

Constructing Ideas of the Supernatural

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Abstract

The recent proliferation of research on children's supernatural concepts is noteworthy, as this work is necessary for a full account of human cognition. Despite this advancement in our field, there is a lingering tendency for scholars to exotify supernatural concepts; to treat them as distinct or special. Arguments have been raised that these concepts are "prepared" to develop, even inherent; other arguments dismiss these ideas as "immature" or "childish." Yet, the empirical record documents that supernatural concepts are no more inherent and no more childish than 'natural' concepts. Just like concepts of nature, supernatural concepts are constructed upon and constrained by one's existing conceptual architecture. I illustrate these points by drawing upon work on children's understanding of supernatural minds, like the minds of 'omniscient' deities. This work reveals that young children have great difficulty in understanding such purported minds, but through a protracted developmental process children and adults may gradually approach an understanding of all-knowingness. Based on these and other data, I argue that constructivism makes possible some supernatural ideas that are typically not realized until late childhood or adulthood, contradicting both the view that supernatural concepts are inherent and the view that such concepts are 'childish'. As well, I emphasize that understanding how children develop *beliefs* in supernatural concepts requires understanding how they construct mental representations of those concepts. Embracing the fact that supernatural concepts develop through the same processes as concepts of nature will help to further bring research on these critical topics into the mainstream.

Keywords: Supernatural concepts, religious concepts, constructivism

Constructing Ideas of the Supernatural

At the 2019 meeting of the Cognitive Development Society, a plenary session was dedicated to the topic of “Religious Cognition.” It was noteworthy that a mainstream society would dedicate a plenary session to this topic. The existence of this symposium reflected a relatively recent shift in the field’s attitude toward the study of ‘religious’ or ‘supernatural’ thought. Ideas that were once written-off as inconsequential, nonsensical artifacts or anomalies were now considered worthy of serious scientific study. This shift was ushered, in part, by psychologists and anthropologists who highlighted the ubiquity of these concepts throughout humanity, and who foreshadowed the potential implications of these concepts for characterizing a host of psychological and behavioral phenomena (e.g., Atran & Norenzayan, 2004; Barrett, 2000; Boyer & Walker, 2000; Evans, 2000; McCauley & Whitehouse, 2005). Now, many more psychologists treat supernatural and religious thought seriously, and they realize the need to account for its development. I believe that this ideological shift has provided for an increasingly complete and complex picture of human thought and its development. However, I believe that there are principles of cognitive development that we can more consistently apply and research methods that we can more consistently employ to better frame and pursue the study of “religious cognition” and “supernatural thought”.

My approach and perspective are informed by constructivist theories of cognitive development. There are several flavors of constructivist theories, but they share some key principles (e.g., Carey, 2011; Gelman, 2009; Gopnik & Wellman, 2012; Piaget, 1970; Wellman & Gelman, 1998). In brief, children collect information about the world (either first-hand or second-hand) and use this information to construct their understandings of entities and phenomena. Existing concepts both constrain and support conceptual change. So, current

concepts influence how new information is interpreted, and that information may be used to enrich existing concepts or spur more dramatic conceptual reorganization. Conceptual change is a gradual, iterative process. Depending upon what children experience, what they are taught, and how children themselves fit this information together, this process can yield an infinite array of concepts. We can employ this perspective of cognitive development to identify some limitations that have emerged in research and theory on ‘religious cognition’; limitations that we may remain mindful of as we continue to improve upon our framing of (1) how these ideas develop and (2) how we study their development. Among these limitations is the tendency for researchers to, at times, exceptionalize religious or supernatural concepts; to treat these concepts as categorically distinct from other concepts and other types of conceptual development (e.g., Barrett, 2012; Barrett & Richert, 2003; Dawkins, 1995). Arguments have been raised that certain religious notions are inherent or destined to emerge, leaving little need for conceptual development. Other arguments have characterized supernatural notions as categorically immature, underestimating the complexity of these ideas and their protracted developmental courses. Research on children’s and adults’ purported ‘beliefs’ in supernatural ideas may fail to characterize the specific *concepts* that individuals believe in.

I will expand upon these ways in which we may exceptionalize supernatural concepts, and I hope to convince readers that the field is best served by more consistently treating the development of supernatural or religious concepts the same way that we treat the development of non-religious, ‘natural’ concepts. Throughout this paper, I will illustrate my points by referring to findings primarily from work that my colleagues and I have conducted on children’s concepts of supernatural minds, but it is worth noting that these points are also evident in work that researchers have conducted on the development of other supernatural concepts, among folks

throughout the world (for a few examples, see Astuti & Harris, 2008; Gimenez-Dasi et al., 2005; Legare & Gelman, 2008; Shtulman et al., 2019; Woolley & Phelps, 2001). Concepts of supernatural minds are interesting in their own right and are particularly widespread—for example, ideas of an all-knowing god are found in the doctrines of monotheistic religions including Judaism, Christianity, and Islam (Armstrong, 1993); Buddhism holds that Gautama Buddha reached an enlightened state in which he possessed extraordinary knowledge (Pyysiäinen, 2003); and Hinduism holds that Vishnu is all-knowing (Kumar, 1998). Adherents of these religions constitute nearly 6 billion people worldwide (Pew Research Center, 2017), thus most of the world’s population contemplates some sort of supernatural mind. I will use the term “supernatural concepts” to refer to ideas that are inconsistent with laws of nature that have been identified by science. I will refer to “religious concepts” narrowly, as a subset of supernatural concepts that are found within religious doctrines and practices. There are other ways to define these terms, but the arguments that I lay-out here will apply to most definitions. Although I favor a constructivist lens in addressing these issues, I hope that the points that I forward in this paper are relevant even to scholars who do not adhere specifically to constructivism.

Born Theists?

A variety of arguments have been raised about the “naturalness” of religious concepts. These arguments generally fit into two categories. One argument is that religious concepts are “natural” in the sense that they are *supported by* ordinary cognitive processes and tendencies that are common to our species (e.g., Banerjee & Bloom, 2013; Bering, 2006; Bloom, 2007; Boyer, 1994; Harris, 2018; Johnson & Boyatzis, 2006; Rottman & Kelemen, 2012). For example, scholars have argued that our species’ cognitive tendency to detect (and sometimes over-detect) agency leads us to attribute mentality not only to people and non-human animals, but also to

artifacts with apparent self-propelled movement (e.g., Heider & Simmel, 1944), and unseen beings that might cause otherwise unexplainable phenomena (i.e., ghosts, souls, gods) (e.g., Bering, 2006; Guthrie, 1995). Note that this account includes no assumptions about what *specific knowledge* minds possess or how those minds *obtain knowledge*; rather, the basic tendency to detect agency lends itself to people *potentially, eventually* understanding many types of minds, including (but not necessarily) the minds of deities. Another argument along these lines is that our tendency to detect agency paired with our attraction to teleological explanations for origins—the intuition that things were *created for a purpose*—may eventually lead children to (perhaps briefly, perhaps permanently) assume that some agent (or agents) created humans (e.g., Evans, 2001; Kelemen, 2004; Rottman et al., 2017). Note again that this account includes no additional assumptions about the agents’ physicality, minds, capabilities, and so forth—instead, many different ideas of intentional creation might eventually be constructed, including ideas that are reminiscent of Judeo-Christian origins stories (if children are raised in contexts with those stories) and ideas that bear little resemblance to those stories. As Banerjee and Bloom (2013) explain, “It is one thing...to think about natural entities as intentionally designed artifacts of a sort; it is quite another to generate an enduring belief in invisible agents who have created these artifacts” (p. 7). I believe that the sorts of arguments presented so far—that religious concepts are “natural” because they are *supported by* ordinary cognitive processes and tendencies—help to unite research and theory on concepts that are often quarantined into distinct “natural” and “supernatural” categories.

Contrary to these examples, another prominent argument for the “naturalness” of religion goes much further, contending that children are *prepared* to hold *particular* religious or supernatural notions; particular religious ideas are inherent or destined to develop: “were

children not provided with ideas about gods, they would discover gods for themselves” (Barrett, 2012, p. 42). A specific example of this argument can be found in the influential assertion that young children are “prepared” to understand the mind of all-knowing gods, such as the god found in Judeo-Christian doctrines (e.g., Barrett et al., 2001; Barrett, 2012; Richert & Barrett, 2005): “on many properties, young children seem equipped with default assumptions that better match theological descriptions of God ... Three-year-olds assume beliefs and percepts are infallible” (Barrett & Richert, 2003; p. 309). Note that this sort of argument is distinct from those described earlier—it is more deterministic, proposes that children may possess specific early concepts of the ‘supernatural’, and introduces a divide between ‘natural’ and ‘supernatural’ concepts by purporting that children are especially prepared to understand the latter. Moreover, this account obviates the need for conceptual development, as children are already “equipped with default assumptions that better match theological descriptions of God” (Barrett & Richert, 2003; p. 309). Contrary to the unifying theories and claims described at the outset of this section, this type of speculation might perpetuate the idea that ‘religious’ concepts are distinct from ‘natural’ concepts.

When I began to study children’s concepts of all-knowing beings, the prominent opinion at that time was that children were prepared to understand infallible minds (e.g., Barrett et al., 2001; Barrett, 2012; Richert and Barrett, 2005). However, that argument seemed inconsistent with what we already knew about the development of psychological concepts. Most work on children’s theory-of-mind (ToM) up to that point had been focused on children’s concepts of ordinary people’s minds—minds that may be ignorant, fallible, and which differ in their interpretations of the world. Research on children’s concepts of these minds has identified substantial developments across childhood (Sabbagh & Bowman, 2018; Wellman, 2014). One

popular interpretation of these developments is that children use information garnered by observing and socializing with other people to construct an increasingly rich, robust, and complex understanding of other people's (ordinary) minds (e.g., Carpendale & Lewis, 2004; Gopnik & Wellman, 1992; Wellman, 2014). Because children overwhelmingly encounter minds (of caregivers, friends, strangers) that are indeed fallible, they should begin to understand these minds (as opposed to all-knowing minds) relatively early in development—children acquire more 'data' about these types of minds with which to construct concepts of minds, and it is especially *useful* to understand fallible minds to navigate a social world that is full of fallible folks. A constructivist account might predict that children will *initially* use their robust intuitions about ordinary minds to make inferences about less familiar minds, such as the minds of deities; subsequently children may develop more specific, distinct concepts of deities' minds (particularly if such ideas are prominent in children's contexts).

Across several studies, my colleagues and I began to test these hypotheses by giving standard ToM tasks to children in the US (where ideas about God and belief in God's all-knowingness is commonplace) and asking children to reason about the beliefs possessed by God and other beings with extraordinary minds (e.g., Lane, Wellman, & Evans, 2010; Lane, Wellman, & Evans, 2012). For example, children completed a false-belief task: They were shown a closed crayon box and paper bag, the interviewer asked children what they thought was inside the crayon box, and then opened both containers to reveal that the box held marbles and the bag held crayons. Then both containers were closed. For each of several agents—including ordinary beings (e.g., a girl) and extraordinary beings (e.g., God)—children were asked what that agent would think is inside the box. If children responded "crayons" they were attributing a false belief to the agent.

Consistent with dozens of studies (Liu, Wellman, Tardif, & Sabbagh, 2008; Wellman, Cross, & Watson, 2001), by roughly 4.5-years children typically “passed” these tasks—e.g., reporting that the girl would (falsely) think that crayons are in the box. Most revealing was that children at 4.5 years often reported that *God* would hold a false belief as well. Their intuition was that God possessed a fallible mind, just like all other minds that they have encountered in their everyday experiences. By 5 to 6 years, children typically differentiated between God and ordinary humans, more often reporting that God would know the actual contents of the box (marbles) while the girl would hold a false belief about its contents (crayons). Similar developmental patterns have now been identified by several research labs, using a variety of ToM tasks, among children raised in different cultures where theism pervades (e.g., Gimenez-Dasi et al., 2005; Kiessling & Perner, 2014; Makris & Pnevmatikos, 2007).^{1, 2} Importantly, these developmental progressions are *not destined* to happen; they are a function of children’s conceptual architecture *and* their socio-cultural experiences. Across several studies, children who had greater cultural exposure to ideas of beings with extraordinary minds—e.g., who more often attended places of worship—appreciated these concepts more so than their less religiously-schooled age mates (e.g., Lane et al., 2012; 2014; Lane, Evans, Brink, & Wellman, 2016).

Work on children’s developing concepts of extraordinary minds is one of several lines of evidence demonstrating that concepts deemed “religious” or “supernatural” are not inherent, and

¹ Methodological limitations (e.g., the use of wide age bins and small sample sizes) that are common to studies that have failed to identify this pattern are discussed in detail elsewhere (e.g., Lane et al., 2010).

² Of note, some scholars have contended that 3-year-olds’ tendency to fail these false-belief tasks (to report that agents hold beliefs that are consistent with reality) is evidence that they are ‘prepared’ to understand all-knowingness (e.g., Barrett et al., 2001). However, studies that have gone further and probed children’s *reasoning* (e.g., by asking children “How would God/mom know what is inside the box?”) reveal that 3-year-olds rarely mention agents’ special minds or expansive knowledge to justify their responses—rather, they often refer to their *own* knowledge (“because I know what’s inside”) or to *reality* (“that’s what’s in there”) (e.g., Kiessling & Perner, 2014; Lane et al., 2010, 2012). Children’s (and adults’) mental inferences may be biased by reality or by their own knowledge (Birch, 2005), but their mental inferences are not omniscience-biased. Later, I expand on how children’s reasoning and explanations are critical in revealing what children really think about the ‘supernatural’ world.

that children are not “prepared” to understand these ideas; at least no more so than any other category of concepts (for reviews of this work, see Lane & Harris, 2014; Menendez, Hernandez, & Rosengren, 2020). Rather—much like concepts of gravity, celestial motion, or computers—supernatural concepts are gradually constructed by the individual in response to what they learn through their first-hand experiences and through others’ testimony. These ideas *develop*. Moreover, other cognitive capacities and insights—e.g., a theory of mind, executive capacities, and willingness to entertain counterintuitive notions—also develop and influence how children mentally represent natural *and* supernatural ideas (King, 2011; Lane et al., 2014; Lane et al., 2016; Norenzayan et al., 2012). Ordinary cognition might *support* the development of supernatural ideas, but we are neither born with nor destined to develop these concepts (for a similar argument, see Banerjee & Bloom, 2013).

“Childish” Thinking?

By 5 or 6 years of age, children may hold a multitude of ‘supernatural’ ideas, including early concepts of creation, souls, and the special power of prayer (e.g., Evans, 2001; Lane, 2020; Richert & Harris, 2006; Woolley & Phelps, 2001). The fact that children may hold these concepts has led to more ‘exceptionalizing’, and (in some cases) debasing of religious thought and belief. Some scholars and media persons have concluded that the presence of these concepts among children is evidence that religious concepts writ-large are ignorant, immature, or childish. For example, biologist Richard Dawkins has infamously painted religious followers as “gullible” and has described his rejection of religion as akin to “putting away childish things” (Dawkins, 1995). We need to carefully distinguish between the *sentiments and biases* that we may hold about “religion”, the “supernatural”, or religious doctrine and how we go about *scientifically* characterizing the development of these ideas and beliefs. Consider the fact that we do not write-

off other early-emerging ideas as “childish.” For example, most infants appreciate that unsupported objects typically fall to the ground (Needham & Baillargeon, 1993) and many preschoolers understand the relation between germs and illness (Kalish, 1996), but we do not think that emerging understandings of gravity or of germ theory are childish. Moreover, just like non-religious ideas, many ‘religious’ ideas continue to develop well beyond childhood—so they are, by definition, not “childish.” These include ideas about extraordinary mentality, in particular the idea of *total omniscience*. A completely omniscient being would know much, much more than what is inside boxes (e.g., as studied by Lane et al., 2010); that being would know *everything* about *everything*.

My colleagues and I examined how an understanding of omniscience develops, by asking 3- to 11-year-olds and adults about the knowledge held by a novel character, Ms. (or Mr.) Smart (Lane et al., 2014, Study 2). We decided to not ask participants about God, as variability in their interpretations of God’s omniscience could reflect individual differences in what they had learned about God. With Ms. Smart, we could teach all participants the same thing about her extraordinary knowledge, standardizing that input across participants. Ms. Smart was depicted as an older person, with eyeglasses and a large cranium (embellishments often used by graphic artists to highlight characters’ intelligence). We taught participants that Ms. Smart knows all sorts of things that they themselves would not know. We explained that she knows that a closed box (sitting in front of the participant) contains a stapler, without looking inside the box. She knows *where* the stapler was made (Canada), and she even knows *how many* staplers are made in Canada each year. We stressed that Ms. Smart knows even more than that--she knows *everything about everything*. After this introduction, participants were asked whether Ms. Smart knows

some things, lots of things, or everything. Any participant who reported “some things” or “lots of things” was corrected—we again stressed that Ms. Smart knows “everything about everything”.

Then, we asked about the *breadth* of Ms. Smart’s knowledge, or the *types* of knowledge that she holds. This included knowledge of facts about the present, past, and future, and knowledge of the participants and their parents—about personal events in their lives, their actions, thoughts, and preferences. The youngest children (3-4 years) granted Ms. Smart a variety of knowledge, including knowledge of the future and knowledge of others’ thoughts. However, there were several forms of knowledge that these young children regularly *denied* Ms. Smart—including knowledge of their own and others’ behavior and knowledge of historical events—even though they had *just been taught* that Ms. Smart knows everything about everything. Slightly older children (5-years and older) demonstrated a pattern more like adults, where they attributed *each category* of knowledge to Ms. Smart above chance levels. What about attributions of *all* knowledge—omniscience? A clear developmental trend emerged: only 29% of preschoolers attributed *all* categories of knowledge to Ms. Smart, but this increased gradually over childhood: 64% of children 5-6 years, 71% of children 7-11 years, and 85% of young adults attributed all categories of knowledge to Ms. Smart. Thus, we found substantial developments in children’s attributions of knowledge to a being who is supposed to know everything.

We also measured the *depth* of knowledge that participants attributed to Ms. Smart, or the amount of knowledge that Ms. Smart holds within a domain—for example, how *much* she knows about cars. To get at this understanding, we first introduced participants to four familiar types of experts—a doctor, mechanic, chef, and pilot. We asked participants how *much* each expert knows about their respective domain. For example, “How much does a doctor know about medicine? Some things, lots of things, or everything?” If a participant responded “everything”

we told them that the expert knows “lots of things about [their domain], but not everything.” So, we played-down experts’ knowledge (and recall in Ms. Smart’s introduction, we played-up her knowledge by reminding participants that she knows “everything about everything”, and corrected them if they surmised otherwise). Then we pitted Ms. Smart against each expert: participants were asked whether Ms. Smart or the experts would hold more knowledge within the experts’ domains. For example, “Who knows more about why you get a *tummy ache*, a doctor or Ms. Smart?” Someone who understands omniscience should always report that Ms. Smart knows more. In response to these questions, adults overwhelmingly (90% of the time) reported that Ms. Smart knew more than the experts. But preschoolers typically reported that the *experts were more knowledgeable* than Ms. Smart (76% of the time). Children 5-11 years performed better, but still not as well as adults. So, understanding the depth of a purportedly ‘omniscient’ being’s knowledge was especially challenging, even for older children.

This general pattern is consistent with other work demonstrating that children’s earliest conceptualizations of God tend to be rather human-like, but over time and development, children may construct explicit notions of God’s mind that are increasingly extraordinary (for individual studies, see Heiphetz et al., 2018; Shtulman et al., 2019; for a review, see Heiphetz et al., 2016). Notions of gods’ abilities or of extraordinary minds are not the only ‘supernatural’ notions that have a protracted developmental course. For example, concepts of souls, the afterlife, and creationism may develop well into late childhood and may continue to be refined in adulthood (for reviews, see Lane & Harris, 2014; Legare, Evans, Rosengren, & Harris, 2012). In short, we cannot simply write-off ‘supernatural’ or ‘religious’ ideas as immature. Indeed, some of these ideas are quite difficult for children to grasp, and are far from childish.

What are the *Concepts Behind Belief?*

Finally, we may unintentionally exceptionalize and oversimplify religious thought in the research questions that we pursue. In surveying the work on children's religious beliefs, there is a relatively strong focus on children's endorsement of the *name* or brief description of a religious concept (X). For example, studies address questions such as: "When do children *adopt* a belief in X?", "Do children in one context believe in X more so than children in another context?", or "How does parents' endorsement of X relate to children's endorsement of X?" These sorts of questions can certainly help to identify mechanisms and sources of belief transmission. But when children's beliefs are not explored *beyond* these types of questions in studies, a reader of such studies might surmise that children's concepts of the supernatural are simply a function of their passively absorbing ideas available in their culture, or they might surmise that these concepts are structurally identical, regardless of who is responding. These research questions *alone* do not address the fact that there may be substantial variability in *how* children conceptualize a particular supernatural entity or phenomenon. And these questions alone do not embrace the fact that children actively *construct* their beliefs (Lane, 2018).

In contrast, when surveying the work on children's beliefs about the 'natural' world, researchers (generally) seem more inclined to explore the *structure* and *content* of children's concepts, instead of (or at least, in addition to) asking whether children 'believe' in a concept's name or brief description. For example, in studies of children's concepts of outer space, Earth, or human evolution, researchers are less focused on questions like: "When do children believe in 'outer space'?", "When do children believe in 'the Earth'?", or "When do children believe in 'evolution'?" More often, researchers' primary questions are more along the lines of: "How do children *construct* concepts of outer space?", "How do their *representations* of Earth *change* in

response to what they are taught?”, or “How do children’s *conceptualizations of* human origins vary along with their cultural experiences and other conceptual developments?” (Evans, 2013; Plummer & Krajcik, 2020; Vosniadou & Brewer, 1992; Vosniadou & Brewer, 1994). Answers to these types of questions—about concepts, not just endorsement of labels or brief descriptions—have provided valuable insights into children’s understanding of the natural world. And answers to these questions can also provide valuable insight into children’s understanding of—and indeed, their actual beliefs about—the ‘supernatural’ world too (e.g., Bering & Bjorklund, 2004; Shtulman & Yoo, 2015; Woolley & Phelps, 2001).

A child may report *believing* a religious notion, but that alone tells us nothing of how the child *conceptualizes* the notion; thus, we do not know precisely *what* that child believes. Consider children’s belief in the possibility that someone could “know everything.” In the study that I presented on children’s and adults’ concepts of omniscience, we also asked participants for their *beliefs* about all-knowingness. These included the questions, “Can someone really know everything about everything?” and “Can there be a real person like Ms. Smart?” The youngest children (ages 3-4.5 years) were the ones *most likely* to report that it was indeed possible for someone to really know everything about everything (46%), and that there could be a real person like Ms. Smart (64%)—those data alone might lead one to surmise that young children are more receptive to or attuned to the idea of ‘omniscience’. Yet, remember that these preschoolers attributed to Ms. Smart the *least* amount of knowledge. Their *understanding* of what it means to know ‘everything about everything’ was fundamentally different and more constrained compared to the understandings of older children and adults. Thus, preschoolers who reported believing that someone could know ‘everything about everything’ were actually endorsing the idea that someone could know *lots* of things that were *easily-accessible*, about the *here-and-now*—and

that is very different from how most adults explicitly conceptualize omniscience. If we were to have stopped with the question of *whether* children believe in an all-knowing being, and not delved into children's actual *concepts* about all-knowingness, we would have reached very different (and inaccurate) conclusions about what exactly children believe.

In sum, in addition to asking children about their belief in supernatural phenomena we need to probe how they *conceptualize* those phenomena. Otherwise, it is difficult to draw conclusions about *what* exactly children believe. Indeed, without a better understanding *what* children believe, we risk seriously mischaracterizing children's cognition and we risk seriously mischaracterizing 'religious' or 'supernatural' concepts.

Conclusions

In attempting to characterize the development of 'supernatural' or 'religious' concepts science is best served by treating the development of these concepts the same way that we typically treat the development of 'natural' or 'secular' concepts. Perhaps underlying our tendencies (scientists' tendencies) to quarantine concepts of nature and concepts of the supernatural—for example, to characterize the latter as "prepared" or as "childish"—is that, in our profession, we situate these concepts on opposite ends of a spectrum. We may draw upon our *own* goals as scientists and presume that conceptual development entails moving toward greater empirical truth, toward 'scientific' concepts and away from 'non-scientific' concepts. This may be a special kind of teleological reasoning that *we* are engaging in. But conceptual development does not share our endgame. Moreover, ideas and beliefs that we (the scientific community) explicitly distinguish as 'supernatural' or 'religious' are perhaps not distinguished as such in the minds of most folks (for elaborations of this argument, see Boyer & Walker, 2000; Evans &

Lane, 2011). Indeed, ‘natural’ and ‘supernatural’ notions may peacefully coexist in the same mind (Legare et al., 2012).

From a developmental standpoint, religious concepts are not inherent or prepared, and they are not childish. Just like other concepts, religious concepts are *constructed*—children’s conceptual architecture and other cognitive capacities allow for and constrain cognitive development; existing concepts may be elaborated upon and revised as children attempt to grapple with information that they acquire first-hand or through testimony. Not only do children play an active role in constructing these concepts, but they also play an active role in forming their beliefs, whether those beliefs are about phenomena that we wish to categorize as natural or supernatural. So, rather than stopping with questions about whether children believe in religious ideas, we should continue to delve further and identify exactly what the concepts are behind those beliefs and how those concepts are constructed. As more of the field embraces the fact that supernatural concepts and beliefs develop through the same processes as other concepts and beliefs then research on these critical topics will continue to be brought into the mainstream, providing a fuller, more complete account of human cognitive development.

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