An Unauthorized Examination of the Boy Who Lived

THE PSYCHOLOGY OF HARRY POTTER

Edited by Neil Mulholland, PhD
Is magic real? Maybe it isn't for you or for me, but small children live in a world filled with the magical and only slowly learn to put magic aside for science and reason. How do they do this? And is nostalgia for our magical childhood part of the uncanny appeal of the Harry Potter series? For we seem to lose our sense of magic at just the time Harry begins to discover it.

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Discovering Magic

HARRY POTTER'S DISCOVERY of the world of magic is quite different from how and when children discover magic in our relatively ordinary world. For most of Harry's childhood he is surrounded by the dreary, mundane world of the Dursley family, a family that is both oppressive and exceedingly non-magical. Even seemingly impossible events, such as the rapid growth of Harry's hair following forced haircuts, the rapid shrinking of a despised sweater, or Harry's sudden appearance on the roof of the school kitchen after being chased by Dudley and his gang, are not labeled as anything special in Harry's childhood. Instead, these events are blamed on Harry, an assumed trickster, or in the case of the sweater, attributed to some commonplace act, such as the sweater shrinking in the wash. While Harry does not fully understand these events, he does not attribute them to anything magical. It is not until Harry is ten years old that his eyes are opened to the realm of magic. In contrast, in the Muggle world, the majority of children at that age have given up belief, and perhaps hope, in magic.
Young children in our world, in contrast to young Harry, often believe in such magical things as the Tooth Fairy and Santa Claus. They also believe that the feats performed in magic shows are not merely clever trickery but involve real powers that go beyond the ordinary. In this essay we explore children's real world beliefs in magic and magical entities and how they compare to the magical world of Harry Potter.

The term magic is used regularly to label a wide variety of things. Magic is applied to supernatural events that only seem possible in the world of fantasy and to those natural events that stimulate a sense of wonder or amazement.

In academic settings, the term magic has been used in a slightly more specific way by researchers interested in how children and adults reason about the world. In psychology, for example, much of the current usage of the term magic can be traced to the writings of Swiss psychologist Jean Piaget (1929, 1930). Piaget is often thought of as the father of cognitive development, the branch of developmental psychology that focuses on how a child's thinking changes as the child ages and gains more experience with the world. Piaget viewed the thinking of young children as dominated by magic. He did not mean that children were completely captured by thoughts of the supernatural. Rather, he used the term magic to refer to a form of reasoning that was neither logical nor scientific. In particular, he thought that children under the age of seven could not relate causes and effects in any logical or reasonable manner and often treated purely coincidental events as linked in meaningful ways.

Another attribute of Piaget's view of magical thinking was the belief that one's own thoughts could bring about physical changes in the world. A nice example of this can be found in the early section of *Harry Potter and the Sorcerer's Stone*, before Harry realizes that he is quite different from the Dursleys in an important way. During a visit to the reptile exhibit at the zoo, Dudley knocks Harry out of the way as he moves in to see what a snake is doing. Harry's anger at being pushed to the floor seemingly causes the glass wall between Dudley and the boa constrictor to vanish. This incident captures an event that is quite similar to Piaget's concept of magical reasoning: a child's belief that one's anger or other strong feelings can cause certain events to occur. It differs, however, in that Harry is not fully
conscious that he caused the glass to vanish. In Piaget's view, belief in
the efficacy of one's thoughts involves more of a conscious belief that
one's thoughts or wishes can influence physical events.

Piaget did not generally think that a child's belief in supernatu-
ral powers was connected to these kinds of thoughts; rather, Piaget
viewed this type of children's reasoning as yet another example of
young children linking non-causally related events as if they were
linked by a distinct cause. To Piaget, this form of magical reason-
ing was thought to be characteristic of all children below the age
of about seven and not reserved for a special class of non-Muggles.
In Piaget's view, as children mature and gain more experience with
objects and events in the ordinary world, "magical reasoning" is re-
placed by more powerful and effective logical and scientific reason-
ing. However, these supposed characteristics of the "immature mind"
are often found in adults as well as children. Indeed, as Zusne and
Jones (1989) and Shermer (1997) have suggested, many adults hold
a wide range of strange beliefs and superstitions. One must merely
watch the common practices of many professional baseball players
as they perform a series of rituals prior to approaching the plate, or
other athletes who refuse to wash parts of their uniforms for fear
their luck will change, or people who treat inanimate objects such
as cars or computers as if these objects were sentient beings, to find
common examples of this phenomenon.

For the most part, psychologists have reserved the label magic
for instances of faulty logic and the non-scientific beliefs held by
children or individuals belonging to another culture. In other words,
any form of reasoning not based on rigorous logical and scientific
thinking has been labeled as magic. Because of this, some psycholo-
gists have labeled a wide range of religious beliefs as magical think-
ing. One problem with this use of the word magic is that it is used
in a somewhat pejorative manner to describe the immature thinking
of children or the thought processes or beliefs of adults that are dif-
ferent from those of the dominant culture of the psychologist. To a
large extent it is as if the researchers are taking on Vernon Dursley's
attitude of disdain toward Harry and other magical beings. A more
productive stance, perhaps, is to label problems with cause-effect re-
lations as just that, and to treat individuals' beliefs in magic, sup-
natural entities, or religious phenomena as alternative beliefs that
include forms of causality that go beyond those normally attributed to the physical world. For example, religions often involve a belief in a supernatural being who has the power to make impossible events happen (e.g., making the world out of nothing). In this context, the events are labeled as miracles and not attributed to magic but to an all-powerful, supreme being. Likewise, someone might believe in magical beings, such as wizards and magicians, and that these individuals or the objects that they possess (e.g., wands, hats, etc.) contain a supernatural force that can produce amazing events; these beliefs are quite different from faulty logic in that the holder of such beliefs generally assumes that different forms of causality exist beyond the merely natural world of scientists (or the Dursleys, for that matter!). Therefore, beliefs in the efficacy of magic or the existence of a supreme being are based on a set of fundamental beliefs about what can and cannot happen in the world.

In the minds of children, it is not faulty logic but the idea that the supernatural is real that underlies a belief in what we like to refer to as magic. These beliefs, such as beliefs in the Tooth Fairy, Santa Claus, or the magic of Harry Potter, are in many ways different from purely "causal errors" because they involve relatively long-standing beliefs about how the world works. These alternative beliefs in supernatural objects and means, the prototype magic of the wizards and witches in the realm of Hogwarts, were labeled by Piaget (1930) as social magical beliefs and to be of less interest to researchers trying scientifically to understand children's thinking.

We suggest that it is perhaps best to reserve the label magic for belief in the kinds of phenomena captured by the Harry Potter series. That is, beliefs that there exist particular magical entities (people, objects, or things) that are imbued with a supernatural force, commonly labeled as magic. This force provides individuals or objects with powers or qualities that violate the everyday physical and natural laws. We treat these particular beliefs as quite distinct from those that stem from various religions, because they are different in terms of the attributed causes and origins of the supernatural powers. And given that an overwhelming majority of individuals in the United States profess to hold strong religious beliefs, it does not seem productive to label these kinds of beliefs as magical.

Eugene Subbotsky, a psychologist at the University of Lancaster,
has argued that magical forms of reasoning are not replaced by scientific reasoning as children grow older; rather, magical reasoning is driven underground by social norms, to resurface in certain laboratory or real world situations. In the laboratory, Subbotsky has conducted a series of experiments that make it appear as if “real magic” occurred. In one such experiment, Subbotsky first tells a six- to nine-year-old child a story involving a magical entity. One of these entities is a magic box that can destroy objects placed inside when a magic word is uttered. At this point he will often ask the child whether such a magical box could really exist. The majority of the children respond “no.” Then he produces a box, very much like the one described in the story, and demonstrates that it can magically cut a postage stamp in half when a magic word is uttered. Subbotsky then departs, seemingly to perform some other task, leaving the child alone in the room with the box. Without an adult present many of the children utter the magic word and attempt to perform the magic. The child’s verbal and physical behavior, as well as responses to follow-up interviews where children express disappointment that they could not create any magic, have led Subbotsky to suggest that this form of magical reasoning is not replaced by scientific thought, but is merely driven underground.

Over the past decade we have explored children’s magical beliefs and how they come to hold these beliefs. Much of this work has focused on children’s belief in magic and various supernatural beings, such as Santa Claus and the Tooth Fairy, but it has also focused on children’s belief in magic more generally. We have used a variety of different approaches, including interviews with children and surveys sent to parents. In these interviews children are typically shown pictures or asked to witness events. Afterwards, the children are asked questions designed to assess their underlying beliefs about what kinds of things can and cannot happen in the world. To explore children’s magical experiences further, we have also talked with professional magicians.

Our work suggests that children first begin to believe in magic at about three-and-a-half years old. Prior to this age, most children do not appear to understand magic or find it very fascinating. Magicians hate to perform shows in front children under the age of three, because to the typical three-year-old nothing is really magical. Young
children are confronted with new, amazing, and wonderful things on a daily basis. From rainbows, to remote controls, to new kinds of animals that change shape or color, young children are constantly encountering things that they have never seen before. So, in a way, everything is magical to the young child. At the same time, nothing is really caused by magic because this special category referring to a supernatural form of causality has not yet been formed. Children below the age of three do not think that magicians and wizards are the only ones capable of performing amazing feats, but assume that most if not all adults have these powers. For example, young children think that an adult (a parent, a teacher) can cause a yellow cloth to turn blue by merely pulling it through his or her fist. On the other hand, they don't think that they themselves are capable of performing this act. By the age of three and a half or four, children begin to designate events as commonplace or magical, with normal people (Muggles in Harry's world) able to perform the commonplace events and only magicians able to perform the impossible magical ones (Rosengren & Hickling, 1994, 2000).

In contrast to the rapid manner in which Harry discovers magic, children in our world seem to gradually develop a concept of magic between the ages of the three-and-a-half and five years. Before they can gain this concept, children must first acquire a certain amount of knowledge and experience with objects and events in the world. As they gain experiences, children come to realize what kinds of objects and events are typical and commonplace. These everyday, commonplace experiences form the basis for reasoning about the natural world and help children to define natural and physical forms of causality.

Before children have acquired this knowledge and experience about the physical world, children's reasoning is often quite different from that of older children and adults. Renee Baillargeon, a researcher who focuses on very young infants, has shown that while young infants seem to realize that unsupported objects fall to the ground, they think that any amount of support or contact may be enough to suspend an object above the ground. In a series of clever studies (Baillargeon), she finds that if a single finger is touching an otherwise unsupported, relatively large box, that the infants are not at all surprised that the object does not fall. In another study, research-
ers have found that two-year-old children are not surprised that a machine can shrink and enlarge objects such as couches and chairs (DeLoache et al.). Although a few children attribute this event to magic, the majority of children of this age attribute this event to yet another fascinating machine that they have not yet encountered, nor fully understand. Mr. Weasley’s fascination with Muggle-machinery is not that different from these young children. Items that seem commonplace and not at all magical to us Muggles, such as a telephone, are fascinating to him.

By the time children in the United States reach about three-and-a-half years of age, they have acquired a relatively large number of experiences that lead them to certain kinds of expectations. Children of this age expect that if a person closes his or her hand around a small object that it will still be there when the hand is opened a moment later. If it disappears, they exhibit surprise. They clearly expect objects to continue to exist in time and space unless some sort of natural and physical means is used to destroy the object. In contrast to young infants, children of this age also expect that objects will fall to the ground if not adequately supported. By the age of three and a half, children have also gained a lot of experience with books, stories, and situations where a violation of expectations is labeled as magical. Preschool teachers and parents will also sometimes make reference to magic when presenting color-changing markers, rocks that glow under florescent light, or magnets that propel one another. These events violate the normal expectation that ink does not change color or that two objects cannot interact with one another over a distance. It is not entirely clear why adults use the term magic in these situations. It may be that teachers use the label magic to bring some mystery into the classroom as a way of making a lesson a bit more interesting. Parents may label things as magic for the same reason. In other situations, adults may use magic as a default explanation when the explanation for an event is unknown or when the adult does not have a clear understanding of the actual cause of some interesting event. Attributing these types of events to magic may actually be detrimental to the child’s learning experience. If teachers want to promote inquisitive explorations they should encourage the child to search for the causes underlying particular events. By labeling an event as magical they are providing a cause, but one that is not amenable to
scientific investigation. Thus, the child need look no further for an explanation. The physical world is pretty interesting by itself, thus it seems unnecessary to describe events as magical in order to capture children's attention or to promote scientific understanding.

At the same time as children are learning more and more about what can happen in the real world and what mechanisms can cause these things to happen, they are also getting information about certain events, ones that violate their normal expectations about what can happen in the world. They are exposed to magicians, Santa Claus, and, at a slightly older age, the Tooth Fairy. The majority of parents in the United States actively support beliefs in magic and supernatural entities. However, they do this selectively. Parents tend to support beliefs that are viewed as positive; for example, they generally promote beliefs in Santa Claus and fairies, but discourage beliefs in ghosts, goblins, and witches (Rosengren & Hickling). Magicians are, for the most part, treated more neutrally. Parents may take their children to magic shows, but, other than these particular events, parents in our culture do not actively encourage beliefs in this type of magic as they do with Santa Claus and the Tooth Fairy. This may be because historically magicians, like many of the characters portrayed in the Harry Potter series, such as Lord Voldemort, have a much "darker" nature. It is this "dark side" of magic that parents in the United States seem to want to avoid. This avoidance is likely linked to a general avoidance in the American culture of things that can be viewed as negative. Similarly, parents in the United States have a tendency to shelter their children from exposure to death and death-related events. There is some indication that in cultures where death is more openly talked about, such as in Mexico with its "Day of the Dead" celebration, belief in magic is more common.

To examine how children come to label certain events as magic, we brought parents and their three- to five-year-old children into watch a specially constructed televised magic show. In the show, Dean the Magician (a rather exotic-looking undergraduate student working with us) performed a number of different events, classified as commonplace, physical/natural, and magical. The commonplace events included relatively simple, rather boring events, such as blowing up a balloon or drawing a happy face on a blank piece of paper. The physical/natural ones included more interesting events that involved
chemical or physical reactions such as combining two clear liquids to make a blue liquid and picking up some metal objects with a magnet. The magical events consisted of prototypical magic tricks, such as making a silk scarf disappear and making colored pictures suddenly appear on a seemingly blank page. We found that parents, when talking to their three-year-olds, often labeled our magical events as magic and clearly labeled our other events as not magic. Some even went so far as to denigrate our magician as not a very good magician as he performed a lot of events that were not magic.

In contrast, in this same study, parents of older children (five year olds) rarely labeled events as “magic” and often just asked the children what they thought. Although a few parents took the opportunity to explicitly label the “magic” as trickery, the majority seemed to be quite happy to let their children uncover the deception on their own. This shift in explanation type is supported by responses to surveys where parents of young children (three to four years) state that they encourage belief in magic and some supernatural creatures, but as the children grow older, the parents shift from encouragement to taking a more evasive or avoidant approach. At around age five or six, it is quite common for the parents to turn questions about magic back to the child, asking, “What do you think?” or in the case of Santa Claus, rather than explicitly saying, “No, Santa Claus does not exist,” parents say such things as, “Santa exists in spirit.” Across a number of studies, the majority of parents prefer to let children “find out for themselves” the truth about Santa Claus and the Tooth Fairy and whether there really is magic in the world.

Few, if any, children are likely to develop a richly coherent and consistent world of magic like the one that Harry must navigate. In our world, children’s exposure to magical events is much less consistent and predictable than children’s experiences with the natural world. Every once in a while a teacher may use the term magic in a classroom or a parent may label certain events as magic, but these occurrences are relatively rare. Parents also report rarely taking their children to magic shows (typically less than once a year). In some cases, however, specific children who are especially fascinated with the magical or fantastic may develop very coherent and detailed thinking about magic and even create quite magical fantasy realms.
These children appear to be more likely to purchase magic tricks and come to a clear understanding of the boundary between reality and fantasy at an earlier age than those children with less interest and self-directed exposure.

In contrast, one of Harry’s struggles as he enters Hogwarts is to develop a coherent and consistent knowledge of magic. In many ways, as Harry first enters Hogwarts his traditional view of the world is shattered. An entirely new form of explanation and causality is thrust upon him. He comes to find that many of the things he was told all his life are untrue. He also discovers new and wildly different things from what he has always been taught by the Dursleys and his teachers in the Muggle world. In our world, children’s beliefs are also changed dramatically, but in the opposite direction. When Harry enters formal schooling at Hogwarts, he discovers a wonderful world of magic. When children in our world enter formal schooling, there is a shift away from magic, as children are supposed to discover the world of science and logic. Around the time children enter formal schooling, parents shift from actively encouraging their children’s magical and fantasy beliefs to becoming more evasive and avoidant, and perhaps unsure of how they should respond to their children’s inquiries about the true nature of Santa Claus or the Tooth Fairy.

Researchers have not really investigated why parents first encourage magical beliefs, then shift to avoidance, or what children feel about the fact that their parents have been lying to them for a couple of years. The consequences of these parental behaviors and whether there is an optimal parental approach to the exploration of magic has not yet been examined by researchers studying the development of children’s thinking. So, at present we don’t really know whether it is good to encourage magical beliefs in children or what the consequences are when a child discovers that magic is not real. It does not seem that this discovery shatters children’s faith in their parents; rather, it may serve to encourage children to search for magic in other places, such as in books by J. K. Rowling and others. It also may increase children’s appreciation for the amazing events in the world, such as rocks or fish that glow in the dark, walking catfish, flying fish, carnivorous mushrooms, fish that change from female to male, magnets, and even rainbows. The sense of wonder caused by these events and early encouragement in magic may help spark the imagi-
nation and creativity of the next generation of inventors, scientists, and fiction writers.

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**EMILY C. ROSENGREN** was born in Ann Arbor, Michigan, and moved to Champaign-Urbana, Illinois, at a young age. She will be (by the time you read this book) a graduate of the University High School in Urbana and will hopefully have received an owl carrying an acceptance letter to a school of higher learning. Both her parents are developmental psychologists. At present their parenting has left no visible scars, but has led her to search out other possible careers and the possibility that she contains some non-Muggle blood. She and her sister have been the inspiration for most of her father’s best work.

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**REFERENCES**

