

ORIGINAL ARTICLE

Counting hiddenness: cognitive science and the distribution of belief in God

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Abstract

Establishing the distribution of belief in something, especially something that spans cultures and times, requires close attention to empirical evidence and to certain inadequacies in our concept of belief. Arguments from divine hiddenness have quickly become one of the most important argument types in the philosophy of religion. These arguments and responses to them typically rely on robust but relatively undefended empirical commitments as to the distribution of belief in God. This article synthesizes results from psychology, anthropology, and the cognitive science of religion to show that the distribution of belief in God is much more messy and much more philosophically interesting than is currently appreciated. I then derive some implications for how one might reconceive the hiddenness debate in light of these findings.

Keywords: divine hiddenness; cognitive science of religion; religious diversity; nature of belief

The literature on divine hiddenness began, much like the contemporary discussion of the problem of evil, as a ‘logical’ problem, that is, as a discussion of whether certain kinds of non-belief, religious uncertainty, or ambiguity were logically consistent with the existence of God. As the hiddenness discussion moves in the direction of concerns more rooted in the amount or degree of hiddenness related phenomena, an empirical question raises its head. How much hiddenness is there? The answer, it turns out, is non-trivial and important.

In the first section of this article, I show the way in which belief plays a critical role in the hiddenness literature. In the next section, I use the cognitive science of religion and related sciences to show that, while belief in God is not innate in any ordinary sense, there is strong evidence that human beings are disposed to folk religion, even though the nature of folk religion is not entirely convenient for the theist. In the penultimate section, I look at how empirical considerations allow us to nuance our understanding of religious diversity. I argue that ‘belief in God’ is a convenient stand-in for a set of reflective, intuitive, affective, and behavioural dispositions that lack any clear dividing line between two things that can be uncontroversially labelled ‘belief’ and ‘non-belief’. In the final section, I tease out the implications of this position for framing and adjudicating divine hiddenness arguments.¹ This article will not, by itself, try either to defend a particular formulation of hiddenness argument as best or to defeat such arguments as a class. Rather, it

hopes to open new dialogical terrain by attending closely to a foundational piece of the discussion, namely the empirical picture of who is cognitively committed to God's existence and what that means.

Hiddenness arguments and belief

If God is a personal being, then one should expect that relating to God would be like relating to a human person in at least some important respects. If two people are to have a good relationship, then something is required of each of them. At a minimum, they must be attentive, responsive, and well-disposed to the other person at least within a range of contexts relevant to the relationship. Within the major theistic religions, we are told that the relationship between God and human beings is analogous to our closest and most intimate relationships. An especially common image is to depict God as being like a father. One might challenge the aptness of this analogy on any number of grounds. A good father would not let their child languish in poverty, illness, or chronic pain if it were in his power to prevent it, yet the world contains each. Likewise, a child should know their father loves them. Clearly, not all humans know any such thing of God.

Hiddenness arguments, however, have focused disproportionately on one parallel, one that most of us take for granted. Having a relationship with another person presumes believing they exist or so one might well think, but, of course, many people do not believe that God exists. Therefore, these people who do not believe in God do not have a relationship with God. They are not simply estranged from their heavenly father. They do not even know they have one even though one would think God, if God existed, could easily let them know.

Here is a 2015 version of John Schellenberg's argument from hiddenness.

1. If God exists, then God is perfectly loving toward such finite persons as there may be.
 2. If God is perfectly loving toward such finite persons as there may be, then for any capable finite person *S* and time *t*, God is at *t* open to being in a positively meaningful and reciprocal conscious relationship (a personal relationship) with *S* at *t*.
 3. If God exists, then for any capable finite person *S* and time *t*, God is at *t* open to being in a personal relationship with *S* at *t*.
 4. If for any capable finite person *S* and time *t*, God is at *t* open to being in a personal relationship with *S* at *t*, then for any capable finite person *S* and time *t*, it is not the case that *S* is at *t* non-resistantly in a state of non-belief in relation to the proposition that God exists.
 5. If God exists, then for any capable finite person *S* and time *t*, it is not the case that *S* is at *t* non-resistantly in a state of non-belief in relation to the proposition that God exists.
 6. There is at least one capable finite person *S* and time *t* such that *S* is or was at *t* non-resistantly in a state of non-belief in relation to the proposition that God exists.
- Therefore, it is not the case that God exists. (Schellenberg 2015, 24–25; spelling modified)

Belief features prominently in premises 4–6. The first three premises seek to establish that God's perfect love would require such a being to be open to a personal relationship. The argument then focuses in on non-belief as the phenomenon that proves that no such perfectly loving God exists, the reason being that God would know that an absence of belief precludes personal relationship.

Schellenberg explains the connection of belief to personal relationship as follows.

After all, a personal relationship is a conscious, reciprocal relationship, and a conscious relationship is a relationship one recognizes oneself to be in. Given these facts, one clearly cannot even get started in a personal relationship without *believing that the other party exists*. Now belief, as most contemporary philosophers would agree, is involuntary in the sense that one cannot choose to believe something at a time just by trying to. So by not revealing his existence B is doing something that makes it impossible for A to participate in a personal relationship with B at the relevant time even should she try to do so. (Schellenberg 2015, 23; italics in the original)

The focus on belief in God is not because belief is sufficient for relationship with God but because it seems like a precondition for it. Moreover, one would think it would be a straightforward matter whether or not someone believes in God. It's the sort of thing one can just ask about in a survey.

Schellenberg's work has been at the centre of the hiddenness literature, and so his argument from non-belief has received the most attention of the atheological arguments in the vicinity. The second most prominent hiddenness argument comes from Stephen Maitzen, and it too in a different way focuses on belief. Whereas Schellenberg claims that any qualifying case of non-belief proves on its own that God does not exist, Maitzen points more overtly to the distribution of belief in God. Given the way that theists and non-theists clump in different places, the best explanation for the distribution of theistic belief is that it tracks something cultural rather than the truth.

Maitzen lucidly summarizes his case as follows.

According to the argument from divine hiddenness (ADH), God's existence is disconfirmed by the fact that not everyone believes in God. Over the years the argument has provoked an impressive range of theistic replies, and the topic has become the subject of a lively current debate. However, none of these replies has overcome – or, I suggest, could overcome – the challenge posed by the uneven distribution of theistic belief around the world, a phenomenon for which naturalistic explanations seem more promising. The 'demographics of theism' not only confound theistic explanations of non-belief in God; they also cast doubt on the existence of a *sensus divinitatis*, the awareness of God that theologians in the Reformed tradition claim is innate in all normal human beings. Furthermore, these facts make ADH in some ways a better atheological argument than the more familiar argument from evil. (Maitzen 2006, 177)

Maitzen uses this memorable illustration to underline how dramatic the demographics in question can be.

Contemporary demographic data illustrate the lopsided distribution of theistic belief. The populace of Saudi Arabia is at least 95 per cent Muslim and therefore at least 95 per cent theistic, while the populace of Thailand is 95 per cent Buddhist and therefore at most 5 per cent theistic. The approximate total populations are 26 million for Saudi Arabia and 65 million for Thailand. Presumably these samples are large enough to make the differences statistically significant and not merely a statistical blip that would disappear if we took an appropriately long view of the matter. If those data are even roughly accurate, the distribution of theistic belief is at least highly uneven between those two countries, and they are hardly unique in this respect. (Maitzen 2006, 179–180)

Once again, clearly the argument is given in terms of belief. The distribution of anything else is relevant only insofar as it bears on whether or not it can help us tell a naturalistic or theistic story about why the distribution of belief is what it is.

A third atheological argument worthy of note is that of Jason Marsh who draws our attention to pre-history. He says,

Early humans, including many anatomically and behaviorally modern humans, originally lacked a concept of God and were religiously restricted to concepts of limited, and sometimes mean, supernatural agents. As a result, many [such humans] failed to believe in God or anything like God. The nonbelief in question was both naturally occurring and nonresistant. (Marsh 2013, 359)

The thought here is that there is a chronological bias in the distribution of belief in God. If we go back far enough in history, we will find *Homo sapiens* (and perhaps other hominids) who predate the concept of God but who do not seem relevantly different from present-day humans at least when it comes to being able to host a belief that God exists.

Maitzen and Marsh are focused on the distribution of theistic belief overtly, but there is reason to believe that one should care about the distribution even if one were more narrowly focused on Schellenberg's version of the problem. Consider first the fact that it is important to Schellenberg to give us a number of categories within which candidate cases of non-belief can be found – the regretful former believer, the informed but disinterested modern atheist, the person who has never heard of God (cf. Schellenberg 2015, 76ff.; 2007, 205, 228ff.). Even though his argument is set up in such a way that one qualifying case would do, that argument has to be seen within its encompassing philosophical dialectic. Theists have provided various candidate reasons why God might allow non-belief or why someone might be more resistant to belief than they think they are.² By providing a number of different kinds of cases, Schellenberg puts pressure on the theist to provide a response that could cover all of the candidates. Providing what is, in effect, a typological distribution of cases of qualifying non-belief is important to Schellenberg because it renders less plausible the idea that any given theistic response can cover the gamut of cases and makes a mixed theistic response that takes very different lines to cover all the cases look ad hoc.

There have been other attempts to analyse arguments from hiddenness, and Schellenberg's in particular, by looking closer at what it means to believe in God. For example, if we thought of belief in terms of credences, which come in degrees, more people might count as believing in God's existence (Poston and Dougherty 2007). If states other than belief such as acceptance, non-doxastic faith (Howard-Snyder 2016), or hope count as good enough, then more people would have a relevant cognitive stance vis-à-vis the proposition that God exists. These points are valid as far as they go, but they are primarily conceptual points about what other states can do the kinds of things that belief is normally thought to do. It is still the case that we must get a little closer to the ground empirically to know what the distribution is whether of belief or of a more expanded set of belief-like states.

Now that I have made a case for the importance to the literature of the distribution of belief in God, let us see what can be said about it empirically.

Is belief in God innate?

Many theological traditions would not grant Schellenberg even one case of non-resistant, non-culpable non-belief. For Jonathan Edwards, in a well-trodden quotation in the hiddenness literature, disbelief in 'divine things' would be an instance of 'a dreadful stupidity of

mind, occasioning a sottish insensibility of their truth and importance' (cf. Wainwright 2001, 102). John Calvin famously claims that we have within us a *sensus divinitatis* which promotes belief in God.³ Though accounts certainly differ, one finds the reoccurring claim across Christian and other monotheistic traditions that some kind of awareness that God exists is easy and ubiquitous even if not inevitable.⁴ The hiddenness debate notwithstanding, one gets the strong impression that theists down through the ages have been convinced that all human beings are well-situated to believe that God exists.⁵ The cognitive science of religion (CSR) paints a more complicated and multifaceted picture, however.

Agency detection is, arguably, the most fundamental form that social cognition takes. Without the ability to detect agency in one's environment, any further ability to think about agents would be rendered useless. The cognitive science of religion has made much of the ease with which agency detection can be triggered. Stuart Guthrie, in the early days of the field, revived the traditional critique of religion as an exercise in anthropomorphic projection (e.g. Xenophanes' 'horses would draw the figures of the gods as horses') (Guthrie 1993). We, of course, can see faces and figures in non-agential stimuli, either with amusement or in superstitious earnest. When we see a mannequin in our peripheral vision, it can take us a second to realize it is not a real person, for instance. Moreover, some of the ways we talk at recalcitrant computers and cars at least raises the question of whether we are importing social schemas in how we react to them.

Experiments have investigated the conditions under which we experience a scene as populated by agents. The classic, grandfather of the field is a Heider and Simmel simulation in which basic shapes move across a screen in ways conditional upon the movements of other shapes or at random (Heider and Simmel 1944). It turns out that it is quite easy to move shapes in relationship to each other so as to suggest to the viewer that the shapes are agents with beliefs, desires, perceptions, and the like who interact in light of those mental states. An experiment with this set-up will convey the impression of agency even if the 'agent' is a cluster of shapes that move together but don't touch or even if the agency depicted 'switches bodies' (Bloom and Veres 1999; also Chudek et al. 2018). Likewise, very young children will treat a novel object like an agent if it lights up or moves in a way that is readily interpretable as goal-directed or affect laden. In light of findings like this, our ready ability to detect agency in even novel forms was given the label HADD (for 'hypersensitive agency detection device').⁶ Using evolutionary psychology, it is common for people in CSR to posit that HADD is adaptive because it allows one to avoid becoming the lunch of a hidden predator at the reasonable cost of a few false positives. Likewise, it could facilitate the detection of prey or avoidance of ambush by competitors within one's species. If we do easily project or detect agency, then the thought is that this disposition might play an important role in generating religious experiences or concepts. A sensitivity to a hidden predator or even simply a hidden agent could be the foundation upon which we come to conceive of unseen agents who reveal themselves when they choose and thence gods and ancestors.⁷

Agency detection sets in quite early. Even in infancy, a child is very good at distinguishing between agents and non-agents, even if it is impossible to probe what the infant experiences when it, say, attends selectively to mum and takes comfort in her presence.⁸ Toddlers and young children show a standard progression in how the social mind develops an articulable understanding of other agents and what they can do. One of the most famous tools in this literature concerns what is called the false belief task. In a false belief task, a child must be able to recognize and keep track of the fact that, in the scenario, the way reality appears to another person is not the way the child knows it to be (e.g. maybe there are rocks in a candy box the other agent hasn't looked into or a cookie jar's location has been moved when the agent wasn't there). Children only start to talk

reliably about another agent in terms of their false beliefs at around three and half.⁹ The false-belief literature shows that a child acquires an ability to recognize and act on the fact that other people know things about the world, but they acquire it before they can qualify their understanding of another person's beliefs in light of that other person's limitations. Understanding the limitations of other knowers is something a child must grow into over time.

Belief is not the only domain like this. The general pattern of child development is that a child's understanding of other agents' limitations trails behind their positive conceptions of what other agents can do. This pattern is conducive to not simply neglecting one thing while getting another right but to over-attributing abilities. Dad is not just strong; he's the strongest person in the whole world. Mum is not just able to fix many things; she's the fixer. Some theorists detect in this developmental pattern a readiness to believe in agents with special properties, agents who lack limits that the rest of us have. It is not that hard to imagine an agent who is super-knowing; after all, you have to grow out of just such a way of thinking about others.

This developmental pattern has suggestively been called a 'preparedness' to believe in God, though one need not interpret the term theistically (Barrett and Richert 2003; also Barrett 2012). Rather, human cognition and its development lends itself to developing the concept of a god.

At the same time, it should be noted that there is a significant gap between the dispositions I am drawing attention to and a disposition to endorse the official God concept of any major modern monotheism. Being super-knowing is not the same as being omniscient. Being super-capable or super-strong is not the same as being omnipotent. And so on. In fact, if one were to look across cultures and across time, most anthropologists agree that polytheism, not theism, is the most common way of thinking about extra-natural reality.¹⁰ Polytheistic gods, by and large, are more likely to be super-knowing than omniscient, more likely to be super-capable than omnipotent. Though polytheistic systems may have a creator god or a ruling god, whether any god in the pantheon is interestingly analogous to a monotheistic god depends on further cultural factors.

Suffice to say, we may be innately disposed to believe in one or more gods more so than 'God'. I am not claiming that polytheism is innate per se. Rather, insofar as we may have a disposition to posit gods and since monotheism (aka just one god) is a more restrictive proposition than polytheism (aka any number of gods other than one), it makes sense that polytheism would, all other things being equal, occur more frequently than monotheism. That does not mean that monotheism is not one of the positions that coheres well with our innate dispositions, but one can certainly affirm that even if monotheism has a developmental advantage over atheism, it certainly is not inevitable that a human being will believe in God. This is not to say that children would come up with stable god concepts of any sort on their own. There is some evidence that children tend to hold explanations of phenomena in terms of extra-natural agents lightly or at least flexibly until they have been thoroughly enculturated. It may take exposure to a community of adults expressing with conviction that a particular god exists and acting accordingly for a child's innate susceptibility to belief in extra-natural entities to attain stability and specificity.¹¹ In fact, insofar as there is a range of expression for our mentalizing dispositions and belief in extra-natural agents is one expression of them, one might very well expect a certain minority of the population in all times to be doubtful, sceptical, apathetic, or disbelieving in the existence of whatever God, gods, ancestors, or spirits the majority are disposed to believe in (cf. Norenzayan and Gervais 2012), although to what extent such 'natural disbelief' made atheism in the modern sense available in the past is debated (cf. Whitmarsh 2016).¹²

One other area in which children seem developmentally disposed to be friendly to religion has to do with teleological reasoning (Keleman 2004; Keleman and Rosset 2009). Children find it very natural to ascribe a purpose to things and find such explanations of why things are the way they are compelling. This impulse does not extend just to artefacts that humans make (e.g. the shoe has a hard bottom so you can step on poky things). It also is very easily extended to animals, plants, and even non-living things (e.g. the rock is poky so no one will sit on it).

Much as it is easier to conceive of a person as knowing or even super-knowing than as being limited in knowledge, so it is more natural for us to think of things as endowed with a purpose than to think of them as simply existing.

One of the things we endow with purpose in a robust cross-cultural way is events where someone is benefited or harmed, that is, cases of fortune and misfortune (Cf. Boyer 2001, ch. 5). It is easy for human beings to conceive of harm as having been intentionally inflicted and therefore demanding an explanation in terms of intent, even when there is no obvious human candidate (e.g. a termite-infested granary happening to collapse while a family is inside, Evans-Pritchard 1976, 22–23). We are especially inclined to find purpose in misfortune when it appears proportionate to some putative misdeed (Baumard and Chevallier 2012). One might think of this as a special application of our disposition to see purpose in things. While one might think this disposition nicely accords with a doctrine of providence, fortune and misfortune do not necessarily track some putative overarching divine plan. The idea that someone might use special objects or renegade rituals to forward someone's private good at the expense of the common good (i.e. witchcraft, magic or dark magic depending on the cultural context) is a robust cross-cultural phenomenon.¹³ The dangers of untoward magic, though, would make no sense to us if we weren't inclined to teleological thinking, if we didn't apply it to cases of fortune and misfortune that would otherwise not be explicable in terms of intent, and if we weren't capable of positing invisible expressions of agency.

Consequently, one could, on the one hand, say that not only is a child innately disposed to believe in the existence of at least one super-powerful, super-knowing invisible being, they also have innate dispositions that lend themselves to a doctrine of creation and of providence. After all, if everything has a purpose and we experience artefacts as having been given a purpose by the humans who make them, so too it is not much of a stretch to see a world full of teleology as implying the existence of a Creator. Likewise, if one appeals to the intentions of extra-natural agents to explain good and bad fortune, then it is not much of a stretch to posit some systematicity to when the gods will be for you or against you. It only takes the additional step of seeing God or the gods as proactive rather than simply reactive to reach a proto-doctrine of providence.

On the other hand, the teleological reasoning that we find developmentally natural is far from theologically enlightened on its own, at least by the lights of theistic orthodoxies. It is often self-referential (aka, things are the way they are because of their relevance to my interests) or alternatively it is a kind of projection of narrow self-interest onto other things (e.g. the rock does not want to be sat on just like I would not want to be sat on). Worse than that, ascriptions of misfortune are often perverse, ascribing moral fault to people who may be suffering through no fault of their own. Moreover, the gods of many people dole out fortune on a rather narrow basis, often due to whether they have been given honour or disrespected according to the operative cultural script rather than due to a generalizable concern for morality as such or for human destiny.¹⁴ Teleological reasoning can easily collapse into magical reasoning and interest in magic has often competed with organized religion. Once again, then, there are religiously interesting building blocks that appear to be innate, but those building blocks have often been used to produce things that do not count as belief in God in any straightforward sense.

Yet, even though we have not yet called into question what ‘belief’ means, we can already see that these building blocks have certain interesting relationships with the God concept such that, while not ideal from the theist’s point of view, one can see how, say, endorsing the existence of a polytheistic deity might point one in the direction of God, if God exists.

Do religious people believe wildly different things?

Religious diversity has been the basis for concentrated anti-religious argument and theological speculation long before divine hiddenness rose to prominence within analytic philosophy of religion.¹⁵ The reason is not far to seek. If the divine is real and human beliefs about it track the truth, then we would expect more uniformity across religious belief. Other areas such as established science or perception of medium sized objects in normal lighting conditions do not produce such heterogeneous responses. As a result, we need an explanation for why there is so much variance and, if one wants to set one religion above all the others, we need a good reason for setting it apart. When we conjoin divine hiddenness to these worries, we are caused to wonder why a God who wanted to be believed in would allow such diverse expressions of religion. Likewise, we want to know why God would allow them to clump such that, even if one religion were true, it is likely that very many people would come to believe something else due to when and where they were born.

Return to the contrast between Saudi Arabia and Thailand from Maitzen’s illustration. Saudi Arabia is theistic, and Thailand is not. Though it may seem obvious, one should ask where our empirical evidence for demographic clumpiness is coming from here and what it means. One might reason from the fact that Saudi Arabia is a Muslim country to its being overwhelmingly theistic and likewise from an association of Thailand with Buddhism to Maitzen’s demographic disparity. If one wanted to be a bit more empirically accountable, one might look up what people answered to questions on a national census both in Saudi Arabia and in Thailand. Suppose a Saudi woman and a Thai man take an identical survey and answer a question, ‘Do you believe in God?’ The woman checks yes; the man checks no. It looks like as clean a split as one could want.

Simply aggregate those answers across a representative sample of people in both countries, and we get the conclusion that people in one place mostly believe in God and people in the other mostly do not. But is the empirical picture so straightforward?

When we come to assess how much religious diversity there is in the world, we have to ask what our measures for belief are or, indeed, whether belief is what we want to be measuring. We need to decide what we mean by belief and in virtue of what a group of people count as all having a belief.¹⁶ Let’s unpack these complications and then turn to some empirical considerations.

For some propositions, a given person may be disposed to act in a way that assumes the truth of that proposition across all circumstances in which its truth could reasonably be inferred to be relevant. You are committed to the truth of $2 + 2 = 4$, and you would manifest that commitment in just about any relevant circumstance. Your credence in the proposition does not really vary. Your attitude towards the proposition was not importantly determined by will or emotion, and your attitude towards the proposition is probably unambiguously distinguishable from alternative states like acceptance or hope or the like. Fatigue does not really affect your willingness to use the proposition in reasoning, not without reaching significant enough levels that your ability to reason in general is undercut. We do not experience all propositions this way, however.

Some propositions rarely recede into the intuitive, unthinking background but must be consciously borne in mind to take effect. The idea that physical objects like the desk before me are mostly made of air is much harder to bear in mind than the idea that

objects persist over time (aka ‘object permanence’) (cf. Bremner, Slater, and Johnson 2015). For all intents and purposes, we act moment to moment as if the second statement is true but the first is offscreen, irrelevant until specifically cued.¹⁷ It’s easy to remember that people can be motivated to do an action by financial incentives or moral reasons, and it is tempting to act as if all reasons for an action will simply aggregate. It turns out that financial incentives and moral reasons can interfere with each other in complicated ways depending on the context, which is much harder to keep in mind and apply.¹⁸ We may mark as true on a survey or test that if each generation of animal *x* passes on a sufficiently distinct genetic inheritance, then, given enough time, a completely different kind of creature *y* could be a direct descendant of *x* through the effect of selection pressures. For practical purposes, however, we think, talk, and act in a way more reflective of an essentialism about animal kinds (cf. Medin and Atran 2004).

The intuitive, simpler member of each pair above is more representative of our so-called folk theories, the set of which is sometimes called our ‘core knowledge’ (Spelke 2000; Spelke and Kinzler 2007). Folk theories may not be innate in the traditional sense, at least not entirely, but they characterize normal human development. They may be overtly represented, or they may be the embodied schematic expectations that inform what we represent in their respective domains. Regardless, they operate as useful approximations of how humans experience different domains across cultures and times. We, for example, experience objects as persisting over time unless something special happens to them. By contrast, nothing about typical human development makes all but certain that one will experience desks and other medium-sized objects as being composed mostly of air. Folk theories are often associated with ‘system 1’ from dual process theory, but that’s not to say that they are the result of hard-wired modules (cf. Evans 2003). Folk biology, for example, has a developmental timeline that interacts with exposure to plants and animals, is dependent on a general disposition to engage in teleological thinking, and interacts with but is not wholly determined by parental beliefs (cf. Emmons and Keleman 2015). It is doubtful that one has certain innate convictions about animals in a modular black box that simply come online at some discrete point in childhood. Rather, they are acquired over time and become part of the intuitive backdrop of one’s world.

By contrast, the other members of our illustrative pairs are in some tension with our folk knowledge. The idea that the desk is mostly air or that eventually biological descendants can form a distinct species appear to violate our folk physics and folk biology respectively. Other items are hard to retain and use because they express conditional relationships or reveal the boundary conditions of simpler, intuitive truths. It is much easier to remember and employ the propositions ‘people are motivated by money’ and ‘people are motivated by moral reasons’. It is much harder to remember and use ‘Offering money might undercut offering moral reasons when trying to solve a collective action problem.’ There is no easy path between a commitment to these less intuitive propositions and action or even reasoning. They require more cultural scaffolding and intentional effort to be acquired and to be employed pragmatically. To use Bob McCauley’s terminology, they are a matter of ‘practiced naturalness’ at best whereas the folk propositions are a matter of ‘maturational naturalness’ (2011). Moreover, when we are under stress, tired, or simply not reflective, we may easily neglect to employ reflectively endorsed propositions when they are relevant in favour of simpler, more intuitive substitutes.

Now, come back to the question of belief before we turn to the question of belief in God. Suppose someone acts on folk theoretic proposition *x*. Moreover, *x* informs a large quantity of that person’s reasoning and behaviour. Yet, in special contexts, they are strongly disposed to reflectively affirm *y*, which they can and do employ for a circumscribed but important range of reasoning and action. Further, suppose that *x* and *y*

technically cannot both be true. What does the person believe? If we use a survey, it is possible they will answer *x*, especially if they are not giving their answers much thought. Chances are, though, that someone taking a survey in good faith will engage the task in a more reflective mode and answer *y*. Is that answer true? I want to say it is and it isn't. Our concept of 'belief' is not flexible enough to capture the cognitive complexity here. Answering simply 'yes' or 'no' obscures the truth of the matter. The point is not to offer an error theory for people's belief self-ascriptions *per se*. It is certainly not to say that belief self-ascriptions cannot reliably track a self-state or are not evidence of what state they are in. Rather, the point is that folk-reflective cognitive splits force one to make a theoretically loaded choice of what exactly shall count as a belief for one's purposes or indeed whether one should be counting beliefs or something else. Moreover, this dynamic is not unique to religion but applies wherever folk commitments and reflective commitments differ.

As was discussed in the previous section, there is reason to believe that there is significant overlap in what we could call 'folk religion', a mixture of universal and typically developing expectations that one sees cross-culturally in typical child development but which one also sees in adults.¹⁹ One sees folk religion in adults in two ways. The first is in the non-trivial resemblance between overt expressions of religiosity by members of different religions, especially by those who are not themselves religious specialists.²⁰ Even if a Thai Buddhist monk and a member of the Saudi Ulema might answer a given question about, say, the point of religious ritual or prayer quite differently, folk religion pushes the conceptions of the person on the street who has received less specialized reflective religious training closer together whether that street is located in Riyadh or Bangkok. In fact, CSR theorists detect a consistent gap across religions between official orthodox belief and practice and what one actually finds at the lay level. Whether we have in mind lay Buddhists relating to Buddha as a kind of god (cf. Purzycki and Holland 2019), lay Christians taking a transactional approach to prayer, or lay Muslims seeking a visit from Muhammed or a deceased relative in a dream vision (Mittermaier 2011), this gap is a source of consternation for institutionalized religion, but deviations from orthodoxy and orthopraxy are not random. These cases of 'theological incorrectness' betray the influence of folk religion (cf. Slone 2004). This is not to say that the lay members of all religions believe the same things (or that the experts in different religions don't have their own overlaps). There is surely an interaction between folk religion and culturally specific religious concepts, sensibilities, and overtly rehearsed propositions.²¹ Even on the reflective level, though, the beliefs of lay believers in different religions are probably a lot closer to each other than one might think based on how philosophers talk about the problem of religious diversity.

The second way that folk religion shows up in adults applies to even adults who give 'theologically correct' reflective answers regarding what practitioners in their given religion are supposed to believe and do. There is strong evidence across folk domains that, if a subject in an experiment is fatigued or rushed or primed to engage in intuitive thinking, then one can generate reasoning and behaviour that is more representative of the relevant folk theory than the subject's reflective beliefs. Even highly trained experts like, famously, members of the mathematical psychology group of the American Psychological Association can be manipulated using these techniques into giving answers in experiments that they should know are wrong but that feel right at the level of intuitive cognition (Tversky and Kahneman 1971). The same holds for religion. In a now classic experiment (Barrett and Keil (1996)), participants read a narrative about a boy who is in some trouble and prays to God for help. The narrative itself does not obviously commit to anything theologically incorrect, but it is constructed to prime the application of one's normal folk theories of mind and action to God. Subjects readily take the bait and answer

a series of questions about the narrative in ways that seem to imply that God is a lot more like us, a lot more like a super-agent, than Christian orthodoxy allows. For prayers occurring at the same time in two different locations, subjects answer questions as if God has to finish answering one unrelated prayer before God can attend to a different prayer at a different location. Some prayer requests are harder to fulfil or require more effort than others, and so on. Subjects were also given the equivalent of a theology quiz. Subjects who gave theologically suspect answers in response to the priming narrative did not necessarily have any problem giving the right answers on the theology quiz.

What should we make of such experiments? On the one hand, such experiments do not mean that the orthodox, reflective beliefs of individuals are causally inert. In fact, in control experiments, '[w]hen cognitive demands were grossly simplified, the errors disappeared' (Barrett 1999, 329). One can intentionally employ a proposition that is not intuitive. One can make reflectively endorsed propositions more intuitive through practice and the construction of special contexts. There is no reason why those special contexts in which one is more likely to employ the reflective proposition can't also be strategically important ones. Moreover, it is not entirely clear whether responding to a fiction in which an anthropomorphized God is primed is a reliable indicator of the extent to which one will anthropomorphize God in real life any more than being able to track a fictional narrative about Santa Claus means that one will act as if the real St Nicholas lived near the North Pole. To the best of my knowledge, the robustness of folk intrusion in the theologically orthodox is empirically under-established.²² On the other hand, one should not interpret the theological incorrectness literature without bearing in mind the robustness of the empirical backdrop of research across folk domains here. Given what we know about folk knowledge intrusion in the areas of physics, biology, psychology, etc. we should assume that it is a significant phenomenon in the religious domain as well. Moreover, insofar as religion is inherently bound up with existential concerns, there is even reason to suspect that folk intrusions might be more of a problem in the religious domain.

In the last section, we discovered that there is indeed evidence for something like a God instinct in human beings, but it does not yield something convenient for the theist. One has to make a highly contestable judgement regarding whether this instinct is powerful enough or specific enough to lend itself to a response to divine hiddenness. Similarly, in this section, I have made the case that judging whether religious diversity coupled with hiddenness is a defeater for religious belief is not as simple a matter to judge as the religious critic might have thought. This is not because we have discovered that all religions really believe the same thing. Rather, average religious believers stand in a somewhat ambivalent and dissonant relationship to what they are supposed to believe. This is not because the average believer does not really embrace religion, but rather because what the average believer actually does believe is deeply inflected by folk religion. Whether that's good news for the theist or not is, once again, complicated because folk religion and theistic orthodoxies have, at best, a relationship of approximation.

Implications

Let's begin the final section by synthesizing some of the terrain we've covered in the first three sections. The most common formulations of problems of divine hiddenness focus on belief in God and its distribution in one way or another. When our folk theories and reflective representational commitments conflict, there is no straightforward answer as to what we believe. Instead, one has to make a theoretically loaded choice concerning what cognitive states one cares about relative to a particular inquiry. There is ample evidence that there is just such a division between the intuitive and the reflective when it comes to religious belief. This is further complicated by the fact that supernatural or

extra-natural concepts other than the God concept bear a family resemblance and have similar biological and cultural foundations to the God concept. Therefore, there is no straightforward, pre-theoretical answer as to how belief in God and meaningful ways of relating to God cognitively in general are distributed across present and past human populations. Therefore, hiddenness problems and attempted solutions should be recast in ways that presume this messier and more nuanced empirical picture rather than drawing hard and fast lines between belief and non-belief.

The defence of this argument has already been given in the first three sections of the article, but in this final section we will situate its implications. I claim that these observations should lead us to reformulate the three hiddenness arguments with which we began the article. Such reformulations should change the hiddenness discussion by influencing what a defence of or attack on key premises in these arguments looks like. I do not maintain that the considerations discussed here make the hiddenness arguments indefensible. I restrict myself instead to the claim that the philosophical dialectic in which these arguments figure changes in ways that make key premises more inherently questionable or contestable or in need of further elaboration.

Consider first Schellenberg's argument, which is not as directly concerned with the distribution of belief so much as whether there are certain kinds of non-belief which one would expect God to exclude all instances of. In premises 4–6 of his argument, presented earlier, we see the key phrase 'in a state of non-belief in relation to the proposition that God exists'. We are told that God would at no time allow someone to be in the state depicted by this phrase unless perhaps they were being wilfully resistant. We are now in a position to see that this key phrase is ambiguous in an interesting way.

Suppose for the sake of discussion that it is permissible for God to create beings with psychologies like ours that are susceptible to differentiation between intuitive and reflective cognition. If the state of non-belief in question is to be judged at the reflective level, then Schellenberg's idea could be translated into the claim that, if God exists, we would all reflectively endorse God's existence at all times. There are very few candidates for propositions with which we have this relationship. Even propositions like 'I exist' are more likely to figure in the intuitive background of reflection than to figure continuously in reflective cognition. Certainly, if one were to bake any particular view of the ego into the content of 'I' instead of treating it as a mere indexical, then even if it is correct and known to be correct, we do not continuously represent or endorse 'I exist' at the reflective level.

One could instead interpret the belief dispositionally while still referring to the reflective level. The claim would then be that at no time would God ever allow any individual to fail to have the disposition to reflectively endorse the proposition that God exists when that proposition is made psychologically salient. This too would evolve the dialectic in interesting ways because we would have to ask ourselves what salience conditions we would expect God to ensure eventuated in reflective endorsement. Many of the propositions we are disposed to reflectively endorse are not triggered in a variety of circumstances where they technically apply. For instance, the average college graduate may be disposed to reflectively endorse that tables are made mostly of air on a general knowledge test while not being disposed to entertain that proposition when he sits down at one in the dining hall.

If one instead supposed that the state of non-belief relevant to Schellenberg's argument is to be judged at the intuitive, folk level, then the claim might be translated like this. God would at no time ever allow a human being to fail to represent the world in a coarse-grained, pragmatic way as including something relevantly similar to what the God concept describes. One might suppose that baking in 'coarse-grained', 'pragmatic', and 'relevantly similar' into this description is unfair, but we assumed that it is

permissible for God to create beings with psychologies like ours. This is how folk cognition operates. It keys in on the course of average human experience and how one might interact well enough with one's environment to secure what a human being needs. It is light on metaphysical abstraction. If we suppose that what God would guarantee is something at the intuitive, folk level, then it would need to be judged by criteria that make sense for that kind of cognition. I take it as established at this point in the article that it is an interesting empirical question who does and does not count as satisfying this claim. We would then need to know how coarse-grained, how pragmatic, or how similar a given folk concept could be and still satisfy any reasonable expectation we would have as to what minimal cognitive state is consistent with God's existence.

If it were sufficient for a human being to be *disposed* to represent the world in a coarse-grained, pragmatic way as including something relevantly similar to God, a disposition which of course could be masked or finked, then, from an empirical perspective, we have a candidate that might be universal. After all, claiming that the development of folk religion is maturationally natural, that is, that it easily and typically develops in most human contexts, is less empirically adventuresome than claiming that any particular religious concept or behaviour is innate. Arguably, the viability of the cognitive science of religion as a research programme requires at least a commitment to human beings being predisposed to acquire folk religion in typical human contexts.

That disposition being universal is likely to be impossible to prove, but its being possibly universal should be uncontroversial.

Recall that for Schellenberg the claim is that at no time would God ever allow a single person to be in the relevant cognitive state unless it was perhaps due to their somehow choosing wilfully to be that way. While it is probably true that at least some individuals who identify as agnostic or atheist, perhaps many, may nonetheless engage in intuitive cognition and related actions that are meaningfully located on the spectrum of intuitive religious cognition, it is dubious that all persons who so identify do this. Even for Schellenberg, though, who does not explicitly base his argument on the distribution of belief, it is a live question whether persons disposed to represent the world in such a coarse-grained, pragmatic way as to include something similar or relevantly similar to God would not qualify as people who are in a position to relate to God in a meaningful sense in virtue of their cognitive position. This is not necessarily because all will find such a cognitive set-up natural to label 'belief' but rather because certain of the functions that we associate with the belief concept can be grounded in such a disposition. Since a disposition to represent the world in a coarse-grained, pragmatic way is often sufficient for relating well enough to it, the question of whether there could be any circumstances in which a good God might allow or produce such a state is an important, non-trivial question.

Again, the relevant point here is not so much that people are saying things that are wrong when they say they have or lack a belief, but that the theorist has to decide what belief-like state we care about relative to our inquiry, which may or may not be what a subject at a time can reliably report about. This is partly because, as it turns out, psychologies like ours provide different candidates for the roles we ascribe to beliefs. Of course, one might call into question whether it really is permissible for God to create beings with a psychology that is similar to ours. Perhaps there is something sub-optimal about creatures who engage in folk and reflective cognition that can come apart or be in tension. But, if that is the conclusion, that turn in the dialectic by itself is a very interesting and surprising result! That God could ensure that everyone believes that God exists is quite pre-theoretically plausible, but no one starts the hiddenness discussion thinking it obvious that a good God would not create creatures who use folk cognition and have limited capacities for reflection. I, of course, do not claim that appealing to our psychology in

this way renders Schellenberg's case toothless. Rather, I maintain that it reframes it in important ways that would otherwise be missed.²³

The application of our discussion to Maitzen and Marsh's arguments is more straightforward. Both are overtly concerned with the distribution of belief as opposed to the instancing of some especially inexplicable form of non-belief. Maitzen points out that the distribution of belief in God is surprising on the assumption that God exists, and it seems better explained naturalistically than by divine intent. As discussed earlier, however, this demographic clumpiness looks different at the reflective and the intuitive levels of cognition. Though folk religion as manifested in Saudi Arabia and Thailand, to take his prior example, may have some differences to be sure, the difference at the folk level is not as great as the difference between the reflective religion of average people in the two locales, which is, once again, not as different as the official orthodox positions of the religious experts may be. That is, the distribution of reflective theoretical commitments that are consistently and widely instanced is typically most stark, although also quite patchily instanced even in religiously homogeneous contexts. The distribution of folk religious concepts and related behaviours is the least differentiated, especially if one evaluates it in concrete, pragmatic terms, though there certainly are differences in the expression of folk religion in different places.

Let us say for the sake of argument that both are surprising on a religious perspective and that various naturalistic scenarios better predict these states of affairs. In that case, both are some evidence for a naturalistic view and against a theistic one. How strong this evidence is, however, depends on which kind of cognition one thinks God would be more invested in guaranteeing. Likewise, one has to ask how the two distributions might interact from a theistic perspective. If a certain pragmatic baseline for relating to God were made possible through folk religion, for instance, one needs to ask whether there could be any reasons that God might have for allowing cultural factors to evolve reflective cognition in different ways in different places which are choiceworthy conditional on that folk baseline being secured. If there are, then even if stark differences in the distribution of reflective religion might on its own be powerful evidence against theism, the combined distribution of intuitive and reflective religion might be a different matter.

Likewise, to turn to Marsh, consider an early hominid with cranial capacity consistent with high levels of intelligence which we can be confident predates the development of the concept of God. Suppose, for instance, that we take it to be the case that Neanderthals show some evidence of religious practices in the archaeological record but no evidence that would justify predicating of them a God concept (cf. the account in Dunbar 2022, 149ff.). One has to decide whether one cares more about the reflective or intuitive level of cognition and evolve one's inquiry accordingly. If it is the reflective level which matters, then one has to ask whether the archaeological record is capable of justifying claims about what Neanderthals reflectively endorsed and under what conditions their more rarefied theoretical constructs, whatever those may have been, were triggered. If those reflective concepts fell quite short of anything like a God concept, then one has to ask whether that was the best they could do relative to the cumulative culture available to them and whether whatever it was they were capable of was impermissible or unworthy of God to use.²⁴ If it is the intuitive level that matters, then one has to ask what it was in the experience of the Neanderthals that led them to engage in the practices which we would consider religious and whether, relative to their cognitive and relational capacity, they were in a position to relate to God in a coarse-grained pragmatic way. I take these to be live and interesting questions, though ones that are hard to answer with any confidence for early hominids. In general, it is plausible that the development of folk religion as we experience it reaches further back into hominid history and matures sooner than the development of our reflective religious capacities. And this discrepancy raises

interesting questions about what early hominids were capable of relative to relating to the divine and whether they had resources for so relating that are consistent with theism.

In conclusion, my hope is that this article will enrich the hiddenness discussion by situating it more firmly in the empirical literature. This has been done at least partially before (cf. De Cruz 2015 and Braddock 2022), but I have sought to cast my net a bit wider in that empirical literature and to do so in a way that pays special attention to belief and the way that intuitive and reflective cognition can introduce complexities into its ascription. I have made the case that these additional complexities should change how hiddenness arguments are elaborated, defended, and critiqued.

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Notes

1. Some of the topics to be addressed have appeared in the hiddenness literature before. Braddock (2022) and De Cruz (2015) discuss the relevance of the cognitive science of religion to divine hiddenness and Green (2013) explored the intersection of cognitive science and the so-called natural knowledge of God. Howard-Snyder (2016), Cullison (2010), and Poston and Dougherty (2007) explore how a relationship might be formed, grown, or prepared via something short of explicit propositional belief, though they do not exploit the literature on reflective versus intuitive cognition per se. One of the novel contributions of this article is putting these two veins in the literature in more robust dialogue.
2. These include, but are not limited to, providing sufficient time for one's motivation for obedience to God to change (Howard-Snyder 1996), making room for certain kinds of temptation and moral behaviour (Swinburne 1998), avoiding certain group dynamics that would preclude the possibility of resistant non-belief (Dumsday 2016), not offering further revelation of Godself because we are unworthy of it (Dumsday 2014), or even expressing God's personality or preference for a diverse set of projects (Rea 2011; 2018).
3. For example, in chapter 3 of book 1 of the *Institutes*, Calvin states, 'It is beyond dispute that some awareness of God exists in the human mind by natural instinct' (Calvin 1987, 27).
4. In his book reconceiving natural theology in terms of natural signs, for example, C. Stephen Evans takes himself to be naming a feature shared by Jews, Muslims, and Christians when he formulates his 'Wide Accessibility Principle' on which, though easily resistible, the knowledge of God is widely available and easy to obtain (Evans 2010, 14).
5. One way this confidence comes across is the aspersions that have been imputed to those who don't believe, as if disbelief must imply something untoward about one's character as one sees with the Edwards quote, but another route is to consider the attraction of *consensus gentium* arguments for theists. The comfort level felt in appealing to the higher order evidence in this case presumes one knows that the evidence is going to come out in one's favour. For some contemporary reconstructions of such an argument, see Zagzebski (2011), Kelly (2011), and Braddock (2023).
6. Justin Barrett, who coined the term, originally used the word 'hyperactive' but then thought better of it. For the original coining of the term, see Barrett (2000).
7. Another potential source is what is called 'intuitive dualism'. Treating our having minds as contingent upon having biological life is far from inevitable, presumably due to a functional insulation of our theory of mind and our folk biology. Consequently, when children process what it means for someone to die, there are a number of studies that show that they find it very intuitive to stop making biological ascriptions to the dead individual

while being willing to make at least some mental state ascriptions to them (e.g. beliefs, memories, emotions). One might think that this would be a good foundation upon which to conceive of the persistence of ancestors, which might then turn into more godlike conceptions. See, for example, Bering (2002). For a recent challenge to at least some uses of this literature, see Barrett et al. (2021).

8. For a nice exploration of the earliest forms of social cognition and interpersonal agency, see Reddy (2008).

9. How to interpret the finding is not entirely straightforward. Children can sometimes pass related but simpler tasks at earlier ages, and the 3.5–4 year old benchmark may at least to an extent track the executive function and representational skills necessary to talk about something complex, like telling one person about another person's beliefs diverging from reality, rather than the ability to experience another person as having a false belief. For a meta-analysis of false belief studies which includes studies that appear to show an earlier emergence of false belief understanding but concludes that the originally posited timetable is basically correct, see Wellman et al. (2003).

10. One might make a distinction between animism and polytheism and then ask whether it is animism rather than polytheism that is the most common disposition. Much depends on how exactly one conceptualizes the two. If one, for instance, takes animism to be the disposition to treat natural phenomena as if they were animated by agency in a way a naturalist would not and one similarly restricts what can count as a god for polytheism to things that bear a family resemblance to either the God of monotheism or the humanoid deities of Graeco-Roman mythology, then it probably is true that animism is more ubiquitous across human history. If, instead, one allows polytheism to range over views that admit more than one extra-natural agent, as I am doing here, and think of animism as the attribution of extra-natural agency to particular natural features in one's environment, then animism is a sub-class of polytheism, if a very broad one. Even on the first way of thinking about it, my basic point in the text is unaffected. The agent animating a land feature, a tree, or a jaguar is more likely to have specialized knowledge than to be omniscient. Moreover, even on the first way of construing the distinction, polytheism is still very common and unambiguously expressive of our folk religious dispositions whereas animist entities that are poor candidates for being counted as godlike are for that reason more likely to be related to or cognitive precursors of our religious dispositions than their most basic forms. The cognitive naturalness of animism has recently been the subject of some discussion in the literature. See Smith (2020); (2022); and Hendricks (2022).

11. One of the themes of Tanya Luhrmann's work is that belief in God or other invisible others is fraught with cognitive dissonance that must be resolved through practices that cultivate a sense of the presence or efficacy of the invisible other. See, for example, Luhrmann (2020); also Engelke (2007).

12. One might think this line of evidence introduces a debate as to which is developmentally natural to human beings, supernaturalism or disbelief, but that is the wrong way to think about it. By way of example, it is maturationally natural for human beings to speak the language that is spoken around them. This is what most human beings under typical developmental conditions will do. Because this is so, one can predict various circumstances in which a minority of the population will not develop this capacity, namely, scenarios in which the developmental pathways that typically lead one to speak the language spoken around you are interfered with or diverted. It is the naturalness of speaking the language spoken around you that explains why certain individuals might develop differently and why they will be a minority of the population except in exceptional circumstances. The existence of the minority, however, does not jeopardize the claim that typical development is manifest in the majority. The same is true as regards the literature on the naturalness of religion and its relation to the idea that there are multiple pathways to a disbelieving, ambivalent, or sceptical stance by way of the disruption of one or another of our folk religion dispositions, usually as a minority position in a population.

13. In anthropology texts, magic is typically defined as the ability to influence others or events through supernatural intervention or agency. Magic is regarded as an individual enterprise that serves particular ends rather than benefiting the community at large, in contrast to religion, which serves ethical ends directed toward the wider community or society (Farrer 2014, 9).

14. There is something of a debate in the empirical literature about exactly how to think about this point, but what I say here is not in jeopardy. On the one hand, some maintain that 'supernatural reward and punishment' is 'a ubiquitous phenomenon of human nature that spans cultures across the globe and every historical period, from indigenous tribal societies, to ancient civilizations, to modern world religions – and includes atheists too' (Johnson 2016, 7). On the other hand, others claim that morally interested gods really only arise with the advent of so-called complex societies and the agricultural revolution (cf. Norenzayan 2013, 55ff.). There is agreement, however, that pre-agricultural deities care about at least certain behaviours and must be appeased if one offends them. They operate according to a social script that *mutatis mutandis* would apply to an important and powerful person even if, unlike later deities, their interests do not converge with the entire moral realm. The

disagreement concerns exactly how moral one should think the concerns of these earlier deities and some of the cultural evolutionary causes and implications of the shift from the one kind of deity to the other.

15. In early analytic philosophy of religion, John Hick's work was an important locus of such work, with his playing the fact of religious diversity against exclusivist perspectives on religion in favour of a pluralistic vision that portrayed at least all the major world religions as equivalently grasping the same noumenal reality (Hick 1989). It is noteworthy that even in Quinn and Meeker's *The Philosophical Challenge of Religious Diversity* (2000), which features a goodly selection of the best philosophers of religion of the time, the focus of the essays is very much more on Hickian arguments against religious exclusivism than on hiddenness-related arguments, despite the hiddenness literature having already been launched in earnest by Schellenberg's *Divine Hiddenness and Human Reason* (1993).

16. This article will not give a full-blown account of belief, the nature of which is very much being debated. See, for instance, Princeton's Templeton funded Concept and Cognition Lab's exploration of different conceptions of belief: <https://cognition.princeton.edu/belief>. The discussion here will have some sympathies with Aaron Zimmerman's neo-pragmatist view that it is the disposition at a time to use a given piece of information for the purposes of guiding attention and behaviour (Zimmerman 2018, 1), but I certainly do not agree with every wrinkle of Zimmerman's position.

17. The relationship between folk physics and explicit, scientific physics has been the subject of some discussion. I am sympathetic to Andrea diSessa's general approach here in claiming that folk physics is tied to recurrent patterns in the phenomenology of the physical world that are recognized and then built up into models subsumed under narratives (diSessa 1996). In short, there is a parallel between the two physics and that parallel may well help explain how it is possible for us to develop physics proper. Folk physics, however, is tied to more concrete, qualitative patterns of experience.

18. The potency of financial reasons alone will track the size of the incentive but adding a moral reason changes the shape of the interaction, though how it changes the interaction depends on whether the incentive is experienced as coercive (cf. Gaulin et al. 2021).

19. It should be noted that the domain of religion is quite diverse and the utility of using the word 'religion' to impose an implied unity on the whole domain is contestable (cf. Barrett 2017). I think 'folk religion' is useful shorthand for intuitive religious cognition and related behaviours and that complexities of this sort are not unlike those seen in other folk domains. The complication is, nonetheless, worth bearing in mind.

20. Pascal Boyer has colourfully called this the 'tragedy of the theologian' (e.g. Boyer 2001, 283), but this is a point of agreement between most theorists in the cognitive science of religion, wherever their theories may diverge. All such theorists claim that identifying the cognitive underpinnings of religious phenomena reveals mechanisms and dispositions that undergird at least the folk expressions of religion across what might seem, at the level of theology, to be quite disparate religions.

See, for instance, not just Boyer, but McCauley and Lawson's emphasis on the role of schema for representing ritual action (2002), Whitehouse's use of different kinds of memory to identify his imagistic and doctrinal modes of religiosity (2004), and so on. Even if the CSR theorist looks to explain a particular religious expression in a particular cultural context (e.g. Cohen 2010), they typically appeal to explanatory factors that are human psychological universals with the expectation that the same factors are at play across at least folk religion.

21. For example, whether it enters at the level of phenomenology or intuitive interpretation, near-death experiences seem to clearly be influenced by cultural variation but in a way that is probably pre-reflective (cf. Belanti et al. 2008).

22. See, for example, Westh (2013) for some critical discussion.

23. One interesting thread that one could pull on in this spirit is the way religious cognition piggybacks on mentalizing with the fact that mentalizing is manifest on a spectrum such that some individuals are quite low on mentalizing. As mentioned above, certain theorists like Norenzayan and Gervais hold that this gives us a reasonable expectation that in a religious population there will be at least a minority of persons, such as those low on mentalizing, whom one would expect to be more likely to be apathetic, sceptical, or disbelieving vis-à-vis one or another aspect of religion. One could imagine a hiddenness-style argument to the effect that God would not create human beings with a psychology like this because it makes it highly likely that there will be some minority of the population who are less well set up to believe in God or relate to God through religion. This is a function of making religious cognition depend on natural foundations which are susceptible to variation in populations. I cannot give this topic its due here, but I note that it is illustrative of how productive atheological paths might open up based on the more robust empirical foundation I am here providing.

24. If they have no reflective cognition but it is the reflective level that matters, then that fact by itself would undercut Marsh's argument.

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