



CHAPTER 6

How We Conceive of the Divine

WHEN VISITING INDIA, one cannot miss the colorful diversity of shrines and temples devoted to the various gods. You will find images of multiarmed human forms—elephant-headed Ganesha, the monkey-god Hanuman, the god Vishnu in the form of a fish or a boar, and hundreds of others. These various images correspond to as many (or more) different conceptions of the divine—and this is only in Hindu India and only considering those beings that are objects of worship and not countless demons, spirits, fairies, and other superhuman beings. If we consider all of the superhuman concepts from the world over, how can any general patterns be drawn?

My argument in this chapter is that a cognitive scientific perspective can provide descriptive and explanatory insights into how humans conceptualize the divine the way we tend to do, and why. I begin by summarizing one common account from cognitive science of religion (CSR) for why concepts of gods are common around the world. I then offer some observations about why some god concepts are conceptually effective for injecting meaning into life's events. I end the chapter with some brief comments on whether cognitive explanations for why people tend to believe in gods undercut justification for these beliefs.

WHAT IS A GOD?

One of the difficulties in studying how people think of gods is even identifying what counts as *god*, *divine*, *superhuman*, or *supernatural*.

All of these terms are contested, and their use will reflect a particular perspective or theoretical framework. Rather than try to define *gods* from a theological perspective—a perspective that is bound to be disagreeable to someone from a different theological vantage point—here I will treat *gods* and related terms from a cognitive scientific perspective.

Gods, here, will refer to:

- : counterintuitive intentional agents,
- : that a group of people reflectively believes exists,
- : that have a type of existence or action (past, present, or future) that can, in principle, be detected by people,
- : and whose existence motivates some difference in human behavior as a consequence.

Recall from chapter 4 that being counterintuitive is having a property that violates (either through breach or transfer) the expectations of an intuitive ontology. A living cow with metal internal parts is counterintuitive because the expectation of having organic innards is intuitively applicable to Living Things, and this expectation is breached here. A tree that listens to people's conversations is counterintuitive because the expectation set *Mentality* has been transferred to an ontological category to which it does not belong. *Counterintuitive*, then, as a technical term motivated by current understanding of natural human conceptual systems, maps roughly onto how people often use the terms *supernatural* or *superhuman* without running aground on the problem of specifying what is natural and what is "super" or above humans. (What if the divine is part of nature? What if a god is decidedly subhuman in some respect?) Such a definition of a god, as it appeals to cross-culturally recurrent features of human cognition, avoids the problem of being nonapplicable to other times or places.

Gods, as defined in this way, are certainly not the only concepts that have occupied theologians or thinkers concerned with the ultimate concerns, the meaning of life, or spiritual pursuits. If one wants to see Paul Tillich's idea of God as an abstract "ground

of our being”¹ or variants on the theme that God is some kind of impersonal force much more like that portrayed in the *Star Wars* movies than that in the Bible, then the cognitive approach I am advocating will disappoint. From this cognitive perspective, such nonagentive ways of viewing “God” or “the divine” do not fall into the same category with Allah, Shiva, or Zeus as conceived by ordinary devotees.

Perhaps surprisingly or disconcertingly, demons, ghosts, ancestors, and other traditional religious beings are gods under this framework. Whether a god is good or bad, powerful or feeble, all knowing or laughably fallible, or worthy of devotion or scorn does not factor into this definition of gods. I regard this inclusiveness as a strength. Ancestor-spirits and nature-spirits just might be the most common focus of rituals and other “religious” activity in traditional small-scale societies, and their echoes are present in even the most “complex,” urbanized societies in the form of ghosts and saints. An account of belief in gods that marginalizes these as “superstition” is unduly narrow.

A key question before the cognitive scientist of religion is to account for why gods are so recurrent across cultures. Whenever a particular type of idea or practice is widely recurrent across cultures, the human scientist should want to know why this is so. Simply answering “Because gods exist” is an insufficient answer. Quarks might exist but that does not mean quark-concepts are widespread across time and space. It might be that fairies do not exist and yet beliefs in such beings have stretched from China to Ireland. Whether or not something exists is a different question than why people believe that something exists. Cognitive scientists study such seemingly banal questions as “Why do people believe there is a three-dimensional world around them?” without resorting to “Because there is.” Even if the actual existence of a three-dimensional world is patently obvious to us, there is still a cognitive problem regarding just how we come to find belief in such a world patently obvious.

A second important question is why do some of these gods become connected with belief systems or theologies concerning meaning and ultimate concerns? Fairies might meet the definition of a god and they might be widely recurrent, but they do not figure centrally in theological treatments of why humans are here, how they should understand themselves, and how they should live their lives. Why not? Why are some gods better candidates for providing meaning, and becoming focal in religions, than others?

WHY GODS?

Gods are common because of the operation of ordinary natural cognitive systems we use to make sense of the world and especially minded agents. The concert of various content-specific systems facilitates our belief in gods. Previously I noted how we humans are eager to make sense of the world around us and have a number of early developing natural ways to do so. If something bears the marks of a bounded, physical object, then the Physicality and Spatiality expectation sets kick in, providing inferences, explanations, and predictions for the object's properties and movement. What if something does not appear to move in a way easily explained in terms of ordinary mechanics? As described in chapter 5, we eagerly seek out intentional agents—particularly other humans—in the environment. Persons such as humans violate Physicality in some important ways, and this partitioning of things that wholly conform to Physicality from those that do not is a conceptual act that even infants engage in. Persons play by different rules than ordinary objects, and babies know this. Persons and their causal properties can account for events and states of affairs that the rules of Physicality cannot. As reviewed in chapter 4, Kelemen's research on design reasoning shows that children often regard *someone* as a more sensible cause of natural states of affairs (such as features of mountains and camels) than some mechanical process.²

We have other natural causal strategies available, including essentialist and vitalistic reasoning that come from the Biology expectation set. Nevertheless, given persons' (apparent) potential ability to explain a broad range of events and states that are not obviously the result of these other forms of intuitive causal reasoning, and given the importance of person-based causation in human social life, we have a strong natural propensity to resort to person-based causal explanations when other forms of intuitive causal reasoning fail.

This natural tendency to resort to person-based conceptualization of events, states, and things might be an instance of *error management*. Humans and other animals have limited and fallible decision-making abilities that will at least occasionally lead to making errors as in failing to detect food at hand or regarding something as edible when it isn't; or being scared of a harmless object or failing to notice a dangerous predator nearby. Because errors will happen, in many cases it would be advantageous for an organism to err in one direction instead of the other depending upon which kind of mistake is more costly for the organism. For instance, the cost of mistaking a poisonous mushroom for an edible mushroom could far outweigh the benefit of finding lots of edible mushrooms. This observation applied to human cognitive systems entails that humans will have some tendencies that are tuned in a particular "safer" direction.³ Anthropologist Stewart Guthrie has argued that the human perceptual and conceptual tendency to see human-like agents and agency everywhere—even in situations we later recant—is one such better-safe-than-sorry tuning.⁴ I have labeled this cognitive system *HADD* for *hypersensitive agency detection device*.⁵ Evidence that humans have such a device is strong.⁶

Cognitive scientists have demonstrated repeatedly that, from infancy, movement that looks self-propelled and goal-directed activates thinking about objects as agents, and further can trigger attribution of mental states, beliefs, desires, and sometimes even personality and social roles. Famously, psychologists Fritz Heider

and Marianne Simmel showed American female college students a film of geometric shapes moving in and out and around a broken rectangle and then asked them to recall what they saw. Instead of producing simple factual descriptions such as, “The large triangle moved toward the circle and stopped just to its right. The large triangle then moved out of the rectangle and toward the smaller triangle and circle . . .,” observers mostly described the movement using personification—for instance, describing the smaller triangle and the circle as friends and the larger triangle as their enemy, and them wanting to escape, and the large triangle becoming angry.⁷ This and subsequent studies illustrate that our perceptual and conceptual systems readily attribute minded agency with little provocation—even in conditions in which we reflectively think that such attribution is in error.⁸ That is, we have an agency detection system that produces false positives (or at least we reflectively believe it to do so). Guthrie has argued that this tendency to find human-like agency even where it does not actually exist is a primary generator of belief in gods. We have *HADD experiences*, experiences in which we detect agency for which the type of agency is unclear, and then sometimes regard them as evidence of a god or gods. Our natural cognitive systems find minded agency even where there is not any, and are likewise attracted to intentional explanations for natural events and states of affairs. Gods, by these lights, are false positives.⁹

Even if one is uncomfortable with Guthrie’s decidedly dismissive approach concerning the possible existence of one or many gods, his general point is helpful. Our natural cognition readily applies purposive and mentalistic construals to a broad range of objects, states, and events even given only ambiguous evidence that mental agency is in fact at play. If one has been exposed to a god concept—and recall that in principle gods’ activities are detectable in the world—one’s agency detection system has a good likelihood of detecting evidence of the god’s activity. Similarly, given this agency detection system that is more forgiving of false positives

than failures of detection, one will occasionally encounter events or conditions that *seem* to cry out for an explanation in terms of the activity of an intentional agent and a regular human or animal will clearly be insufficient. Such events might occasionally lead to the postulation of a god (or support the existence of a known god).

To illustrate, recently when I arrived at home and prepared to open my back garden gate, the door slowly swung open just in front of me, without me contacting it—not a normal occurrence! While it opened, I assumed that *someone* on the other side heard me coming and opened it for me, but when it was fully open, I saw no one who could have opened it. I checked behind the gate and saw no one. Strange. My agency detection system registered agency (I had a HADD experience). I assumed a human agent was present, but then no human agent was present. Who did it? We probably all have such experiences. Most of the time we shrug it off, but perhaps occasionally such experiences reinforce beliefs in ghosts, spirits, and the like.

Similarly, as Kelemen's work suggests, we seem to have a conceptual bias to see natural things in terms of their function or purpose, and have a tendency to connect this apparent purpose to the activity of someone—an intentional agent or person. Finding purpose in the natural world and eagerly attaching purpose to intentional agency would provide impetus for believing in beings that can account for the apparent purpose or design in the natural world. As humans and animals are rarely good candidates, conceptual space is open for gods to fill this role.

Taking Guthrie's and Kelemen's work together, we see that humans have natural, intuitive impetus for postulating gods. Events and things in the world appear purposeful, designed, or otherwise the product of minded, intentional activity. It has been speculated that events of unusual fortune or misfortune likewise provide motivation to consider the existence and activities of gods. When some improbable event happens that seems meaningful, we might readily assume someone, perhaps a divine someone, is responsible.¹⁰

Such thinking could be reinforced by moral intuitions as well. Psychologists have discovered some evidence that we easily think about the world as operating on some kind of reciprocity principle, what is called *just world reasoning*.¹¹ If someone does something morally wrong, something bad is more likely to befall him. But why? One way of theologically elaborating this intuition is to postulate a punishing and rewarding force such as karma, as we see in many Asian religions. Alternatively, a fairly intuitive account would be that someone knows about the wrongdoing and punishes it. As gods might know even what is done in secret, and can use natural forces and things to reward or punish, gods may serve an explanatory role in these cases of unusual fortune or misfortune. Even gods that have little concern about human interactions may be vengeful when humans trespass against them.

The natural tendency to see agency around us, to see purpose in the world, to demand explanation for uncommon fortune or misfortune, and to connect fortune or misfortune to reward and punishment may conspire to make gods readily understandable and provide impetus for entertaining their existence and activities. One further set of considerations deserves mention as well.

HOW DEAD PEOPLE BECOME GODS

Many if not most of the world's gods (broadly construed) bear some relation to deceased humans. Ancestor-spirits and ghosts were, at one time, humans. In small-scale and traditional societies, warding off ghosts and malevolent spirits, propitiating the ancestors, or garnering the support of (deceased) saints often takes on far greater importance in regular practice than concerns about creators or cosmic deities. What might account for this cross-cultural recurrence?

At this point the answer is largely speculative. If we accept that our natural cognitive equipment makes us intuitive dualists as Paul Bloom has suggested (and discussed in chapter 5), then the idea

that an immaterial something—mind, body, spirit, or some combination thereof—is left behind after death is not radically counterintuitive. Even if such dualism is not an intuitive default but is merely an easily accommodated idea, the point remains that mind- and soul-related ideas are not difficult to decouple from bodily reasoning, and the fact that someone’s body has stopped working need not conceptually turn off reasoning about the person’s thoughts, feelings, desires, and other properties. Further, as Pascal Boyer has noted, with someone intimate, we know a lot about their tastes, desires, preferences, personalities, and the like; and upon death these mind-based properties remain untouched. Our theory of mind, informed by such information, continues generating inferences and predictions even after someone has died.¹² Add to these considerations the occasional, emotionally gripping experiences related to the deceased, such as dreams, hallucinations, or strange sounds, which trip our enthusiastic agency detection system (HADD), and you have a recipe for supposing that the recently deceased is still active without his or her body. Indeed, the distinct sense that someone passed away is still somehow present is not uncommon even among people who explicitly reject belief in ghosts and spirits of the dead.¹³ As the dead no longer have visible, physical bodies, they may satisfy the search for an intentional agent in the many cases in which our agency detection system detects agency but it is clear a visible human or animal could not have been responsible (HADD experiences). It follows that little cultural encouragement is needed to develop the idea that some form of the dead is still around and active among the living in some cases.¹⁴

MINIMALLY COUNTERINTUITIVE IDEAS AND CULTURAL TRANSMISSION

Thus far I have been stressing the content-specific natural cognition that likely encourages thinking about gods and entertaining

their existence and activity. If these dynamics characterize many people's automatic thinking in ordinary human contexts, we would expect that ideas about gods would be readily generated by individuals (if only in a piecemeal fashion) and transmitted from person to person, perhaps gaining elaboration. As god concepts have a strong intuitive foundation, conforming well to nonreflective beliefs, they will be strong candidates for reflective beliefs as well. Recall from chapter 3, strong accessibility breeds believability.

Though I have been stressing intuitive impetus, a god concept need not be wholly intuitive but might deviate a bit from the expectation sets sketched in chapter 4. As long as a concept is not *too* counterintuitive, the concept need not suffer in terms of how easy it is to conceptualize, remember, and communicate. Consider a spirit that can read minds. Mind reading might be counterintuitive, but a disembodied mind having the additional feature of being able to know what people are thinking is not particularly cumbersome. It is only modestly counterintuitive and so is easy to think and talk about. Some experimental research shows that concepts that are only slightly counterintuitive are as or more memorable and transmittable than wholly intuitive ones.¹⁵ If so, then their good potential for being communicated will increase with how often they are talked and thought about. Thus, they will be more frequently encountered and, in turn, become more familiar and accessible, leading to believability. Being mostly intuitive and just slightly counterintuitive poses no special problem for a religious concept and may actually be an asset.

Not all god concepts are only slightly counterintuitive, however. Many have features that deviate radically from natural expectations and are highly counterintuitive. Consider the idea of a god that knows all, has no location whatsoever, exists in a different time (or no time at all), and yet, can interact with the world. This approximates a view of the divine that we see in some theological treatments in Judaism, Islam, Hinduism, and Christianity. What then? Such concepts are likely to require special cultural scaffolding to

aid their transmission: special artifacts, institutions, practices, or other devices that help people learn and use these more complex concepts.¹⁶ I return to this problem in chapter 8.

GODS AND MEANING MAKING

Some Westerners think of gods in terms of their ability to give existential meaning to life, to account for why we are here, what makes life worth living, and how we should conceive of ourselves in relation to other humans, the rest of nature, and the cosmos. Though some gods might help with the big existential questions, perhaps most are more modest in their meaning-making. Why are my chickens laying poorly? Why was this fishing trip so successful? How can I get the spouse that I want?

As noted previously, intentional beings (Persons) can help explain and predict a broad range of phenomena either as proximate or more distant causes. As concepts, they possess what Pascal Boyer has called *inferential potential*, the ability to generate a broad range of ideas, inferences, explanations, and predictions about issues that matter to people. That is, a concept with inferential potential has the potential to enable people to *infer* or draw conclusions across a broad range of concerns.¹⁷ Appealing to the activity of an average person (let alone a super person) can account for a greater variety of things than appealing to the average rock, shrub, or beetle. Not all person concepts—human or gods—have the same inferential potential, however. We naturally learn about human causal limitations and thus understand, for instance, that positing human activity cannot make meaning from a freak thunderstorm that destroys my crops. Humans have a restricted range of things they can do and, thus, can explain.

Boyer has argued that gods—particularly the ones that attract a lot of attention and behavioral investment—are those whose counterintuitive property or properties give them greater and broader inferential potential in domains of human concern. For

instance, by virtue of being invisible, being able to read minds, or seeing all, a god can have access to strategic information about who plans to do what to whom, and may act on that information or share it. Different counterintuitive properties, such as failing to exist on Wednesdays or only knowing languages that cannot be used, yields little gain in inferential potential. Such beings will be unable to importantly bear upon human concerns or experiences. They are not terribly interesting or worth talking about, and so will be less accessible, and hence, less believable. Consequently, such beings will usually fail to persist as shared ideas and will rarely (if ever) become recognized as gods.¹⁸

Even successful gods vary in the ability to make meaning. Some local forest spirits might be very powerful and inferentially important when it comes to reasoning about what goes on in a particular part of the forest, but completely irrelevant when drawing inferences about domestic affairs, whereas the opposite would be true of domestic spirits. Gods vary in the meaning they can help make. Those with broadest ranges of activity—both spatially and in terms of kinds of things they can and cannot do—will generally have the greatest ability to serve as meaning-makers. A cosmic creator who can act in essentially any domain of life has more meaning-making reach than the ghost haunting the house on the corner and, therefore, is more likely to come to mind, be talked about, and be accessible and believable (all else being equal).

I raise these observations concerning how gods are recruited to make meaning because, from a Western perspective, it is commonly assumed that gods are all about meaning and that all gods are equal in this regard. Westerners sometimes talk about religions as fundamentally existential meaning-making systems. The suggestion is that those “spirits” or “ghosts” that do not serve this function are not really a part of religion, but are merely part of local superstition and should not be called *gods*. In terms of conceptual properties, however, a clear dichotomy does not exist.

REASONS TO DOUBT THE EXISTENCE OF GODS?

Gods come in dazzling diversity, from ancestor spirits to cosmic creators, but amidst this diversity we can see that a small number of conceptual factors make an idea more likely to become entertained and believed in as a god. A strong god candidate is a modestly counterintuitive intentional agent or person, because such persons have great inferential potential while not being too complex or difficult to understand and communicate. Successful gods will also tend to produce actions that are detectable in the world, either through our agency detection system, or because they account for apparent design and purpose in the natural world. Beings that may be invoked as morally interested, and perhaps accounting for fortune and misfortune in terms of reward and punishment, might be especially successful. In short, successful god concepts need to be able to make meaning of life's events in relatively intuitive, straightforward ways. Observing these features of gods are not new. The novel contribution of cognitive science is that we can now better explain why these features are important for gods and why they tend to congeal.

How we conceive of the divine is shaped by the natural cognitive equipment we have, but by no means does this entail that beliefs in gods are mistaken or suspect on this basis. Merely providing a scientific account of such beliefs should not be taken as casting doubt upon their truth.

Previously I argued that identifying that a belief has a natural cognitive basis does not bear upon whether it is true, but may justify someone in holding such a belief to be true until sufficient reasons to the contrary arise. That is, when it comes to naturally derived beliefs, we may treat them as "innocent until proven guilty." I believe the same principles apply here to belief about gods. Insofar as beliefs in the existence of gods are fairly direct, natural out-

comes of ordinary human cognition, they may be regarded as justified until reasons arise to reject them.¹⁹

For instance, our natural tendency to see design and purpose in the natural world, and regard that design and purpose as the product of intentional agency seems to be cognitively natural and, hence, innocent until proven guilty. Likewise, in many situations our agency detection system tells us that someone has acted and we are justified in this belief until we have good reasons to reject it. Note, however, that identifying the particular someone responsible for the perceived design in the natural world or as the agent whose action has been detected requires inferences beyond the immediate deliverances of natural cognition. The more inferential the steps, the less obviously justified such beliefs are. That is, intuitive religious ideas have stronger grounds for justified belief (all else being equal) than theological reflections and elaborations upon these beliefs. This conclusion is ironic in that theologians often regard themselves as in the business of sharpening and refining religious instincts and intuitions much in the same way that philosophers intellectually sharpen and refine other classes of intuitions. Perhaps theologians do refine religious thought and consequently produce better intellectual products than what we receive through simple natural cognition. Nevertheless, such theological concepts may bear a greater burden of proof than simpler claims such as “That tree was deliberately brought about in some way by someone” by virtue of being less natural.

In this vein, philosophers have begun exploring whether doubt is cast upon religious beliefs or whether they are encouraged by cognitive explanations of religion.²⁰ Here I only want to dispense with three common arguments against belief in gods that arise in the context of cognitive explanations.²¹

One objection is that if belief in gods is produced by natural cognition, then they are not based on relevant evidence, and hence, are dubious. I believe my argument from the previous chapter covers

this objection but even if not, it is an error to infer that natural cognition being part of belief formation precludes the use of evidence in the case of believing in gods. The account presented above clearly points to the role of agency detection and inferring design and purpose from *observations* of the world around us. Surely this constitutes one sort of relevant (even if insufficient) evidence. It might be that people accurately “read” intentional agency from the text of the natural world.

Alternatively, one might argue that perhaps our natural cognition does prompt us to believe in gods using evidence, but is simply unreliable in this regard. Our cognitive equipment might be fine for finding human agency with bodies and the like, but it produces belief in beings that do not exist such as ghosts and fairies and so it cannot be trusted when applied to gods. The difficulty with such a line is that it assumes that we *know* that there are no disembodied or invisible agents, so when our cognitive systems detect one, they do so in error. Such an argument is what is known as “assuming facts not in evidence” in American legal terminology or “question begging” in philosophical jargon. You cannot use the (alleged) fact that invisible agents do not exist as support for the claim that the cognitive system in question is error-prone and so undermines belief in invisible agents. You have assumed what you are setting out to reject.

Similarly, consider a household scale upon which we weigh things. I might suspect that it gives bad readings for any number of reasons, but I cannot determine that it is in fact error-prone without independently determining the weight of an object and then showing that the scale does not give its true weight. Just dropping a bag of potatoes on the scale and saying, “See, the scale says 10 kilos. That’s not right. This scale is no good,” would only be convincing if we knew already that the sack of potatoes does not in fact weigh 10 kilos. If our cognitive systems “weigh” our experiences and conclude that there is at least one god out there, we cannot take this conclusion as evidence that the cognitive systems are

mistaken unless we have independent reason to think there are no gods. Indeed, normally we would regard such a “weighing” as evidence that there is indeed at least one god.

A third objection is a rejoinder to the first two. One may concede that the cognitive faculties that encourage belief in gods use inputs from the world around, and that we must leave open the possibility that at least one god exists, but these faculties result in many divergent beliefs in various sorts of gods. This divergence suggests error in the belief-forming mechanism, at least as applied to gods, and gives us reason to hold suspect the beliefs it produces. This more formidable objection still ignores an important point: natural cognition converges on the existence of at least one and possibly many gods. The precise character of the gods in question might vary, but it would be a mistake to take this variation as reason to reject justified belief in some kind of god. Imagine three people are out for a walk in the woods and they each think they see an animal in a distant thicket. One says it is a deer. One claims it is a fox. The third believes it to be a bird. Clearly, the belief-forming mechanisms in question are imprecise in this context, but should we conclude that they are not justified in believing they saw an animal of some sort?

Color perception provides another helpful analogy. Our cognitive system naturally gives us impressions about what color(s) various things are, but this fact does not preclude that there are disagreements in particular cases. A tropical fish might be described variously as red, fuchsia, magenta, pink, violet, or purple (just to name a few) depending upon the individuals’ personal history, eyesight, and expertise. One person might even see no color at all (on this occasion) because he is among the roughly 7 percent of American males who are color-blind.²² We would surely be in error to suppose that the lone person who sees the tropical fish and believes it to be violet does not have a justified belief on the basis of having an error-prone cognitive device. Likewise, people might disagree on the details of the gods in question, and a minority might fail to detect any gods at all, but it does not follow that those who

believe in the existence of gods are unjustified in such beliefs. Many of these beliefs are likely to be false upon further, reasoned considerations, but as with belief in free will, souls, and consciousness, the naturalness of belief in gods should be taken as grounds for giving such beliefs the benefit of the doubt.