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## Of Hobbes and Harvey: The Imaginary Companions Created by Children and Adults

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In his classic book *Play, Dreams and Imitation in Childhood*, Piaget (1962) carefully documented a series of imaginary companions created by his daughter Jacqueline. At 3;11, she invented an "aseau," a strange birdlike creature that could also be a dog, an insect, or any other animal that struck Jacqueline's fancy. The aseau was followed by an invisible dwarf and then a girl named Marecage, who played all the time and did not have to take naps. Piaget was interested in the many functions served by these companions and provided examples of how they comforted Jacqueline when she was afraid, helped her cope with being teased, and provided a vehicle for expressing opinions, emotion, and ideas related to reality.

Piaget's discussion presents a normative view that contrasts with the theories of his contemporaries, who tended to link imaginary companions with various types of disturbances and difficulties (e.g., Ames & Learned, 1946; Bender & Vogel, 1941; Benson & Pryor, 1973; Myers, 1976, 1979). On the other hand, Piaget (1962) cautioned his readers not to overinterpret interactions with imaginary companions as evidence of creativity or a developing imagination: "In reality, the child has no imagination, and

what we ascribe to him as such is no more than a lack of coherence" (p. 131). For Piaget, imaginary companions were an intriguing mix of imitation and distorting assimilation that belonged to the preoperational period of development. He believed that the development of imagination consisted of a decrease in such constructions "in favor of representational tools more adapted to the real world" (p. 131).

Despite his negative interpretation of imaginary companions as evidence of immature thought, Piaget described the phenomenon of children's imaginary companions as the most interesting of all deliberate symbolic constructions. We agree with the latter part of this assessment. After more than a decade of studying the creation of imaginary companions and related types of pretend play, we continue to be amazed by the complexity, idiosyncrasy, and detail in children's reports. Also, like Piaget and more recent researchers (Bouldin & Pratt, 1999; Gleason, Sebanc, & Hartup, 2000; Manosevitz, Fling, & Prentice, 1977; Manosevitz, Prentice, & Wilson, 1973; Pearson et al., 2001; Singer & Singer, 1990), we consider the creation of imaginary companions to be normative, even common, during early childhood. However, in contrast to Piaget, we do not believe that interacting with an imaginary other is a curious phenomenon unique to early childhood. Instead, we have more of a life-span perspective on this type of activity and are convinced that there is much to be learned about the capabilities of the human mind and the development of imagination from the investigation of imaginary companions.

In what follows, we review recent research on the developmental course of imaginary companions, the functions they serve, the characteristics of children who create them, and parental reactions to them (e.g., Taylor, 1999; Taylor & Carlson, 1997; Taylor, Cartwright, & Carlson, 1993). We also discuss some of the methodological challenges presented by this area of research. Finally, we suggest a link between the creation of imaginary companions by children and the creation of imaginary characters by adult fiction writers.

### DEFINITIONAL AND METHODOLOGICAL ISSUES

In general, there is considerable variability in the types of pretend activities that children enjoy. More specifically, imaginary companions come in all shapes, sizes, ages, genders, and species. They differ in vividness, personality development, longevity, and activities. Sometimes they are completely invisible and sometimes children use props to represent them, including a variety of idiosyncratic objects (a leaf, a stick, a finger, etc.),

as well as toys such as dolls and stuffed animals. One of our research participants used a couch caster (i.e., the little hemisphere of metal that goes on the bottom of a couch leg to keep the carpet from tearing). He wore it on his thumb, and his thumb and the caster cap became "Johann." Some children consistently use a prop, others consistently do not use a prop, and others are inconsistent (i.e., sometimes they use a prop and sometimes the character is completely invisible). For example, Piaget's daughter sometimes used a shovel to represent her friend Marecage, who at other times was invisible. In addition, some children act out or impersonate the character themselves rather than treat it as a separate individual (e.g., a child who created a character named Super Lightning Bolt Aidan and pretended to be this character for many months). Finally, some children switch back and forth between impersonating the character and treating the character as a separate individual. This was true for Piaget's daughter Jacqueline. When she first invented the aseau, she ran around flapping her arms and was the aseau. Only later did the aseau become a separate entity who was her companion.

According to Harris (2000), all these pretend activities are similar in that they involve role play; the child imagines the thoughts, actions, and emotions of a person or creature. Within role play, Harris made distinctions based on the vehicle for the imagined character: (a) an object as vehicle, (b) nothing as vehicle (i.e., an invisible imaginary companion), or (c) the self as vehicle (i.e., impersonation). In our research, we have investigated all three types of role play, but here we focus primarily on the first two types in which a character (based on an object or invisible) can serve as a companion. Depending on the age of the children, about a third to half of imaginary companions are based on objects and the rest are invisible (e.g., Gleason et al., 2000; Taylor, 1999). Some authors have excluded objects as imaginary companions (Svendsen, 1934); however, we believe that children's imagined relationships with objects sometimes become so vivid and interactive that it is reasonable to consider them a type of imaginary companion. Parental report can help identify the toys that are more than casual playthings or transitional objects, but are instead toys with which children have a special relationship similar to the one depicted in the comic strip *Calvin and Hobbes*.

In our research we have found that the psychological characteristics that distinguish children with imaginary companions from other children are true for the children with toy imaginary companions as well as children with invisible imaginary companions (Taylor & Carlson, 1997). This is not to say, however, that toy-based and invisible imaginary

companions are equivalent in all respects. Gleason et al. (2000) found that children tend to have relationships that resemble friendships with invisible imaginary companions, whereas with toy imaginary companions there is often a caretaking relationship. Although this is a general trend with many exceptions, it is an interesting finding and suggests that the type of imaginary companion that a child creates may provide insight into the social and emotional functions of the companion.

A variety of approaches have been used to examine the characteristics of children's imaginary companions. One frequently used method is to ask adults if they had an imaginary companion in childhood and if so to describe it. According to these retrospective reports, about 10% to 25% of adults report having had an imaginary companion (e.g., Hurlock & Burnstein, 1932). One limitation of retrospective reports is that many adults do not remember very much about their imaginary companions, and often what they report are secondhand accounts from their parents. In fact, when investigating imaginary companions in childhood, parents can be a valuable source of information, with 50% or more of parents reporting that their children have imaginary companions (Gleason et al., 2000). However, some parents are unaware that their child has created such a companion or have inaccurate impressions about the companion's characteristics. For example, one parent in our research described her child's imaginary companion Nobby as a little invisible boy, whereas the child reported that Nobby was a 160-year-old businessman (Taylor, 1999). In another study (Manning & Taylor, 2003), a parent described her daughter's imaginary companion Olympia as a naughty invisible girl who was responsible for damages in child's room, whereas the child described Olympia as an invisible giraffe who turned different colors when she danced.

Given the limitations of parent reports, it is optimal to interview the children themselves. Children are the authorities on their imaginary companions, and many young children are quite capable of describing them (Friedberg & Taylor, 1997; Nagera, 1969; Singer & Singer, 1990; Taylor, Cartwright, & Carlson, 1993). However, child interviews present other methodological difficulties. For example, children may have a special way of referring to their imaginary companions ("fake friend," "ghost sister") and misunderstand questions about having a "pretend friend" (Taylor & Carlson, 1997). Further, sometimes children mistakenly describe real friends when asked about pretend friends. Interviewing parents as well as the children provides clarification in such cases. In light of these considerations, our preferred method has been to use a combination of child and parent interviews, and when possible we have interviewed both the

children and the parents on two separate occasions to assess the reliability of the descriptions (Taylor & Carlson, 1997; Taylor et al., 1993).

### CHARACTERISTICS OF IMAGINARY COMPANIONS

In the course of our research, we have collected 592 descriptions of imaginary companions: 327 descriptions from children, 76 descriptions from parents, and 189 retrospective reports from adults. These descriptions are from published studies (Taylor et al., 1993; Taylor & Carlson, 1997; Taylor, Carlson et al., 2004) and unpublished data collected in collaboration with Ariann Bolton, Stephanie Carlson, Thomas Dishion, Robert Kavanaugh, Vickie Luu, Jennifer Miner, and Alison Shawber. The children in our studies ranged in age from 3 to 12 years (73% were 5 years old or younger, 16% were 6–8 years old, and 11% were 12 years old). The parents all described the imaginary companions of children under 5 years of age, and although many of the adults did not report exactly how old they were when they played with their imaginary companions, most of the adult retrospective reports seemed to be of companions from early childhood. For the purpose of providing a broad picture of childhood imaginary companions we have collapsed across different sources of information.

Of the 592 descriptions, 236 (40%) were of special toys or objects that seemed to function as imaginary companions. These companions were not based solely on teddy bears and dolls, but represented a range of different species (rabbits, frogs, dogs, monkeys, Muppets, a kangaroo, a dinosaur, a hedgehog, a cow, a tiger, a horse, a dolphin, a Smurf, a Tasmanian Devil, a cat, a donkey, a squirrel, and a moose), as well as more idiosyncratic non-toy objects (Taylor & Carlson, 2002).

The remaining 356 descriptions (60%) were invisible companions. About 34% of invisible imaginary companions were regular everyday sorts of invisible girls and boys, consistent with the function of imaginary companions as playmates. However, many imaginary companions (16%) were not regular children in that they had special or magical characteristics—they could fly, change shape, exert special powers—or they had unusual physical characteristics like blue skin or tiny size. For example, Elfi Welfi was described by her 4-year-old creator as being especially tiny with tie-dye hair and skin and a bossy personality. This particular case illustrates another intriguing aspect of children's imaginary companions: They do not always comply with the child's wishes. Sometimes they disagree with the child, surprise the child with the things they say or do, and even boss the child around (e.g., Bouldin & Pratt, 1999; Nagera, 1969; Taylor, 1999). In fact, a few imaginary companions (1% in our sample) are predominantly

mean or frightening to the child (e.g., "Invisible big blue furry thing that had red eyes, no clothes and was six feet tall. He was really scary.").

In addition to human imaginary companions, our sample included a large number of invisible animals (15%). The invisible animals typically have the ability to talk or otherwise communicate with the child, and about half are further embellished with magical powers or special characteristics. For example, one child described Dipper, an invisible flying dolphin who lived on a star, never slept, and could fly very fast (Taylor, 1999). In addition to invisible people and animals, children reported other categories of imaginary companions, albeit less frequently. Our sample included superheroes, ghosts, angels, and spirits (8%). Yet another 7% of the invisible imaginary companions were unique (e.g., a Cyclops who was a world traveler).

From the sample of descriptions presented, the diversity of children's imaginary companions is clear; they vary in size from a speck to 10 feet tall, they can be newborn infants or they can be ancient (e.g., 1,000 years old), they are every possible species, and they may even be from another planet. Further, the imaginary companions sometimes have families and lives of their own. For example, we recently learned about a little invisible boy named Bunsen. Bunsen often spent time with the child who created him, traveled in the family car with her, and had long conversations with her on the phone. However, Bunsen also had a family of his own, including parents (Peechop and Petreep), a sister (Bowie) who was born about the same time that the little girl's sister was born, and a dog (Pum-Pum) who died when a dog in the little girl's family died.

#### CHARACTERISTICS OF CHILDREN WHO CREATE IMAGINARY COMPANIONS

In our research we have found that about 28% of 3- and 4-year-olds have imaginary companions. What are the characteristics of the children who engage in this type of role play? First of all, at least in preschool, they are more likely to be girls than boys (Carlson & Taylor, 2005). Our research replicates many other studies that report a sex difference in the incidence of imaginary companions (e.g., Hurlock & Burnstein, 1932; Manosevitz et al., 1977; Mauro, 1991; Pearson et al., 2001; Svendsen, 1934). We have found, however, that this difference pertains to the form of the role play rather than the overall frequency of role play. Although preschool girls are more likely than boys to have imaginary companions, boys are more likely than girls to impersonate imaginary characters. These findings highlight the importance of including impersonation when investigating role play

in preschool children, given that boys and girls appear to express fantasy orientation differently during the preschool period (e.g., Bach, 1971; Carlson & Taylor, 2005; Harter & Chao, 1992; Rosenfeld, Huesmann, Eron, & Torney-Purta, 1982; Svendsen, 1934). Another caveat about the sex difference in the creation of imaginary companions is that it seems to disappear as children get older. In recent longitudinal data, we found that by school age, boys and girls are equally likely to create imaginary companions (Taylor, Carlson, Maring, Gerow, & Charley, 2004).

A number of recent studies have investigated personality and other types of possible differences between children with and without imaginary companions. The emerging view is that, in most respects, the similarities between the two groups are more striking than the differences. However, fantasy activities during the preschool period are related to a number of positive social characteristics. For example, high-fantasy children are rated by teachers as showing higher levels of energy, concentration, self-reliance, and frustration tolerance (Tower, 1985). They also initiate and engage in more social play and are less likely to play alone (Singer & Singer, 1990). More specifically, other studies have found that young children who create imaginary companions show higher levels of positive affect and are more socially competent (e.g., Partington & Grant, 1984; for a review see Singer & Singer, 1990; Tower, 1985; although see Harter & Chao, 1992 for contradictory findings), and some research suggests that creating an imaginary companion in childhood is related to later creativity (e.g., Schaefer, 1969). Mauro (1991) found that although children with imaginary companions did not differ from their peers on most temperament measures, they were rated by their parents as being less shy and more able to focus and sustain attention than children without imaginary companions. Overall, research findings suggest that young children who do and do not create imaginary companions show considerable similarity in personality (e.g., Bouldin & Pratt, 1999, 2002; Manosevitz et al., 1977; Manosevitz et al., 1973; Taylor, 1999; Taylor et al., 2004); however, when differences are found, they tend to favor children with imaginary companions (Mauro, 1991; Taylor, 1999).

We have been particularly interested in the relation between having an imaginary companion and theory of mind development. By age 5, most children have developed an understanding of the role of the mind in guiding behavior, and this understanding is positively correlated with measures of social competence (e.g., Astington, 1993; Lewis & Mitchell, 1994; Wellman & Gelman, 1998). A number of researchers have suggested that children's involvement in pretense and fantasy contributes to theory

of mind development, noting that role play in particular is a context in which children encounter and manipulate multiple perspectives (e.g., Astington & Jenkins, 1995; Harris, 2000; Leslie, 1987; Taylor & Carlson, 1997). Indeed, elaborate pretense often involves a good deal of negotiation between what the child is pretending and the real world. For children with imaginary companions, this negotiation involves integrating the companion into everyday activities, such as having an extra place set at the table and keeping others informed about the companion's behavior and mental states.

Taylor and Carlson (1997) found that compared to children who engaged in less role play, 4-year-old children who had imaginary companions or impersonated characters were significantly better at distinguishing appearance from reality, attributing a false belief to both themselves and a puppet, and recognizing the different perspective of another. Further, there was a .28 correlation between fantasy and theory of mind that was independent of verbal intelligence, age in months, and sex. Similarly, Carlson, Gum, Davis, and Molloy (2003) found that having an imaginary companion was positively related to understanding that a person can hold a false belief. In addition, Carlson et al. found that 24-month-olds who later created an imaginary companion showed a broad interest in fantasy, demonstrated greater understanding of visual perspective taking, and used more mental state words compared to children who did not create imaginary companions.

Thus, the findings from our own research and the research of others stand in sharp contrast to the view that children's involvement in fantasy, and the creation of imaginary companions in particular, reflects social and cognitive deficits. Whereas Piaget described imaginary companions as nothing more than distorting assimilation of reality to the child's own ego, we find that children's imaginary companions are positively associated with their performance on cognitive tasks that require accommodation of thought to reality. Rather than promoting an exclusive focus on the child's own subjective experience, role play involving imaginary companions is related to a greater ability to adopt the perspective of another person and to consider how mental representations are connected to but distinct from reality. Thus, our findings are consistent with Harris's (2000) claim that children's pretend play demonstrates their knowledge of reality, rather than confusion about it.

We clearly have a positive view of imaginary companions, but we do not mean to claim that troubled children do not create them. Pretend play is a resource that young children use to cope with a wide range of

difficulties and adverse life circumstances (e.g., Bach, 1971; Bender & Vogel, 1941; Friedberg & Taylor, 1997; Myers, 1979; Nagera, 1969; Terr, 1990). For example, work by Putnam (e.g., 1996, 1997, 2000), Silberg (1998), and others (e.g., Sanders, 1992) indicates that sexually abused children who develop dissociative disorders are very likely to have imaginary companions. In addition to providing companionship, the imaginary companions created by these children also serve a number of coping functions not typically reported by nonabused children. Specifically, children and adolescents diagnosed with dissociative identity disorder report that their imaginary companions keep secrets, hold memories, endure the pain of abuse, and act as protectors (Putnam, 1997; Sanders, 1992). Similarly, Clark (chap. 12, this volume) presents some striking examples of how sick children use fantasy to cope with the challenges presented by their illnesses. For a variety of difficult situations or life problems, having an imaginary companion can be a positive and adaptive response. However, it is important to keep in mind that although children with problems often have imaginary companions, having an imaginary companion does not mean that the child has problems. In fact, children with imaginary companions tend to be particularly sociable individuals who enjoy the company of others and are somewhat advanced in social understanding.

#### PARENTAL ATTITUDES ABOUT IMAGINARY COMPANIONS

It is not just developmental psychologists who are curious about imaginary companions and wonder what they mean. Parents also express a range of positive and negative beliefs about the significance of imaginary companions. On the one hand, some parents are extremely positive about their children's imaginary companions, viewing them as markers of high intelligence and creativity (e.g., Manosevitz et al., 1973; Svendsen, 1934; Taylor & Carlson, 2000). In fact, some parents worry if their child does not have an imaginary companion. At the other extreme, parents sometimes hold negative views of imaginary companions, fearing that creating and interacting with an imaginary character reflects an inability to tell the difference between fantasy and reality or is evidence of emotional disturbance and risk for developing mental illness (Taylor & Carlson, 2000).

The wide range of parental reactions to imaginary companions raises a number of interesting questions: What are the bases for parental beliefs? For example, are they a function of culture and religion? Do they stem from experiences specific to the imaginary companions created by their

own children? To what extent do parental beliefs influence children's fantasy behaviors? Do children whose parents discourage interactions with imaginary companions give them up more quickly or become more secretive about them? Perhaps these children would be less likely to have an imaginary companion in the first place.

As a first step in addressing these issues, we have investigated how parental attitudes about imaginary companions (personified objects and invisible) and impersonated characters vary as a function of the cultural, socioeconomic, and religious context in which the role play occurs (Carlson, Taylor, & Levin, 1998; Taylor & Carlson, 2000). For example, in one study, we compared the attitudes of 40 parents from a midsize U.S. city and 28 parents from Mexico City (Taylor, Miner, Legorreta, Luu, & Perez, 2004). The parents were told stories in which children engaged in a variety of behaviors involving different types of pretend play and then were asked to describe what the children were doing and their reactions to the children's behavior. The Mexican parents did not differ from the U.S. parents with respect to pretend play involving object substitution (e.g., the child pretends a block is a train), but they were significantly less approving of role play involving imaginary companions and expressed a variety of concerns about them (e.g., "I was afraid it was something supernatural. Their reassurance that they could see it frightened me.") Differences also emerged in the extent to which parents equated pretending with lying; whereas 25% of the Mexican parents associated pretending with lying, none of the U.S. parents did so.

In a related study, we compared the reactions of parents of low socioeconomic status whose children were in a Head Start preschool with the reactions of parents whose children were not enrolled in Head Start (Taylor, Miner et al., 2004). Both groups of parents were approving of pretend play involving object substitution. However, the Head Start parents were significantly less positive about role play involving imaginary companions than the other parents. We wonder if this difference could be related to differences in the content of the children's play. Children often explore negative themes in their play such as death, violence, disease, or negative aspects of ongoing events in their lives (e.g., Dunn & Hughes, 2001; Friedberg & Taylor, 1997). Although some degree of violence in the context of pretend play may be normative for children, it makes parents uneasy (Sutton-Smith, 1997). In this study, we did not collect systematic data about the content of the children's play, but some of the Head Start children had imaginary enemies rather than friends. For

example, one child from this group described Sebastian, a nasty, violent invisible entity who was a threat to a second tiny imaginary companion the child protected by holding in the palm of her hand. In future research it would be interesting to more carefully investigate the relation between the content of children's fantasies involving imaginary companions and the circumstances the children are currently experiencing.

More generally, there have been a few recent studies that have focused on the correlates of particular themes in pretend play. Dunn and Hughes (2001) found that the enactment of themes involving the deliberate infliction of harm is related to a number of negative outcomes. Compared to their peers, the 4-year-old children who frequently engaged in violent fantasy showed poor executive control, frequent antisocial behavior, poor communication and coordination of play, and more conflict with a friend. At age 6, the tendency to engage in violent fantasy play was also related to a lack of empathy in moral judgments. These findings suggest that an emphasis on particular themes in fantasy play may be of greater concern than a high level of fantasy involvement.

#### FANTASY IN MIDDLE CHILDHOOD AND ADOLESCENCE

Piaget (1962) described young children's pretense as an immature form of thinking that is replaced by more reality-oriented thought as children enter the concrete operational stage of development (e.g., Friedberg, 1995; Friedberg & Taylor, 1997; Newson & Newson, 1976). Some researchers, however, have argued that children's fantasy play does not disappear in middle childhood and adolescence but goes underground in response to implicit cultural expectations and explicit discouragement (Cohen & MacKeith, 1991; Pearson et al., 2001; Silvey & MacKeith, 1988; Singer & Singer, 1990). In particular, recent evidence challenges the view that imaginary companions are limited to early childhood (e.g., Bouldin & Pratt, 1999; Hoff, 2005; Pearson et al., 2001; Taylor, Carlson et al., 2004). For example, Taylor, Carlson et al. (2004) found that even at age 7 years, 31% of the children were currently playing with imaginary companions (compared with 28% of the children at age 4). Many of the 7-year-old children described imaginary companions that their parents did not know existed, perhaps because the imaginary companions of older children are played with more covertly (Newson & Newson, 1976). Another recent large-scale investigation of invisible imaginary companions found that

28% of 5- to 9-year-olds reported having a current imaginary companion (Pearson et al., 2001). Further, at least 9% of the 12-year-olds in this sample also reported having a current imaginary companion. Pearson et al. (2001) noted that this may be an underestimation, as some of the older children who denied having an imaginary companion reluctantly admitted after the interview that they actually did have one.

Other research indicates that adolescents also sometimes have imaginary companions. Seiffge-Krenke (1993, 1997) found that it is common for creative and socially competent adolescents to write to imaginary companions in their diaries. Moreover, continued interaction with imaginary companions is not the only form of active fantasy involvement found in older children and adolescents. For example, in a retrospective study of adults who created private, elaborate, and enduring imaginary worlds in childhood, Silvey and MacKeith (1988; Cohen & MacKeith, 1991) found that "paracosms" were most commonly created between the ages of 8 and 9. As with the imaginary companions of younger children, imaginary worlds provided an antidote to boredom and were not associated with adjustment difficulties (Cohen & MacKeith, 1991).

In summary, although relatively little research has examined fantasy and role play in middle childhood and adolescence, the available evidence does not support Piaget's assertion that imaginary companions and other forms of pretend play are displaced by games with rules after the preoperational period. In addition, research on imaginary companions beyond early childhood has implications for Piaget's claim that children's pretend play declines as they become more adapted to the social world and are increasingly able to satisfy the needs served by this form of play with real relationships. In contrast, the research we have presented has shown that imaginary companions are not replaced by real friends; rather, these imaginary relationships seem to go hand in hand with social competence.

### IMAGINARY OTHERS IN ADULTHOOD

In light of the evidence that imaginary companions are not limited to early childhood but are created as late as adolescence, we have become interested in adult activities involving imaginary others. Most adults enjoy some sort of activity involving fantasy consumption (e.g., reading novels), but do they ever have imaginary companions? Adults with imaginary companions have sometimes been portrayed in movies such as *Harvey*, a story about a gentle adult man and his friendship with a giant invisible talking rabbit (Chase, 1944), but little is known about the extent to which this type of

relationship occurs in real life. However, according to Caughey (1984), the social worlds of most people include a large number of individuals they know only through television, books, movies, and other forms of media, as well as the people they interact with face-to-face in their everyday lives. These relationships often go beyond interest and admiration and actually involve imagined conversations, meetings, and extended interactions. Such relationships are similar to the ones that children sometimes have with imaginary versions of real people (e.g., an imaginary companion based on a cousin who lives in another state).

In looking for an adult analog of childhood imaginary companions, we have turned to the activities of fiction writers. For fiction writers, creating an imaginary character or an invented world is all in a day's work. We have found that the reflections of fiction writers about the creation of their characters contain insights and observations that are fascinating and instructive. Of particular interest is how commonly writers report the experience of characters becoming almost real (Watkins, 1990). For example, writers report that their characters sometimes take control of the writing process; characters tell the story to the author who then writes it down. In addition, writers sometimes develop personal relationships with their characters in which the characters are experienced as real, separate, independent beings with minds of their own. We describe this experience as the *illusion of independent agency* (Taylor, Hodges, & Kohanyi, 2003). The essence of this illusion is the sense that the characters are independent agents not directly under the author's control—a fictional character is experienced by its creator as having its own thoughts, feelings, and actions.

At first glance, the illusion of independent agency is reminiscent of flow (Csikszentmihalyi, 1990). *Flow* is the pleasurable experience of becoming so absorbed in an activity that the sense of the passage of time is suspended, one loses track of the self and immediate surroundings, and the activity becomes effortless and unselfconscious. Authors do report the experience of flow while writing (Perry, 1999), but the illusion of independent agency differs from flow in that there can be considerable discord. The characters often argue with the author about the direction the novel is taking and their actions in it. "The characters arrive when evoked, but full of the spirit of mutiny. For they have these numerous parallels with real people, they try to live their own lives and are consequently often engaged in treason against the main scheme of the book" (Forster, 1927/1985, pp. 66–67).

The sense of uncontrollability and discord in the relationships between authors and their characters is something that we have also

encountered in children's descriptions of their imaginary companions. In a study with 90 preschoolers, 36 had imaginary companions (40%) and answered questions about control. Only 1 child described her imaginary companion as completely compliant and cooperative. The other 35 children had a range of complaints: the imaginary companions did not always show up when summoned, would not go away when the children wanted them to, would not share, or refused to play what the child wanted to play.

To investigate the illusion of independent agency more systemically, we interviewed 50 adults who had been writing fiction for at least 5 years (Taylor et al., 2003). About a third of the writers had published their work, and some were professional writers, including one award-winning novelist (35 men, 15 women; age 20–73 years;  $M$  age = 37). The procedure involved the writers filling out a variety of questionnaires (we measured dissociation, empathy, and history of imaginary companions) and being interviewed about the characters in their novels. We asked about the characters' evolution, the author's perceived control over what the characters do and say, whether the characters did or said surprising things, and the extent to which the writers felt that the characters were the ones writing the story.

The most striking result was that almost all the writers (46 of the 50 writers, 92%) reported experiencing the illusion of independent agency. This finding was unanticipated. In fact, we expected to find that some writers experienced the illusion of independent agency and that others did not. Based on this expectation, we had planned to examine the extent to which the experience of the illusion of independent agency was related to a variety of factors, such as having an imaginary companion as a child, dissociation, and empathy. The low level of variability in the writers' experience of the illusion of independent agency precluded these analyses; however, we did find that our 50 writers were a special population. For example, 40% of these writers remembered having imaginary companions as children—a high proportion for a retrospective study. In addition, the writers scored higher on dispositional perspective taking than would be expected in the general population as assessed by the perspective taking subscale of the Interpersonal Reactivity Index (Davis, 1983).

One hypothesis about the illusion of independent agency is that it is related to expertise. The idea is that someone who pretends extensively, whether child or adult, could be considered an expert pretender. With

increased practice, the performance of a skill eventually requires little or no conscious processing. Perhaps for some writers, the creative process becomes automatized so that it is no longer consciously experienced, creating the illusion that the imagined character is the one who is speaking and acting. The character's words and actions begin to be perceived, listened to, and recorded rather than consciously created. Consistent with this hypothesis, we found that expertise (having been published) was related to more detailed reports of the illusion. In future research with expert pretenders (both children and adults), we hope to discover how expertise is experienced in the domain of fantasy, and in particular how it is possible to experience an imaginary other as an independent agent. We also hope to address whether the experiences of adult authors are related to what children experience day after day when thinking about and interacting with imaginary companions. In our view, the research on the illusion of independent agency in fiction writers provides further evidence against Piaget's claim that the creation of imaginary characters is rare after childhood. Rather, fiction writers present at least one example of adults inventing and interacting with imaginary others.

## CONCLUSION

Recent research indicates that the creation of imaginary companions is a healthy and common activity in early childhood and beyond. This body of research contradicts Piaget's (1962) assertion that the invention of imaginary others declines with the emergence of concrete operational thought and disappears by adulthood. As our review has shown, although the specific forms these imaginary others take in childhood and adulthood show developmental differences, research suggests continuity in this type of imaginative activity across the life span. Further, findings from our own research as well as the research of others suggest that the relationships children develop with their imaginary companions may have positive implications for their ability to successfully navigate the social world. The correlational nature of the available data precludes any claims regarding the direction of the relationship between imaginary companions and children's cognitive and social development; however, it is an intriguing relationship that warrants further investigation. Clearly, there is much to be learned about the phenomenology of sustained fantasies about imaginary others and the role of these relationships in our lives.

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