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WHY GODS AND SPIRITS?

Religious concepts are those supernatural concepts that matter. The world over, people entertain concepts of beings with special qualities and special powers. They live forever; in some places, they are supposed to be prescient or all-knowing, to govern the elements, to carve mountains, to strike with lightning or to smite the sinner. In all human groups some god or gods or the spirits or the ancestors (or some combination of these different types) stand out from the rest of the supernatural repertoire in that very strong emotional states can be associated with their representation. Thoughts about what the gods want or what the ancestors know can induce strong feelings of fear, guilt, anger but also reassurance or comfort.

So what makes these stories so important? Why is God more important than Santa Claus, or in the Fang context why do ancestors matter so much more than the White Bogeyman? One may think the answer is quite simple: People believe in God’s or the ancestors’ existence, not in Santa’s or the Bogeyman’s. This, however, is not a cause but a consequence. Some supernatural concepts are represented in such a way that it can seem obvious or at least possible that they refer to real things and agents in the world. The problem is to explain how this happens. This will take several chapters. A first step is to understand what kinds of agents gods, spirits and ancestors are.

RELIGION IS PRACTICAL

Western people—especially educated people, especially students of religion—tend to consider religious concepts primarily as the expression of some beliefs about how the world works. Nothing wrong about that in principle, except that it may lead to a contemplative view of religion, in which people are said to consider their world or existence in the abstract and to realize or imagine that it would make more sense with the addition of some concepts of gods, ghosts or ancestors. In this view, what counts most about the ancestors is that they are the souls of dead people; what matters about God is that he created the world, and so on. But this may not be the most important aspect in people’s actual thoughts about these agents. For religion is a rather practical thing.

First, religious concepts are represented by people mostly when there is a need for them. That is, some salient event has happened that can be explained in terms of the gods’ actions; or someone has just done something that the ancestors probably will not like; or some baby is born or someone just died and these events are thought to involve supernatural agents. In most trains of thought where religious concepts are used, these concepts help understand or formulate or explain some particular occurrence.

Also, what is a constant object of intuitions and reasoning are actual situations of interaction with these agents. People do not just stipulate that there is a supernatural being somewhere who creates thunder, or that there are souls wandering about in the night. People actually interact with these beings in the very concrete sense of doing things to them, experiencing them doing things, giving and receiving, paying, promising, threatening, protecting, placating and so on.

The Kwaio concept of spirit-ancestor (adalo) illustrates this contrast between contemplative, theological understandings and the more mundane business of representing religious agents in practical contexts and interacting with them. The Kwaio live in the Solomon Islands; most of their religious activities, as described by anthropologist Roger Keesing, involve dealing with ancestors, especially the spirits of deceased members of their own clans, as well as more dangerous wild spirits. Interaction with these adalo (the term denotes both wild spirits and
ancestors) is a constant feature of Kwaio life. As Keesing points out, young children need no explicit instruction to represent the ancestors as an invisible and powerful presence, since they see people interact with the *adalo* in so many circumstances of everyday life. People frequently pray to the dead or give them sacrifices of pigs or simply talk to them. Also, people “meet” the ancestors in dreams. Most people are particularly familiar with and fond of one particular *adalo*, generally the spirit of a close relative, and maintain frequent contact with that spirit.

The ancestors are generally responsible for whatever happens in a village: “*Adalo*, a child learns early, are beings that help and punish: the source of success, gratification, and security, and the cause of illness, death, and misfortune; makers and enforcers of rules that must at first seem arbitrary.” Good taro crops and prolific sows indicate that the ancestors are happy with the way the living behave. Illness and misfortune are generally an effect of the ancestors’ anger. True, the Kwaio, like most people in the world, accept that some events “just happen” and have no particular cause. Some illnesses may be interpreted as a straightforward weakening of the body with no special implications; the fact that some ailments are cured by Western medicine shows that they are in that category of mere mishaps. But salient events, particularly remarkable cases of misfortune, are explained as consequences of the *adalo*. As a Kwaio diviner tells Keesing: “If we see that a child is sick ... we divine and then we sacrifice a pig [to the *adalo]*.”

Divination is required to understand which spirit is angry and why. A diviner will take a set of knotted leaves and pull them to see which side breaks first, indicating either a positive answer or no answer to a particular question. The origin of many problems lies in the ancestors’ anger at people who broke rules about what is proper and what is *abu* (forbidden or dangerous—from the root *tapu*, which also gave us our *taboo*). Ancestors, like humans, crave pork and demand frequent sacrifices of pigs. Interaction with the ancestors can be quite complex, because it is not always clear which ancestor is causing trouble: “If it is not really that *adalo* [discovered in divination] that asked for a pig, in order that our pigs or taro grow well, then even though we sacrifice it, nothing will happen.” So people may go through several cycles of divination followed by sacrifice to reach a satisfactory arrangement with the ancestors.

On the whole, there are few situations in Kwaio life that are not construed as involving the ancestors in some way or other. The *adalo* are always around, in most contexts a reassuring but also a threatening presence. Keesing tells how, when taking a walk far away from a village, he was asked by his ten-year-old companion to stop whistling, as this would disturb the wild *adalo* that dwelt there. Keesing jokingly remarked that he did not fear them because he was carrying a big stick, only to be lectured about the futility of such a defense.

The Kwaio ancestors are a perfect example of supernatural agents who matter to people. Now—and this may seem paradoxical—the Kwaio are also remarkably vague as concerns the exact nature of the *adalo*, where ancestors actually live and so on. Keesing notes that people are not even very precise about the process whereby a living person becomes an ancestor. The few who bother to think about such matters only do so as a result of being prompted by an anthropologist, and they have wildly divergent representations of the process. Some people consider that *adalo* are people’s “shadows.” A person stays alive as long as their body, shadow and breath are held together; at death the “breath that talks” goes to live with other dead people in a remote village. The shadow remains around the village as an *adalo* that interacts with the living. Others maintain that there is probably no village of the dead. The “breath that talks” just fades away while the shadow remains with the living. Others think that the shadow does depart to the village of the dead; but it soon comes back to its former village. As Keesing notes, most general questions about the *adalo* receive either inconsistent answers or no answer at all: “How
and why do ancestors control events? What are ‘wild spirits’ [the dangerous ones]? Where do they come from? There is no answer to these questions. [However,] in those realms where Kwaio need to deal with their ancestors, their cultural tradition provides guidelines for action.1 This is in fact a very general characteristic of religious notions, beliefs and norms. This may seem surprising to those of us brought up in modern Western contexts where religion is mostly encountered as a doctrine that includes definite statements about the origin of things, what happens to the souls of dead people, and other such theoretical topics. In a later chapter I explain why religion in some historical contexts came to acquire this theoretical emphasis. For now, let me just emphasize that doctrines are not necessarily the most essential or important aspect of religious concepts. Indeed many people seem to feel no need for a general, theoretically consistent expression of the qualities and powers of supernatural agents. What all people do have are precise descriptions of how these agents can influence their own lives, and what to do about that.

Precisely because religion is a practical thing, we may be tempted to think that the solution to our problem is quite simple: Some supernatural concepts are important because people believe that the agents in question have extraordinary powers. The adalo matter a lot to the Kwaio because the Kwaio take it as obvious that these ancestors and wild spirits can make them sick or give them good crops. But this is not a solution to the problem, it is just another way of formulating it. We must understand why it is so obvious that the gods and ancestors have those powers. Besides, this explanation would not be generally valid. There are many places in the world where the most powerful supernatural agents are not the ones that matter most. The Fang have all these rituals and complex emotions associated with the possible presence of the ghost-ancestors. Now the Fang also say that the natural world (meaning earth and sky and all creatures great and small) was created by a god called Mebeghe, vastly more powerful than either the living or the dead. His work was then completed by another god, Nzame, who invented all cultural objects: tools, houses, etc., and taught people to hunt, domesticate animals and raise crops. However mighty, these gods do not seem to matter that much. There are no cults or rituals specifically directed at Mebeghe or Nzame, although they are assumed to be around, and they are in fact very rarely mentioned. The situation is a bit different in Christianized areas, where “Nzame” has become the name of the Christian god and has therefore become more important. But even there people still pay a lot of attention to what the ghosts-ancestors know or want and much less to the supposedly all-powerful gods. This is in fact a common theme in African religions, where a supreme god is both supreme and in actual fact of little importance to people. For a long time, this puzzled travelers, anthropologists and of course missionaries. Many African people seemed to recognize a Creator in the same sense as the Biblical one, yet were remarkably indifferent to Him. We will see below the explanation for this apparent paradox. For the time being, let us just keep in mind that what matters is not so much the powers of supernatural beings considered in the abstract, as those powers that are relevant to practical concerns.

Like the Kwaio ancestors, gods and spirits are very generally represented as agents we can interact with, and this shapes the way people intuitively think of their powers. To take a Western example, consider another of Justin Barrett’s studies of the God-concept. Barrett asked his Christian subjects to imagine various situations in which they may have to pray God to save other people from imminent danger. For instance, a ship in high seas has just hit an iceberg and is sinking fast. Praying is in essence asking God to do something about the situation, to tinker with a probable sequence of causes and effects that should result in a wreckage. But there is a variety of ways in which God could help. For instance, God could help the ship stay afloat with a
broken hull, or give the passengers the physical strength to withstand a long wait in freezing seawater, or give another ship’s captain the idea of changing course so he sees the sinking liner and rescues everyone.

Barrett wanted to find out which of these scenarios would seem most natural to believers, as this may reveal their (not entirely conscious) notion of how God intervenes in the world. Now, although Barrett was careful to make all these possible interventions equally salient, and though they are all trivial for an omnipotent god, most subjects spontaneously choose the third kind of option. That is, in most situations of this kind they would pray to God that he changes someone’s mind, rather than nudge physical or biological processes. In some sense, this is not too surprising. People have a “theologically correct” notion of God as omnipotent but they also use their intuitive expectation, that it is easier for a person to change people’s minds than to correct or reorient physical and biological processes. But note that this expectation would be irrelevant if God’s great powers were the most salient part of the God-concept. The expectation is activated only because people represent God as a person-like agent who interacts with them.

**GODS AND SPIRITS AS PERSONS**

In myth and folktales, we find supernatural concepts describing all sorts of objects and beings with all sorts of violations: stories about houses that remember their owners, islands that float adrift on the ocean or mountains that breathe. But the serious stuff, what becomes of great social importance, is generally about person-like beings. These invariably have some counterintuitive properties—for example, a nonstandard biology (they do not eat, grow, die, etc.) and often nonstandard physical properties (they fly through solid obstacles, become invisible, change shape, etc.)—but people’s inferences about them require that they behave very much like persons. When people get serious about what is around, beyond what they can actually observe, they tend to furnish that imagined world with persons rather than animals or plants or solid rocks.

That gods and spirits are construed very much like persons is probably one of the best known traits of religion. Indeed, the Greeks had already noticed that people create gods in their own image. (Admittedly, the Greek gods were extraordinarily anthropomorphic, and Greek mythology really is like the modern soap opera, much more so than other religious systems.) Voltaire echoed this thought with his characteristically wry comment that were cockroaches to have a notion of God they would probably imagine Him as a very big and powerful cockroach. All this is familiar, indeed so familiar that for a long time anthropologists forgot that this propensity requires an explanation. Why then are gods and spirits so much like humans?

Anthropologist Stewart Guthrie reopened this long-abandoned question in a book that anticipated some of the cognitive arguments presented here. Guthrie noted that there is an anthropomorphic tendency not just in visual artifacts, in the art of many different cultures, but also in visual perception itself. That is, we tend to interpret even very faint cues in terms of human traits; we see faces in the clouds and human bodies in trees and mountains. This, naturally, is also found in concepts of religious agents, many of whose features are strikingly human. A common explanation is that we imagine person-like agents who rule our destinies because this produces a reassuring view of our existence and the world around us. We project human features onto nonhuman aspects of our world because that makes these aspects more familiar and therefore less frightening. But as Guthrie points out, this is not really plausible. Gods and spirits are dangerous and vindictive every bit as often as they are helpful and benevolent. Moreover, imagining barely detectable agents around oneself is in general rather cold comfort if one is scared. Suppose you are on your own in a house on a deserted moor and
hear noises around the house. Is it really that reassuring to think that they are caused by someone you cannot see? Is it really better than to imagine that the noise came from branches brushing against the window?

Guthrie argues that the anthropomorphic trend is a consequence of the way our cognitive systems work and has little to do with our preferences, with a desire to imagine the world in this way rather than that. The solution, for him, is that we imagine person-like agents because persons are more *complex* than other types of objects. In fact, persons are the most complex type of object we know. Now our cognitive processes strive to extract as much relevant information as possible from environments (this is of course an automatic, unconscious process) and produce as many inferences as possible. This is why, when people are faced with ambiguous cues in their environment they often “see” faces in the clouds and on the mountains. Our imagination naturally turns to human-like creations because our intuitive understanding of persons is just far more complex than our understanding of mechanical and biological processes around us. For Guthrie, this also explained the human-like features of gods and spirits, the fact that however much people want to describe them as different from humans, they are in fact very much created in our own image.

The anthropomorphic tendency described by Guthrie is certainly there. However, before we understand how it contributes to people’s notions of supernatural agents, we must make this psychological description a bit more specific. First, note that gods and spirits are not represented as having *human* features in general but as having *minds*, which is much more specific. People represent supernatural agents who perceive events, have thoughts and memories and intentions. But they do not always project onto these agents other human characteristics, such as having a body, eating food, living with a family or gradually getting older. Indeed, anthropologists know that the *only* feature of humans that is *always* projected onto supernatural beings is the mind. Second, the concept of a mind is not exclusively human. As I said in the last two chapters, it is part of our intuitive expectations that animals as well as humans perceive what is going on around them, react to those events, have goals and form plans. Intuitive psychological inferences are applied to intentional agents in general, not just to persons. So it is quite likely that concepts of gods and spirits are mostly organized by our intuitive notions of *agency in general* (the abstract quality that is present in animals, persons, and anything that appears to move of its own accord, in pursuance of its own goals) rather than just human agency.

**SUPERNATURAL AGENTS AND DANGEROUS BEASTS**

The nuance is quite important because in many situations our intuitive systems can detect this generic form of agency without having a description of what kind of agent is around. When we see branches moving in a tree or when we hear an unexpected sound behind us, we immediately infer that some agent is the cause of this salient event. We can do that without any specific description of what the agent actually is. As I said in the previous chapter, some inference systems in the mind are specialized in the detection of apparent animacy and agency in objects around us. This system is not concerned with whether what was detected was a person or animal or yet another kind of agent (other systems handle this identification task).

According to psychologist Justin Barrett, this feature of our psychological functioning is fundamental to understanding concepts of gods and spirits, for two reasons: First, what happens in religion is not so much that people see “faces in the clouds” (in the way described by Guthrie) as “traces in the grass.” That is, people do not so much visualize what supernatural agents must be like as detect traces of their presence in many circumstances of their existence. The Kwaio track the *adalo’s* involvement in various people’s illnesses or good fortune. Many circumstances
of everyday life are seen as consequences of what the ancestors do or think or want. Second, our agency-detection system tends to “jump to conclusions”—that is, to give us the intuition that an agent is around—in many contexts where other interpretations (the wind pushed the foliage, a branch just fell off a tree) are equally plausible. It is part of our constant, everyday humdrum cognitive functioning that we interpret all sorts of cues in our environment, not just events but also the way things are, as the result of some agent’s actions.

For Justin Barrett, these two facts may explain why agent-like concepts of gods and spirits are so natural. This “naturalness” results from the fact that our agency-detection systems are biased toward overdetection. But why is that the case? For Barrett, there are important evolutionary reasons why we (as well as other animals) should have “hyperactive agent detection.” Our evolutionary heritage is that of organisms that must deal with both predators and prey. In either situation, it is far more advantageous to overdetect agency than to underdetect it. The expense of false positives (seeing agents where there are none) is minimal, if we can abandon these misguided intuitions quickly. In contrast, the cost of not detecting agents when they are actually around (either predator or prey) could be very high.

Our background as predators and prey is of course rather remote to most of us, although it is certainly crucial to understanding some features of our mental functioning. In fact, another psychologist, Clark Barrett, argued that many aspects of our intuitive psychology stem from predation. We have very sophisticated inference systems geared to describing other agents’ mental states and producing plans and expectations from these descriptions. As I said in the previous chapter, most evolutionary psychologists think that we developed intuitive psychology to deal with each other. Ever greater skills in understanding other people were required for ever more complex cooperation. But sophisticated mind reading is a substantial asset also in stalking prey and avoiding predators. For archaeologist Steven Mithen, the evidence available suggests that modern humans had a much better understanding of other animals’ mental states than their predecessors had, adding to the evolutionary pressure for astute mind reading. In any case, it is clear that predation constitutes one of the central contexts where our intuitive psychology is activated.

From an altogether different background many scholars of religion in the past noticed frequent references to hunting as well as the salience of hunting or predation metaphors in many religions. Shamanism is all about hunting for souls, chasing spirits away or avoiding predation by dangerous witches, and these metaphors are found in other types of religion as well. Classicist Walter Burkert described hunting as one of the major domains of our evolutionary past that religion seems to point to. Also, many anthropologists have noted the presence of many dangerous predators in the mythology and supernatural repertoire of many peoples. The awe-inspiring jaguar of many Amazonian cosmologies, like the were-tigers of many Asian myths and beliefs, bears witness to the salience of dangerous predators.

**ARE GODS REALLY LIKE PREDATORS?**

Justin Barrett’s notion of agency hyperdetection is based on experimental evidence about our inference systems and provides a context where we can make better sense of some apparently peculiar features of religious agents. For one thing, as Guthrie pointed out, sensing the presence of barely detectable agents is generally not a comforting feeling. Many such agents are dangerous or frightening rather than reassuring, which makes good sense if the systems activated in such contexts were originally geared to the detection of dangerous predators. Also, as I said in Chapter 2, the agents described as “gods” or “spirits” are mainly represented as persons plus some counterintuitive feature, which always creates some ambiguity as to whether they are
otherwise like persons or not. In most human groups and in most contexts this ontological uncertainty is not really resolved (nor does it appear to be of interest to anyone). In what way the ancestors or the gods are precisely similar to or different from humans is largely left unexplored. This is perhaps less surprising if the main inference system activated when representing such agents is agency-detection, triggered by predator-avoidance and prey-detection systems. These systems, as I said above, detect agents but do not specify what type they belong to.

For me, the connection with predation may also illuminate a characteristic of Fang ghosts that I used to find puzzling. The ghosts, as I said, are the fleeting presence of dead souls that have not yet reached the status of ancestors. Now people who report actual encounters with these spirits often mention that they could watch them but not hear them or conversely that they heard their voices but could not see their faces. For many people this discrepancy (sound without sight or sight with no sound) is also what made the encounter particularly weird and frightening. This is not unique to the Fang. The dissociation between modalities is a frequent feature of encounters with supernatural agents. For a long time I had no idea why this should be especially uncanny and unsettling, but Barrett’s ideas about hyperactive agent detection might suggest an explanation, since predation is one of these contexts where hearing without seeing (or vice versa) is particularly dangerous. This, however, remains largely speculative.

To return to firmer ground, Barrett is certainly right that our agency-detection systems are involved in the construction of religious concepts. But this explanation needs to be fine-tuned. Consider this: Like everybody else, you must have had many experiences of hyperactive agent detection—that is, of interpreting some noise or movement as indicating the presence of an agent. But in many cases it turned out there was no agent. So the intuition that there was one was quickly abandoned. This is natural. It makes sense to “overdetect” agents only if you can quickly discard false positives; otherwise you would spend all your time recoiling in fear, which is certainly not adaptive. But thoughts about gods and spirits are not like that. These are stable concepts, in the sense that people have them stored in memory, reactivate them periodically and assume that these agents are a permanent fixture in their environment. If Barrett’s interpretation makes senseand I think it does—we now have to explain how such overdetection, far from being abandoned when there is little evidence of the agents’ being around, is in fact maintained and becomes stable.

In particular, we need to see how some intuitions about agents in our surroundings are given a stable form by what people around us say about them. Kw aio people interpret some inexplicable shades in the forest as the presence of adalo. Many of my Fang acquaintances reported having seen an animal suddenly disappear in the forest, leaving no trace; and this for them meant that a spirit had taken the animal away. These experiences probably reinforce people’s sense that the supernatural agents really are around them. But note that the concepts were there to begin with, as it were, and mainly constructed on the basis of other people’s utterances. The Kw aio build most of their representations of adalo on the basis of what other people tell them rather than on direct experiences. The Fang interpret various events in the forest as the result of the ghosts’ presence but their ghost-concept is mostly informed by constant warnings of the wandering spirits’ menacing presence. Indeed, in both the Kw aio and the Fang cases, and in fact in most human groups, having such experiences is not even necessary. In a similar way, some Christians may have had experiences of God’s or the angels’ presence but most Christian concepts are not derived from that. It would seem, on the contrary, that it is the prior concept that makes sense of the experience rather than the opposite.
Guthrie and Barrett put us on the right track, because what makes gods and spirits so important really stems from our intuitive understanding of agency. But, as I emphasized in the previous chapter, many different mental systems are at work, producing particular inferences, when we think about counterintuitive agents. Indeed, this is where Guthrie’s remark is particularly apposite: supernatural concepts are salient because they generate complex inferences—that is, because they activate many different inference systems. So, accepting for the time being Barrett’s claim that agency-detection gives initial salience to concepts of barely detectable agents, how are such concepts made more stable and how is it that they matter to people? The connection to a predator-avoidance system may explain some of the emotional overtones of the religious imagination; but people also establish longterm interaction with religious agents. This is where other mental systems contribute their own inferences. To see this in a more precise way, let me take a detour again and describe imagined agents who are almost but not quite like supernatural agents.

**GODS AND SPIRITS AS PARTNERS:**  
**IMAGINARY COMPANIONS AND INVISIBLE FRIENDS**

Although we are not aware of it, the inference systems that manage our interaction with other people are full-time workers. We constantly use intuitions delivered by these systems. Indeed, we also use them when we are not actually interacting with people. All inference systems can run in a decoupled mode, that is, disengaged from actual external inputs from the environment or external output in behavior. A crucial human capacity is to imagine counterfactuals—What would happen if I had less meat than I actually have? What would happen if I chose this path rather than that one?—and this applies to interaction too. Before we make a particular move in any social interaction, we automatically consider several scenarios. This capacity allows us, for instance, to choose this rather than that course of action because we can imagine other people’s reactions to what we would do.

In fact, we can run such decoupled inferences not only about persons who are not around but also about purely imaginary characters. It is striking that this capacity seems to appear very early in children’s development. From an early age (between three and ten years) many children engage in durable and complex relationships with “imaginary companions.” Psychologist Marjorie Taylor, who has studied this phenomenon extensively, estimates that about half of the children she has worked with had some such companions. These imagined persons or person-like animals, sometimes but not always derived from stories or cartoons or other cultural folklore, follow the child around, play with her, converse with her, etc. One girl describes her companions Nutsy and Nutsy as a couple of birds, one male and one female, who accompany her as she goes for a walk, goes to school or gets in the car.

Taylor’s studies show that having long-term relationships with nonexistent characters is not a sign of confusion between fantasy and reality. Developmental psychologists now use precise tests to determine how children mark off the real from the fantastic. Those with companions pass such tests from the age of three and are often better than other children at differentiating between the real and the imagined. They know perfectly well that their friends the invisible lizard, the awkward monkey, or the amazing magician, are not there in the same sense as real friends and other people. Also, children with companions are often better than others at tasks that require a subtle use of intuitive psychology. They seem to have a firmer grasp of the difference between their own and other people’s perspectives on a given situation and are better at construing other people’s mental states and emotions.
All this led Taylor to the intriguing hypothesis that imaginary companions may well provide a very useful form of training for the social mind. The relationship with such a companion is a stable one, which means that the child computes the companion’s reactions by taking into account not just the imagined friend’s personality but also past events in their relationship. Taylor’s studies show that wishful thinking plays only a minor role in such fantasies. What the companions do or say is constrained by the persons they are, and this has to remain consistent and plausible even in this fantastic domain. A four-year-old has sophisticated skills at representing not only an agent where there is none but also an agent with a specific history and personality, with particular tastes and capacities different from one’s own. Companions are often used to provide an alternative viewpoint on a situation. They may find odd information unsurprising, or frightening situations manageable.

So it is extremely easy, from an early age, to maintain social relations in a decoupled mode. From an early age, children have the social capacities required to maintain coherent representations of interaction with persons even when these persons are not actually around and do not in fact exist.

It would be tempting at this point to drift into a not-too-rigorous parallel between such imagined companions and the supernatural agents with which people seem to establish long and important relations, such as guardian angels, spirits and ancestors. (Indeed, the very term imaginary companion used by modern-day psychologists seems to echo the phrase invisible friend [aoratos philos] used to describe the saints in early Christianity.) But the differences are as great as the similarities. First, for many people spirits and ancestors are emphatically not fantasies, there is a sense that they are actually around. Second, believers do not just construct their own decoupled interaction; they share with others information about who the spirits are and what they do. Third and most important, the tenor of people’s relations with spirits and gods is special because of one crucial characteristic of these supernatural agents, as we will see presently.

**STRATEGIC INFORMATION**

Interacting with other agents (giving or exchanging, promising, cooperating, cheating, etc.) requires a social mind—that is, a variety of mental systems specially designed to organize interaction. This is crucial because the social mind systems are the ones that produce the great similarity between supernatural agents and persons as well as the crucial difference that makes the latter so important.

We have inference systems that regulate social interaction; as we have seen, they carry out complex computations. Is this person a reliable partner or not? Is this news enjoyable gossip or bland information? Consider, for instance, a couple who are interviewing prospective babysitters for their children. Although they ask the candidate many explicit questions, it is quite clear that they are paying attention to (and drawing inferences from) all sorts of cues that have nothing to do, at least at first sight, with the business at hand. If the baby-sitter avoids making eye contact, if she starts ranting, if she blushes and produces incoherent answers when asked whether she is married, they will probably think that she is not suited for the job. If on the other hand she says she is a Mormon—what I describe here has been actually observed and studied by sociologists in the United States—they will form a much better impression. For the parents themselves, all this is mixed into a general “impression” that is either favorable or not, and it seems to be all based on a rather vague “feeling.” But note that the devices working in the mental basement are anything but vague. Cues like gaze-avoidance are particularly important to a feeling of reliability or trustworthiness between people. This system is found the world over, but it is
calibrated in special ways depending on where we live. (In the United States, eye contact is required; in other places it is aggressive if sustained; but in either case the system pays attention to this cue and delivers the appropriate inferences, without our necessarily being aware of it.) The reason why a Mormon babysitter is a good proposition for many Americans depends on local history, but again it requires some complex computation. The main explanation, the one people are aware of, is that a Mormon upbringing would give people desirable moral dispositions. But there is another important part of the story that is not available to conscious inspection. It is that it would be very costly for an immoral or unreliable person to stay a Mormon. That is, to carry on behaving in a convincing way toward other members of that particular community, thought to be rather strict on morals, when you have none of the corresponding dispositions would be very difficult and perhaps impossible. (I am not saying this actually is the case; but this is people’s intuitive assumption.)

Social mind systems handle a variety of cues present in any situation of interaction. But we must note that these systems handle only part of the information that is available to our minds. As people are talking to you, your mind also keeps track of where the person is, of your body’s position, of various noises around, etc. The same would be true for any other situation of social interaction. If a dinner conversation takes on an overtone of seduction, there is a massive production of complex inferences and conjectures (for example, “When she said she liked Much ado about nothing better than Romeo and Juliet, was that a subtle hint? But a hint at what?”) because inference systems specialized in a particular kind of social relations are activated and produce emotionally charged interpretations of what is going on. But, again, this is only part of the information the mind is handling. The brain is also dealing with other aspects of the scene—which is why, at least in most cases, people in such circumstances manage to stay on their chairs, swallow their food and indeed eat their dinner rather than the cutlery.

To repeat, information that feeds the social mind systems is only part of the information handled by the mind. It makes sense to distinguish between this socially neutral information and the specific information that activates the social mind inference systems. So here is a general definition: Strategic information is the subset of all the information currently available (to a particular agent, about a particular situation) that activates the mental systems that regulate social interaction.

If the baby-sitter’s manic facial expression, absent gaze and chainsmoking are noticed by the parents, then in that particular situation they are pieces of strategic information. If what she is wearing has no consequence for their social interaction systems—it does not produce any special inference about her reliability—it is not strategic information in that situation. If the literary preferences of your dinner companion have no special effect on the ongoing interaction, then it remains plain information; but it becomes strategic information if it triggers inferences about what to do next.

All this is simple enough but also introduces a salient difference between humans and most other animal species. Many animals exchange information that is relevant to interaction, to cooperation or exchange or mating. But in most cases it is very clear whether a given piece of information is strategic or not. For instance, there are in most species very clear signals to indicate willingness to engage in sexual activities. Hierarchy too can be the object of such unambiguous signals. In chimpanzees, males that want to challenge a leader and establish their own preeminence start screaming and shaking branches. When such a behavior is observed by other members of the band, it is a clear signal that what’s at stake is a political challenge. No
chimp would confuse that with a sexual proposition or an invitation to attack another band. For each domain of interaction, there is a specific range of signals.

In humans, there is just no way to predict whether a given piece of information is strategic or not. It all depends on the way the different parties represent the signal in question, the situation at hand, the person who emitted the signal and so on. Depending on how I represent the situation, that you have meat in your refrigerator may be nonstrategic to me (in most cases) or strategic (if meat was stolen from my pantry, or if I am hungry, or if you always declared you were a vegetarian). In all these latter situations, our interaction may be affected, however slightly, by the discovery. If I am hungry, I may want your meat; if you said you were a vegetarian, I may suspect that what you say about yourself is not always reliable; and so on. In the same way, that you went to the other village yesterday may be nonstrategic (if all I infer is that you were away) or strategic (if I suspect that you went there to meet a potential sexual partner). That you talked with so-and-so may become strategic if I suspect that the two of you are involved in some plot against me or a potential coalition with me.

Saying that some information is strategic only says that it was treated by a particular person’s inference systems for social interaction. The distinction between strategic and nonstrategic depends on a representation of the particular situation. It is in the eye of the beholder. No two beholders behold in quite the same way (and they may well be wrong too) so you cannot easily predict whether a given piece of information has these effects or not. To say that some information is strategic is not to say anything about the information itself but only about the way it is treated in the mind of the person who considers it. If you find this a bit abstruse, consider another term that is defined in this way: reminder. When we say that a particular object or situation is a reminder of something, we know that it can only be a reminder of a particular fact to a particular person. You cannot enter a room and say in advance which objects will be reminders. But given a particular person, some objects will be in that category, triggering a special memory activity. In the same way, some pieces of information will become strategic or not depending on a particular person’s representation of the situation at hand.

I use the word strategic because it is a standard term that refers to any situation where people make moves (adopt a certain attitude, say something) the consequences of which depend on other people’s moves. This technical term does not imply that the information in question is important or vital. For instance, people are generally interested in their coworkers’ sexual peccadilloes. This is strategic given our definition, as our social mind systems track gossip-worthy news and produce minor emotional rewards for acquiring and spreading it. But in most cases this information is of no importance. In contrast, knowing whether it is better to freeze or to flee in the face of particular predators is nonstrategic (it does not activate any of the special inference systems that regulate social interaction) but it is vitally important.

Now humans, being social organisms with complex interaction, not only represent strategic information, they also represent the extent to which other people have strategic information. For instance, given a particular situation where you have something that I want, I automatically form a representation not just of the fact that you have what I want but also that you may be aware of the fact that I want it, and that this may have some influence on your intentions, etc. Such complex inferences are supported by our intuitive psychology, which represents other people’s mental states and their access to information.

One fundamental principle of our intuitive psychology is that access to information is imperfect. Given a situation, and given some information about that situation, we do not automatically presume that this information is equally accessible to everyone. For instance, if I
remove your keys from your coat pocket while you are out of the room, I expect that you will not be aware of what I did. I expect that you will be surprised when you cannot find your keys. As we saw in Chapter 3, normal children from the age of four routinely solve experimental tasks that require evaluating such obstacles to information. That your keys are now in my pocket does not automatically imply that you know they are in my pocket. We do not need to run all this reasoning consciously because our intuitive psychology is an efficient system that does its work in the basement. This principle of “imperfect access to information” is so fundamental that not having it in one’s cognitive equipment results in pathologies such as autism.

This assumption applies to information in general and therefore to the subset of information that is strategic information. That is, given a particular situation and some information about it that is strategic to you (i.e., that activates your mental capacities for social interaction), you cannot automatically presume that other people, in particular other people involved in the situation, also have access to that information. This is the general principle of imperfect access: In social interaction, we presume that other people’s access to strategic information is neither perfect nor automatic.

Suppose you went to the other village last night for a secret rendezvous. The identity of the person you met is, at least potentially, strategic information for other people. (Again, it may be of no real importance.) Knowing that you met so-and-so would activate their inference systems and could change the way they interact with you. But it is not clear to you to what extent that information is available to other people. That is, you cannot presume that they know. Indeed, you may hope that they do not (for fear of scandal) or wish that they did (so you can brag about the romantic episode).

Humans generally spend a great deal of time and energy wondering whether other people have access to some information that is strategic from their own standpoint, wondering what inferences, intentions, plans, etc. these other people draw from that information, trying to control their access to such information and trying to monitor and influence their inferences on the basis of such information. All these complex calculations are based on the assumption that our own and other agents’ access to strategic information is complex and generally imperfect.

GODS AND SPIRITS AS SPECIAL PERSONS

The reason for going through these complex definitions and explanations is that if people consider gods and spirits agents with which they engage in interaction, then surely the cognitive systems that shape our regular interactions with other agents will inform interaction with supernatural agents too.

At first sight, interacting with them is very much like interacting with human agents, in that most of our ordinary inference systems are activated and produce their inferences in much the same way as usual. It is worth insisting on this, because this is what makes interaction with these rather discreet agents so natural. Gods and spirits have minds, so they perceive what happens; we can predict that they will remember what happened, that they will have particular intentions and do what it takes to get these intentions realized. More subtle aspects of social interaction seem also to apply to gods and spirits. As we saw in the Kwaio example described by Keesing, offering a pig to an ancestor when another ancestor was causing trouble was just a waste of one’s resources. The offended spirit would carry on making people sick until someone offered him a proper sacrifice. All this is quite natural; indeed the Kwaio diviner cited by Keesing only gives us an elliptic formulation of this reasoning, because all this goes without saying. But it goes without saying only if you apply the relevant inference systems.
More generally, all gods and ancestors and spirits are construed as beings with which we can interact by using our social inference systems. You pray to God because you want to be cured. This requires the assumption that God perceives that you are ill, understands that you wish to be better, desires you to be happy, understands what would make you happier, and so on. (Incidentally, prayers and other utterances addressed to gods and spirits require that such agents understand not only our language but also the way we use it. Saying “Dear God, it would be so much nicer if my relatives could get on with each other” implies that God knows how to translate this indirect form into the direct request “Please make my relatives get on with each other.”) Gods and spirits that want something in particular will often try to get it, they will be satisfied once they have it but not before that, they will retaliate if people try to cheat them out of it, etc. The fact that all these statements sound so trite shows how intuitive these assumptions are, if you apply the right inference systems.

So are ancestors and gods just like other people? Not really. There is one major difference, but a subtle one that is generally not explicit in people’s statements about these powerful agents. The difference is this: In social interaction, as I said above, we always assume that other people are agents with limited access to strategic information (and we try and evaluate the extent to which they have access to that information). In interaction with supernatural agents, people presume that these agents have full access to strategic information.

Supernatural agents are in general credited with good access to information. That they appear at several places at the same time or become invisible gives them the means to hold information that real agents have more difficulty acquiring. This does not mean that such agents are always considered wiser than mere mortals. The point is not that they know better but more simply that they often seem to know more. Indeed, in the many narratives (anecdotes, memories, myths, etc.) that include such agents as well as human ones, the scenarios in which a religious agent has information that a human agent does not possess greatly outnumber descriptions of the converse situation. God knows more than we know, the ancestors are watching us. More generally: In most local descriptions of spirits and other such agents, we find the assumption that they have access to information that is not available to ordinary folk.

What is made explicit is most often a vague assumption that the spirits or the gods simply know more than we do. But it seems that people in fact assume something much more specific, namely that the gods and spirits have access to strategic information (as defined here) rather than information in general. Kwaio people’s statements about their ancestors highlight this. At first sight, what they say would seem to confirm that ancestors simply know more: “The adalo see the slightest small things. Nothing is hidden from the adalo. It would be hidden from us [living people, but not from them]”; or again “an adalo has unlimited vision.” But when people illustrate these statements, notice how they immediately move from “agents who know more” to the much more specific “agents who know more about what is strategic”: “An adalo has unlimited vision ... something happens in secret and [the adalo] will see it; [if] someone urinates, someone menstruates [N.B., in improper places: doing this is an insult to the ancestors] and tries to hide it, ... the adalo will see it.”

In other words, although you can say that the adalo in general see what humans cannot see, what first comes to mind is that they can detect behaviors that would have consequences for social interaction: someone who has polluted a particular place puts others in danger and should perform appropriate purification rites. Whether someone did violate these rules or not is clearly strategic information. When people represent possible violations, this activates their inference systems for social interaction. For them, it also goes without saying that it is that particular kind
of information that the *adalo* have access to. It may be hidden to people (this is the “imperfect access principle”: people’s access to strategic information is not guaranteed) but not to supernatural agents (they have full access).

Here is another example of the salience of strategic information. The shamans are special, say the Batek of Malaysia, because they can turn themselves into tigers with human heads, and then also make themselves invisible! This may sound like a straightforward example of counterintuitive qualities. But then comes the crucial consequence: because they are now invisible and fly about as they wish, were-tiger shamans can eavesdrop on people’s conversations. Nothing that happens can be hidden from them.\(^8\)

This is in fact the way people represent ancestors and gods the world over. People experience particular situations. Some information about these situations is strategic, that is, activates their inference systems for social interaction (cheating, trust evaluation, gossip, social exchange, coalition building, etc.). They also represent that there are supernatural agents around. Now they spontaneously assume that these agents have access to all the strategic information about that particular situation, even though they themselves may not have access to all of it.

An interesting limiting-case is the concept of gods who know *everything*. The theological, literary version of such concepts stipulates that the god has access to all information about the world from all possible angles. But we know that people’s actual concepts often diverge from theological understandings, as Barrett and Keil demonstrated, so we may wonder whether people actually represent gods as literally omniscient. If they did, they would assume that all pieces of information about all aspects of the world are equally likely to be represented by God. So the following statements would be quite natural:

- God knows the contents of every refrigerator in the world.
- God perceives the state of every machine in operation.
- God knows what every single insect in the world is up to.

In fact, they seem much less natural than these:

- God knows whom you met yesterday.
- God knows that you are lying.
- God knows that I misbehaved.

Note that it is all a matter of context. If you are in a context where the first statements actually refer to some strategic information, then they will seem natural. God may in fact be thought to represent the contents of your refrigerator (if that includes items you stole from your neighbors), the state of some machines (if you use them to harm people) and the behavior of insects (if they are a plague we wished upon the enemy). In such situations that information is strategic. Intuitively, people who represent such situations immediately assume that God represents the information that is strategic to them.

So there is a general difference between our intuitive representation of humans we interact with and our intuitive representation of supernatural agents. The latter are *full-access strategic agents*—agents whom one construes as having access to any piece of information that is strategic. That is, given a particular situation, and given some information that activates one’s inference systems, one assumes that the full-access strategic agent has access to that information.

At this point we might think that we are reading all sorts of complicated thoughts into people’s rather simple representation of gods and ancestors as powerful beings. But that is not the case. The complex inferences about what is and what is not strategic, whether another agent represents it or not, etc., are complex only if you try and follow them explicitly, as steps in a conscious reasoning. But this is not the way such inferences are produced in human minds.
The distinction between strategic and other information may seem alien: we never make this distinction explicitly. But that does not mean we do not make it. On the contrary, social psychologists have gathered a great deal of evidence to suggest that people in any given situation are particularly attentive to cues that are relevant to social interaction and treat these cues differently from other information. That this is mostly beyond conscious access is not very surprising, because most of our inference systems work like that. Consider, again, our intuitive physics and goal-directed motion systems. When you see a dog chasing prey both systems are activated and focus on specific cues. The “physics system” predicts, for instance, that the dog will hit the fence if he does not change trajectories; the “goal-directed motion” system notices that the prey has suddenly changed direction and predicts that the dog will do the same. Each system carries out its computations to produce intuitive expectations. But we have no conscious rule that tells us to separate what is purely mechanical from what is goal-directed in the situation at hand. In the same way, we need no rule to tell us to pay special attention to aspects of this situation that may be relevant to our interaction with the other parties. We do not need this because our inference systems just track that information and handle it in a special way.

The assumption that gods and spirits are full-access agents, that they have access to whatever information is strategic in a particular situation, is not made explicit and need not be transmitted explicitly. As I said in the previous chapter, many important aspects of supernatural concepts are not, strictly speaking, transmitted at all. They are reconstructed by each individual in the course of acquiring the concept. You are not told that spirits can perceive what happens, or that they can differentiate between their wishes and reality. You infer that spontaneously. In the same way you need not be told that the gods (or spirits or ancestors) have access to whatever is strategic in any particular situation. You only hear sentences like “The spirits are unhappy because we failed to sacrifice a pig for them” or “If someone urinates in a house, we humans cannot see it; but that makes the adalo very angry.” Interpreting such statements requires that the adalo (or whatever supernatural agent people in your group talk about) have access to strategic information.

The supernatural agents’ extraordinary powers vary a lot from place to place. Sometimes the spirits or gods are said to be invisible, sometimes they live in the sky, sometimes they go through walls and sometimes they turn themselves into tigers. In contrast, the qualities that allow full access to strategic information are always there. This may explain what missionaries found so puzzling in African religion: that you can have a concept of an all-powerful Creator-god and pay no attention to him.

In traditional Fang religion the ancestor-ghosts are presumed to have access to strategic information. When people represent a particular situation and the strategic information about that situation, they automatically assume that the ancestors know about it. This is the basis of their inferences and actions toward the ancestors. All this is very similar to the Kwaio situation. In contrast, Mebeghe the creator of natural things and Nzame the creator of cultural things are not represented as having such strategic information. People have no intuition about whether these gods represent information about situations; there are no anecdotes that require this assumption to make sense. When missionaries managed to persuade some of the Fang that Nzame actually has all this information, that Nzame—God knows about what people do in secret to other people and knows all they know, these Fang found it natural to direct rituals, sacrifices and prayers to Nzame (although the missionaries were often less than happy at the unorthodox way in which people adapted Christian notions, but that is another story). The powerful gods are not necessarily the ones that matter; but the ones that have strategic information always matter.
RELEVANCE IN CULTURAL TRANSMISSION

What is the motivation for having concepts of gods and spirits? It is always tempting to assume that there must be a special reason why people conceive of agents with counterintuitive properties. In general this temptation leads to purely imaginary solutions. There must be a desire to include the whole cosmos in some explanation, to make life more meaningful, etc. We have no evidence for these general propensities. As I suggested in Chapter 1, it makes more sense to start from what we actually know about religious representations as well as about human minds and the way they function.

People do not invent gods and spirits; they receive information that leads them to build such concepts. Particular systems in the brain specialize in particular aspects of objects around us and produce specific kinds of inferences about them. Now we may wonder what “pushes” the systems to pay attention to particular cues in our surroundings and to produce inferences. Part of the answer is that such mental systems are driven by relevance. To illustrate this point, let me mention a domain where the consequences of relevance are extremely stable and predictable.

Most people born and brought up in modern urban environments have very limited biological knowledge. They can name only a few common species, they have only the vaguest notion how most animals feed, where they sleep, how they reproduce, etc. People who live in a forest environment, on the other hand, generally acquire a huge amount of precise knowledge of plants and animals. Does this mean that the inference systems concerning living things are different in these two situations?

Anthropologist Scott Atran and his colleagues thought this hypothesis should be tested in controlled experiments with Michigan students and Itza Maya villagers in Guatemala. They did find the obvious differences in richness and complexity of biological knowledge. The Michigan students, for instance, generally identified pictures of birds as “birds.” They knew a few names for species of birds but generally were incapable of recognizing them from a picture and could not say anything about their particular behavior. The Itza always identified birds in terms of particular species and knew a lot about what makes them different.

However, in both groups, it is assumed that living things come in different, exclusive groups with special characteristics and that the most important groupings are at the level of species rather than ranks or varieties. In one of Atran’s experiments, people were told about a bird of a new species and told that it could catch a specific disease. All this had been designed so that both the species and the disease would be new to the subjects. They were then asked whether the disease would also affect other animals, ranging from other members of the same species to close species, to different kinds of birds, to mammals and insects. Similar tests were then conducted with other properties, for example, by telling subjects that a certain animal had a certain internal organ or a certain kind of bone, etc. In such contexts, Michigan students and Itza Maya react very much in the same way. They assume that behavior is usually stable within a species but that diseases can affect closely related species in similar ways, and that internal structure can be similar in large animal families.

For Atran, this confirms that taxonomy is a powerful logical device that is intuitively used by humans in producing intuitive expectations about living things. People use the specific inference system of intuitive biological knowledge to add to the information given. They are told that “this cow aborted after we fed it cabbage” and conclude that other cows could be similarly affected, but perhaps not horses or mice. They are told that this rodent has a spleen and conclude that other mammals may have that organ too, but not worms or birds. (Biological inferences are not always valid. What matters here is how they are created.) This is what we call an enrichment of
intuitive principles. This form of acquisition, filling out empty slots in templates provided by intuitive principles, is very general. It applies not just to biological knowledge but also to theories of personality, to local models of politeness, to particular criteria of elegance, and so on.\textsuperscript{10}

How does the system “know” which bits of information to send to which inference systems? In the case of the sick cow and the cabbage, there may be a lot of information about this situation (e.g., the fact that the cow in question was stolen, that it aborted on a Tuesday, that cabbage is green) that is simply not sent to the taxonomy inference system. But when information about the cow circulates through various inference systems, some of them produce some inferences because the information meets their input conditions, and others do not. Information is attended to inasmuch as there is some inference system that can produce something out of it.

We can in fact go further and say that information in the environment is attended to as a function of the inferences various systems can produce from it. It is a general aspect of inference systems, especially the very abstract ones that are particularly relevant to religious concepts, that they are driven by relevance. This notion was first formulated by Dan Sperber and Deirdre Wilson in studies of verbal communication, but it provides a very useful tool in the description of cultural acquisition.

\textbf{ANTHROPOLOGICAL TOOL KIT 4: RELEVANCE AND TRANSMISSION}

Human verbal communication is not a code-deciphering operation. Every utterance is compatible with many different interpretations, and a listener’s task (or rather the listener’s brain’s task) is to infer an optimal interpretation, via a description of what the speaker intended to convey. This can in general be done if the interpretation chosen is one that produces more inferences than others or requires fewer inferential steps, or both. More generally, an optimal interpretation is one that corresponds to a higher inferences/inferential steps ratio than other available interpretations.

The technical aspects of relevance theory are not important here. What is important is that the principle gives us a good approximation of how cultural information can become more or less successful. Some types of cultural input are easily acquired because they correspond to intuitive expectations. In this case the inferential effort required to assimilate this material is minimal. If you are told that poodles are a type of dog, it is very easy to assimilate the consequences of this fact, because the living-beings-as-essential-classes system described by Atran is already in place.

This is quite clear in the domain of supernatural concepts too. As I mentioned in Chapter 2, there is a small catalogue of templates. Individual imagination may expand beyond this catalogue but concepts that do not correspond to one of our templates are usually found in marginal beliefs rather than mainstream ideologies, and in obscure theological scholarship rather than in popular representations. The concepts built according to these templates were built by relevance-driven inference systems. Someone tells you that there is an invisible presence of the dead in the forest and your intuitive psychology inference system produces all sorts of inferences about what they know and what they want, on the assumption that their minds are like ours. You are told that this statue can listen to you, and that too affords inferences only if your intuitive psychology produces them. So it is quite natural that supernatural ideologies revolve around invisible gods with a normal mind rather than invisible gods with intermittent existence.

We like to think that we have certain concepts or hold certain beliefs because it is in our interest, because they seem rational, because they provide a sound explanation of what happens around us, because they create a coherent worldview, and so on. But none of these views explains what we actually find in human cultures. It seems more plausible that cultural
transmission is relevance-driven. That is, concepts that “excite” more inference systems, fit more easily into their expectations, and trigger richer inferences (or all of these) are more likely to be acquired and transmitted than material that less easily corresponds to expectation formats or does not generate inferences. We do not have the cultural concepts we have because they make sense or are useful but because the way our brains are put together makes it very difficult not to build them.

**RELEVANCE OF FULL-ACCESS AGENTS**

The fact that most concepts of gods and spirits include this full-access assumption is a result of cultural selection. Over thousands of years, indeed over many thousands of years and in many different social groups, human minds have entertained a huge number of individual representations of gods and spirits. These probably varied and still vary along many dimensions. How does all this affect the way people build concepts on the basis of what others tell them? The presence of such systems has a simple consequence: People build concepts in ways that activate their inference systems most and produce the richest set of inferences with the least cognitive effort. Now compare three possible varieties of supernatural agents:

*Divine brutes:* They know nothing about what is going on but can make you sick, make your roof collapse or make you rich, quite inadvertently.

*Full Aquinas agents:* Their minds represent every single fact about the world.

*Full strategic agents:* If some information is strategic to your inference systems they have access to it.

The first two types are not common, for obvious reasons. Brutes are easy to understand, but their representation generates no inferences. Given a choice between two possible courses of action, the presence of a brute makes no difference. So-called Aquinas agents do make a difference; but then, figuring out what they know would be costly. For every aspect of every situation, you would have to imagine that the Aquinas agent represents it, derives conclusions from it, etc. Very few of these imagined thoughts would be of any consequence. (If a god knows that my toothpaste contains peroxide, what follows?) This is why, even in places where the official theology describes an Aquinas agent, people’s actual intuitions do not follow this complicated route, as Barrett and Keil’s experiments showed. I am not suggesting that people could not entertain the notion of a divine brute or Aquinas agent. I am just saying that over a huge number of cycles of acquisition and transmission of cultural material (stories, anecdotes, explanations of events, comments about situations, etc.) the concepts of full-access strategic agents enjoy a certain selective advantage, all else being equal, and that this is sufficient to explain why they are more frequently encountered than others. So what is this cognitive advantage?

It seems, first, that such concepts are relevant because they require less effort to represent than possible alternatives, given the way our cognitive systems work. Remember that we always assume that other people’s access to strategic information is imperfect and we therefore constantly run complicated estimates of what they know, how they came to know it, what they conclude from it, etc., given the obstacles between facts and their knowledge of these facts. I talked to so-and-so yesterday but perhaps you do not know that, because you did not see the people who saw us together, or you met people who would not tell you, etc. Conceiving of what the full-access agents know means running all these estimates minus the obstacles, that is, going straight from “I met so-and-so” to “The ancestors know that I met so-and-so.”

But there is more. Concepts of full-access agents do not just require less effort but also generate richer inferences than other supernatural concepts. To illustrate this, consider the notion, especially widespread in the United States, that aliens from some remote galaxies
periodically pay a visit to Earth, contact people, deliver stern warnings to humankind or recruit unwilling participants in bizarre medical procedures. Anthropologists Charles Ziegler and Benson Saler have documented the spread of such ideas, showing that these beings are often described in a way that is very similar to religious agents. Stories such as the infamous Roswell incident—in which an unidentified craft supposedly crashed in New Mexico, leaving behind the charred remains of several aliens—bear all the hallmarks of what anthropologists call mythical elaboration, the gradual construction of a “good” story out of not-so-perfect initial versions by changing some elements, reordering the sequence, eliminating episodes that do not contribute to the general meaning, etc. Also, the popular version of aliens—they have knowledge we do not possess, they have counterintuitive proper ties, they have huge powers (give or take the occasional aeronautical mishap)—would make them very similar to most versions of supernatural agents.

Yet, as Saler and Ziegler point out, this is not quite like religion as we commonly know it. Although many people seem to accept the existence of such beings and the surprisingly efficient governmental cover-up, there are no specific rituals directed at the aliens, the belief seems to trigger in most people no deep emotional commitment, no significant change in lifestyle, no intolerant notion that we are better because we believe in aliens. If I may speculate, I would add that in the most popular version these aliens are not described as having what I just defined as strategic knowledge. That is, although the aliens are described as smart fellows with advanced knowledge of physics and engineering, this somehow does not seem to trigger the inference that they know that my sister lied to me or they know that I filed an honest and accurate tax return. The way believers acquire and represent the “evidence” for alien visits seems to have no bearing on individual behavior.

In contrast to this, a small number of people actually represent aliens in the same way as gods and spirits. In some cults what the aliens know and want makes a huge difference to people’s lives. What you can do and how you do it, the way you live and the way you think are all informed by thoughts about the aliens. This generally happens because an impressive character managed to convince followers that he (less often she) had some direct contact with the visitors, and also managed to trigger the inference that they have strategic access. What matters to the followers’ inference systems—how to behave, what choices to make, etc.—is then affected by the aliens’ viewpoint on these choices and behaviors.

**Consequences of Full-Access Agents**

Given this expectation of full access, it is not surprising that in many human groups people are concerned with other people’s views of religious agents. To assume that there is a fully informed agent around is likely to change my behavior. But then if others assume that there are such agents it will change their behavior too, which is why their representations are of great interest to me. This is one aspect of religion that we cannot understand if we stick to the common idea that gods and spirits are just very powerful persons who can move mountains, send people plagues or good fortune. If that was the main feature of gods and spirits, we could understand why they mattered to a believer; but we could not explain why believers are often so keen to know whether they matter to other people.

We could translate this complex cognitive argument into more familiar terms by simply saying that “people assume that the gods know what is important; if some information is important people assume the gods will know it.” But this trite summary would miss the crucial point. What is “important” to human beings, because of their evolutionary history, are the conditions of social interaction: who knows what, who is not aware of what, who did what with
whom, when and what for. Imagining agents with that information is an illustration of mental processes driven by relevance. Such agents are not really necessary to explain anything, but they are so much easier to represent and so much richer in possible inferences that they enjoy a great advantage in cultural transmission.

Notes: