most brought forth the differences in their play. It may be that this is still attention related, that the children paid more attention to things that they liked, or it may be that liking itself, rather than attention, is the driving force behind the difference. It may also be that media texts with heavy branding and lots of available merchandise, like the Disney Princesses, function differently than other media by, for example, increasing rumination or tying the media texts more closely to a viewer’s identity. Whatever the reason, participants’ liking of counterstereotypical elements of media texts was related to outcomes predicted by the drench hypothesis. This could help to explain why preferences and liking seemed to exert greater influence over play behaviors than time spent viewing.
These possible relationships to cultivation further emphasize how important it is for media effects scholars to consider merchandising in their research. While this study cannot confirm any of these ideas, their potential impact for explaining how cultivation may function within modern media environments makes them crucial for media effects researchers to understand. Some suggestions for how to pursue this research will be discussed in the “Direction for Future Research” section of this chapter.

In addition to implications for cultivation, this study raises some questions about how media merchandise may affect young children’s cognitive development. Participants who used media merchandise instead of generic alternative toys replicated more media content in their play, and it is possible that children reproducing things that they have already seen instead of creating new ideas may be related to slower development in the many cognitive domains related to fantasy play discussed in chapter 2, like theory of mind, executive function, and linguistic skills. The central question here is what about fantasy play is most causally related to those developmental changes. If it is the cognitive process of creating of sufficiently fun content for the play that is responsible or even partly responsible for the relationship between fantasy play and development, then it is reasonable to think that replicating media content may not fulfill the task in the same way that making up new play content does. This may be especially true in the context that comprehension skills tend to get better with age; pre-school and kindergarten aged children may replicate media content in their play without truly understanding it, which might negate those cognitive processes. For example, more frequent engagement in fantasy play is related to more advanced theory of mind (Lillard et al., 2013). If it is the
cognitive process of imagining what a toy might say or do that another entity might not that drives that relationship, and if a child simply repeats what a character did in media without an understanding of why that happened or of why different characters might do something else, then the fantasy play with the media character would likely not support the expected strengthening in theory of mind. Of course, as will be indicated in the “Directions for Future Research” section of this chapter, this is tentative and needs to be researched further. However, the possibility is certainly worth probing because the opposite, that replicating media content promotes advancement in cognitive skills beyond what other toys can, is less likely to be the case.

Finally, the results of this study support Smith’s (2010) concept of equifinality. Play itself was not inclined to promote assimilation or accommodation among the participants. As explained in chapter 5, it seems that play with media merchandise may support either assimilation or accommodation depending upon the degree to which the particular media text from which the merchandise comes differs from norms of stories in the same genre. This aligns well with Smith’s idea that play is one of many ways that children may achieve cognitive advancements though accommodation but that other activities may contribute to such advancements as well, and not all play will necessarily fulfill this role. Further, the results indicate that whether or not accommodation occurs may happen at least somewhat systematically based upon both environmental and individual factors; it is not simply a matter of chance or of whether a child is cognitively ready for such advancement. Some of the important aspects that determine whether play will be assimilative or accommodative can be manipulated. This may be especially
important for instances in which adults want to encourage one type of learning over the other, as will be further discussed in the “Practical Implications” section below.

Thus, along with all of the insights discussed in chapters 4 and 5 about how media merchandise relates to fantasy play, the results of this study have meaningful implications for media effects theories and research. In particular, this study indicates that media merchandising and play may contribute to cultivation and cognitive development in ways not previously sufficiently explored. Suggestions for how to pursue such ideas will be expanded later in this chapter.

**Practical Implications**

As for the real world implications for children, the decision of whether to provide children with media merchandise is a not a simple one. Overall these results suggest that media merchandise may be detrimental to young children in a number of ways. As described above, merchandise may be related to delays in cognitive development, and while that is far from clear at this time, caution may be appropriate until further research can confirm whether such effects exist and to what degree. In addition, the replication of media content may have important implications for children’s development of stereotypes in their schemata. It is well documented that media portrayals of minority groups often include stereotypes and that many stereotypes are developed, in large part, from media consumption (e.g., Aubrey & Harrison, 2004; Mastro, 2008; Smith & Cook, 2012). Because of this, much media merchandise will come from media texts that perpetuate stereotypes. This means that when children replicate media in their fantasy play, they may include those stereotypes as well as related stereotypes that become accessible due
to the cognitive relationships between them. Based upon the ways that accessibility and schemata function, as explained in chapter 2, this is very likely to contribute to children’s learning of any stereotypes that appear in the play. This is a particularly serious issue when one takes into account that children may not need to fully understand those stereotypes to learn them. For example, most of the participants in the study probably could not articulate that women in media often take passive roles in their own stories, much less a (likely implicit) belief in support of such representations. They can, however, notice that it is “normal” for a princess to be saved by a prince rather than solve her own problems, to always do what she is told, to be defined by her marital status, and to fill other narrative roles that emphasize her passivity. Even when children cannot define exactly what stereotypes are or what they mean for real people, they can still rehearse them. Thus, in a media landscape that perpetuates stereotypes, play with media merchandise may offer additional opportunities for children to learn stereotypes. This fits very closely with the fact that, in the study, girls who chose the most passive princesses as their favorite tended to conceive of more passive princesses in their play.

So far these implications have pointed to the idea that play with media merchandise is potentially harmful for young children and should be avoided. However, that may not always be the case. In the few instances in which a minority media character is counterstereotypical or very well-rounded, a toy designed to look like that media character may result in children replicating media content that does not support common stereotypes. Of course, it is possible for characters to challenge some stereotypes while perpetuating others, so some caution in this approach is necessary. Choosing only
exceptionally well-written and well-rounded characters when buying merchandise may be the best strategy.

In addition, it may be possible for parents or others to influence how children use media merchandise. If children with more complex understandings of characters are associated with further deviation from the original media text in their play, then helping children to understand characters as unique entities and to be able to remember many qualities about characters may help to alleviate some of the possible ill effects from fantasy play with media merchandise. Similarly, if the attributes that children find most interesting about a character are related to the content of their play, then helping children to see and value certain traits in characters could help children to avoid stereotypes in their fantasy play. There are a number of possible methods for such interventions, including conversations with children about media, playing with children when using media merchandise, or creating new stories for media characters.

Finally, it should be noted that merchandise producers can do things to take an amount of social responsibility for their products. The finding that the affordances of the toys influenced play behaviors takes on increased magnitude in the context of a gendered toy industry. Few toys are marketed as gender neutral, and national chain toy retailers in the United States almost universally split their stock into “for boys” and “for girls” sections. While this raises a number of questions about sexism in and of itself, it has important implications for the current study when one considers that certain kinds of toys are exclusive to “boy” and “girl” aisles. Specifically, action figures are almost never included in girl aisles, and fashion dolls are almost never included in boy aisles. This
means that when media companies choose a single gender as their target audience for a media text, the merchandise for that text will include certain types of toys in the absence of others. If the affordances of toys influence play, then it is reasonable to think that children might do something different with, for example, a Rapunzel action figure that can swing a frying pan in its arm or that can swing on its hair than they would with a Rapunzel plush. In addition, toys that are built to perform an action could help to emphasize a character’s activeness, which the results indicate could help children to avoid stereotypes in their play if that character is a woman or girl. Thus, corporate decisions about merchandising likely have a part this complex media effects equation, and companies taking the responsibility to provide a diverse array of toys to children could impact their lives in meaningful ways.

**Limitations**

This study has limitations that must be kept in mind when interpreting and applying the above results. First, only one specific set of media texts was used as a stimulus. As explained in chapter 2, there were practical reasons the study needed to be designed that way, but that does not change the fact that children may interact with other media franchises differently than they do Disney Princesses. Replication with other media texts and merchandise would increase generalizability.

Certain aspects of the sample affect generalizability as well. Most notably, the sample is all girls. While there is no reason to believe that the cognitive processes that underlie fantasy play are substantially different between young boys and girls, socialization of gender norms starts very early, which is likely one of the primary reasons
that so few boys signed up for a study about Disney Princesses. Therefore, one must question whether a similar study with other genders would produce the same results, and one should be cautious in generalizing to all children. Second, because so many of the participants came from a prestigious private school, the sample does skew toward children from households with relatively higher household incomes and more educated parents. Also, all of the participants were recruited from combined pre-school and kindergarten institutions, with two serving children as young as three years old. This means that many children in the sample, even those in pre-K, may have had over a year of schooling at the time of data collection. All of this relative homogeneity means that generalizations across all young children should be made with caution until these results are replicated with other samples.

Related to this homogeneity, approximately 66% of the sample was recruited from an all girls’ school. These participants may experience socialization with peers in ways differ from children who attend co-ed classrooms. Further, this particular all girls’ school actively builds anti-sexism into its curriculum, emphasizing to young students that girls are not limited by their gender and attempting to break down common gender stereotypes. This environment makes it likely that participants’ gender schemata may have been different than others in the population as they entered the study. This could have particularly important implications for the qualitative aspects of the study. For example, it may be that the number of children who focus on counterstereotypcial aspects of their favorite princesses or who conceive of princesses in their play as passive would be higher in the population than in the sample. While this does not affect the general idea
that both assimilative play and accommodative play with media merchandise is possible, depending on the circumstances, it may influence how common such behaviors are without intervention.

Third, there is an important limitation in the measurements. When using narrative string coding, the participants’ play sessions were compared to all of the movies featuring their favorite princess. At the times of the study, four princesses had been featured in three movies (one theatrical release and two straight-to-video sequels/prequels), and two princesses had been featured in two movies (one theatrical release and one straight-to-video sequel). If an item in the play was a match or change for an item in any one of the movies featuring those princesses, it was coded in these categories. It is possible that a child could have only seen some of the movies featuring their favorite princess and that items in the play only coincidentally matched or changed items from unseen movies. It may seem like a better option that the coders only compare each participant’s play to the movies their parents reported that they had seen in the previous 30 days. However, that was not a viable option because children could remember content from movies seen more than 30 days prior. In fact, there were a few participants whose parents reported that they had not seen any Disney Princess movies in the last 30 days, but the participants were still able to choose and describe a favorite princess. Because of this, the researcher made the call to code as was described in Chapter 3. The somewhat problematic nature of that coding could have resulted in some instances of the kinds of coincidental matches and changes described above.
It is also important to note that because the movie exposure measures cannot account for all possible types of exposure. Some children may learn the content of popular media through interactions with peers rather than through viewing media content themselves. They may also view media products when visiting friends or relatives, which parents may not be aware of and therefore would not report in the surveys. In addition, many Disney Princess stories are available in formats other than the movies themselves, like books based on the movies. Any of these could have affected the measure such that exposure to the content of Disney Princess movies was underestimated.

Finally, the exploratory nature of this study means that it was designed to examine what behaviors are present in young children rather than to fully understand the processes behind those behaviors. All thoughts about these processes in this text were phrased to communicate speculation, and they should be understood as such. Relatedly, the study considered very few possible confounding factors, largely because one of the goals of the study was to determine what confounding factors might be important for future research. There are almost certainly other variables that influenced the results that were not measured or considered.

**Directions for Future Research**

One of the goals of this study was to guide future research examining how media merchandise produces media effects, and several such directions are apparent from the study’s results. First, knowing that children tend to recreate more media content in their fantasy play when using media merchandise, researchers should explore a number of other variables that may have a place in the relationship between using merchandise and
incorporating media content in play. First, do the effects accumulate when multiple pieces of merchandise from the same media text are present? Would having, for example, both a Rapunzel and Flynn Rider doll tend to result in even more replication of *Tangled* in a child’s play, or does any amount of merchandise produce approximately the same about of replicated items? Second, what happens when merchandise from multiple different media texts are involved in the same play? What happens when a child plays with both Elsa and Mulan at the same time? Or Elsa and the Hulk? It seems likely that these kinds of options for toy selections are available to many children in their homes, so the effects of these kinds of combinations, both within media texts and between them, are important to understand and merit further research. Furthermore, research should address if merchandise use follows the same patterns in social play as it does in individual play. Children may use merchandise from the same or different media texts together at school, in childcare programs, or when visiting a peer at their home, so researchers must question how social play in these environments may be unique. In particular, it will be important to consider sufficiency, as children engaging in social play must find play activities that they both agree are sufficiently fun, which may be different than play activities that either child finds sufficiently fun on their own.

Second, researchers should examine potential mediators, moderators, and otherwise confounding variables that could affect the relationships between media merchandise and play. There are numerous possibilities, but parental mediation could be an excellent next step. Previous research supports the idea that parents talking to children about the media can improve children’s comprehension, especially if those conversations
provide scaffolding (Beck & Clarke-Stewart, 1998; Pratt, Kerig, Cowen, & Cowen, 1988). If parents can change children’s understanding of media, then they may be able to effectively encourage children to understand media characters such that certain attributes stand out more than others. Based on the study data, this could help children to challenge stereotypes in their play. It would also be interesting to know if parents telling new stories about media characters could affect the content of play with merchandise. If new stories become part of the child’s schema for the character, like a movie sequel might, then parents could potentially make limitless adjustments to narratives or characters that could, in turn, adjust their children’s play. If this does prove to be an effective strategy, teachers may also be able to instigate such adjustments through guided creative writing or drama activities. Future research should test children’s understanding of characters and stories as well their play behaviors with merchandise before and after the introduction of these types of parental involvement.

Finally, future research should focus on explaining how and why the outcomes from this study occurred and what other important outcomes may exist. Potential relationships with other cognitive capabilities have already been mentioned in this and other chapters, and these will be important for researchers to consider. How theory of mind and creativity may be related to play with merchandise may be good places to start because these variables have certain logical connections to differences between play with merchandise and with generic alternatives. As explained earlier in this chapter, the fact that children may be able to copy elements of media texts related to differences in knowledge between characters or characters’ internal states without understanding them
shows potential for media merchandise play to slow theory of mind development. Such an act would deprive children of the opportunities to reason through and practice these concepts that fantasy play without media replication can provide.

Creativity has connections to the current study in that making up something new would be, by definition, an exercise in creativity in ways that copying a media text would not. The fact that children in the generic condition were more likely to have changes rather than additions in their play makes creativity particularly interesting. If playing with generic toys is not related to stronger creativity in young children, this might give credence to the idea that children playing with generic toys that fit categorically with a current media trend (e.g., princesses, superheroes) simply replace the specific content from media that they would use with a media toy with common archetypes and tropes.

Examining the relationship between creativity and complexity of character descriptions for favorite characters, since the latter was related to an increase in additions during fantasy play, could also be of use. It may be that the cognitive skills underlying creativity and character descriptions often develop in tandem and that creativity makes a unique contribution to that relatively higher amount of play content that is entirely different from media texts.

Research confirming the speculations about how play with media merchandise may affect the acceptance or rejection of stereotypes in the long term will be especially important. Perhaps the best way to do this would be through a longitudinal study looking at amounts of fantasy play with and without media merchandise, content of play, and changes in beliefs over time. Of course, that would require a great deal of resources and
may be difficult from a practical standpoint. Alternatively, a study following the norms of cultivation studies may be useful. Rather than using time spent consuming media as a variable, parents could be asked to keep track of time spent playing with media merchandise. Researchers could then evaluate if play with relatively more stereotypical characters is related to holding those stereotypes and related stereotypes as beliefs and, similarly, if play with counterstereotypical media merchandise is related to holding fewer stereotypes as beliefs. While such a study would lose actual play content as a variable, it could still be an indication of how children may learn schematic information during play. In addition, including a measure of liking could help to further parse out how preferences may affect cultivation in certain situations, like those in which media merchandise is involved. A study like this would also help to further connect media merchandising to the media effects tradition.

**Conclusion**

Overall, this study leaves scholars, as well as parents, with some important insights to an increasingly normative but understudied aspect of children’s lives. The results indicate that merchandising is part of media effects, that merchandising does have significant effects on fantasy play behaviors specifically, and that parents may want to consider such effects when making choices about their children’s toys. Children tend to use media content in their play when they use media merchandise more so than when they do not. While the relationship between that use of merchandise and rehearsal of stereotypes in play may be somewhat complicated, the combination of merchandise, media content, and children’s preferences indicate patterns that may substantially impact
schemata for cultural constructs. For these reasons, parents’ careful evaluation in choosing their children’s toys may help parents to guide their children’s learning about topics like gender. The results also reveal paths for future research involving cognitive development, cultivation, and the learning of stereotypes during crucial early years when schemata are relatively flexible. Following these research leads could provide parents with better and clearer guidelines for ensuring their children’s healthy development in a media saturated environment and could help media effects scholars to more fully understand how media affect young children.
References


National Communication Association Annual Convention: The Presence of Our Past(s): NCA at 100, Chicago, IL.


Appendix A: Tables

<table>
<thead>
<tr>
<th>Princess</th>
<th>Times Chosen</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snow White</td>
<td>1</td>
<td>2.4</td>
</tr>
<tr>
<td>Cinderella</td>
<td>4</td>
<td>9.8</td>
</tr>
<tr>
<td>Aurora</td>
<td>7</td>
<td>17.1</td>
</tr>
<tr>
<td>Ariel</td>
<td>4</td>
<td>9.8</td>
</tr>
<tr>
<td>Belle</td>
<td>2</td>
<td>4.9</td>
</tr>
<tr>
<td>Jasmine</td>
<td>2</td>
<td>4.9</td>
</tr>
<tr>
<td>Pocahontas</td>
<td>2</td>
<td>4.9</td>
</tr>
<tr>
<td>Mulan</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Tiana</td>
<td>1</td>
<td>2.4</td>
</tr>
<tr>
<td>Rapunzel</td>
<td>6</td>
<td>14.6</td>
</tr>
<tr>
<td>Merida</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Anna</td>
<td>1</td>
<td>2.4</td>
</tr>
<tr>
<td>Elsa</td>
<td>11</td>
<td>26.8</td>
</tr>
<tr>
<td>Category</td>
<td>Play Sessions</td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Protagonist</td>
<td>9.85</td>
<td>3.59</td>
</tr>
<tr>
<td>Relative Time</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Concrete Time</td>
<td>.12</td>
<td>.33</td>
</tr>
<tr>
<td>Relative Space</td>
<td>.02</td>
<td>.16</td>
</tr>
<tr>
<td>Concrete Space</td>
<td>3.15</td>
<td>1.51</td>
</tr>
<tr>
<td>Motivation</td>
<td>.85</td>
<td>.99</td>
</tr>
<tr>
<td>Cause/Effect</td>
<td>2.93</td>
<td>2.88</td>
</tr>
<tr>
<td>Action</td>
<td>13.49</td>
<td>6.17</td>
</tr>
</tbody>
</table>

Notes: The following movies were counted together as a single set in each category, as that is how they were compared to play sessions: Cinderella, Cinderella II: Dreams Come True, and Cinderella III: A Twist in Time; The Little Mermaid, The Little Mermaid II: Return to the Sea, and The Little Mermaid: Ariel’s Beginning; Beauty and the Beast, Beauty and the Beast: The Enchanted Christmas, and Beauty and the Beast: Belle’s Magical World; Aladdin, The Return of Jafar, and Aladdin and the King of Theives; Pocahontas and Pocahontas II: Journey to a New World. Mulan, Mulan II, and Brave are not included because no participants chose Mulan or Merida as their favorite princesses.
Table 3

*Matches, Additions, and Changes in Play Content*

<table>
<thead>
<tr>
<th>Category</th>
<th>Disney Condition</th>
<th>Generic Condition</th>
<th>t(39)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Match</td>
<td>18.26</td>
<td>12.45</td>
<td>9.35</td>
</tr>
<tr>
<td>Addition</td>
<td>68.74</td>
<td>12.56</td>
<td>69.41</td>
</tr>
<tr>
<td>Change</td>
<td>14.46</td>
<td>7.46</td>
<td>21.51</td>
</tr>
</tbody>
</table>

*Note: *p < .05; **p < .01.*
### Table 4

*Correlation Coefficients (Pearson r) Between Character Involvement and Matches, Additions, and Changes*

<table>
<thead>
<tr>
<th>Category</th>
<th>Parasocial Relationship</th>
<th>Wishful Identification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Match</td>
<td>.138</td>
<td>.224</td>
</tr>
<tr>
<td>Addition</td>
<td>.070</td>
<td>.253</td>
</tr>
<tr>
<td>Change</td>
<td>.237</td>
<td>.386*</td>
</tr>
</tbody>
</table>

*Note: *p < .05*
Appendix B: Diagram of Play Space

- Food, Tools, and Telescope Toys
- Animal Toys
- House Painting
- Castle Painting
- Dolls and Teddy Bear
- Transportation Toys
- Chair with Laptop
Appendix C: Example of Narrative String Coding in the Protagonist Category

<table>
<thead>
<tr>
<th>Participant’s Protagonists</th>
<th>Movie’s Protagonists</th>
</tr>
</thead>
<tbody>
<tr>
<td>space shuttle (addition)</td>
<td>Flynn Rider</td>
</tr>
<tr>
<td>dragon (addition)</td>
<td>Mother Gothel</td>
</tr>
<tr>
<td>Rapunzel (match)</td>
<td>Rapunzel</td>
</tr>
<tr>
<td>Rapunzel’s horse (change)</td>
<td>King</td>
</tr>
<tr>
<td>Rapunzel’s friends (match)</td>
<td>flower</td>
</tr>
<tr>
<td>dog (addition)</td>
<td>lanterns</td>
</tr>
<tr>
<td>toy alligator (addition)</td>
<td>soldiers</td>
</tr>
<tr>
<td>bear (addition)</td>
<td>Queen</td>
</tr>
<tr>
<td>automatic car (addition)</td>
<td>brush</td>
</tr>
<tr>
<td></td>
<td>Pascal</td>
</tr>
<tr>
<td></td>
<td>Stabbington brothers</td>
</tr>
<tr>
<td></td>
<td>sneezing soldier</td>
</tr>
<tr>
<td></td>
<td>Maximus</td>
</tr>
<tr>
<td></td>
<td>satchel</td>
</tr>
<tr>
<td></td>
<td>pan</td>
</tr>
<tr>
<td></td>
<td>crown</td>
</tr>
<tr>
<td></td>
<td>group of scary men</td>
</tr>
<tr>
<td></td>
<td>man with hook</td>
</tr>
<tr>
<td></td>
<td>tiny old man</td>
</tr>
<tr>
<td></td>
<td>townspeople</td>
</tr>
<tr>
<td></td>
<td>four girls</td>
</tr>
<tr>
<td></td>
<td>guards</td>
</tr>
<tr>
<td></td>
<td>big guard</td>
</tr>
<tr>
<td></td>
<td>two small guards</td>
</tr>
<tr>
<td></td>
<td>mime</td>
</tr>
<tr>
<td></td>
<td>sun sign</td>
</tr>
<tr>
<td></td>
<td>blue towel</td>
</tr>
</tbody>
</table>