

I recently had an animated discussion with one of my colleagues about the wide spread application of mind-body dualism and its many variants in the cognitive science and psychology of religion. My interlocutor asked me why, if I was so right that psychologists who claim the folk intuitively represent supernatural agents in accord with mind-body dualism are wrong, then why are we still discussing it (as in “why is it still being discussed/supported in the literature”)? To be honest, I don’t have a good answer for this. I have always taken myself to be pointing out something so very simple and obvious that no one could miss it—that is the emperor is not wearing any clothes! On the contrary however, many of my colleagues who are still committed to some form of folk, intuitive mind-body dualism as explaining the psychology of supernatural agent representations act as though I am Chicken Little, proclaiming that the sky is falling after being hit on the head by a falling acorn. And, just to throw in another strained analogy, when enough people tell you that you are crazy, you



start to believe it. To me, it is an issue of credibility for the cognitive science and psychology of religion. If the theories we propose fail to explain how our chosen topic—religion, specifically supernatural agents—appears in its natural and cultural settings, then whatever they might be theories of, they ain't theories related to our topic (and you can always tell when a philosopher is serious: he uses the word “ain’t”).

When I first published “[Descartes Mistake: How Afterlife Beliefs Challenge the Assumption that Humans are Intuitive Cartesian Substance Dualists](#)” in 2008 (also available [here](#)), I believed two things: (1) that I was fortunate that no one beat me to the punch on pointing out something so obvious in print; and (2) that my colleagues would see that not only did these points apply to afterliving deceased, but to supernatural agents in general and that would be the end of that.

In that article, and [subsequent ones](#), I pointed out how and why mind-body dualism is an inadequate theory to capture the folk intuitive representations of the afterliving deceased, from the strongest Cartesian version, to the weaker versions which used less defined notions of (disembodied) person, soul or essence. All of these explanations suffer from one key problem; they fail to capture how the folk intuitively represent supernatural agents in their natural, cultural settings. To date, all of the prominent theories concerning supernatural agents in the cognitive science and psychology of religion either flat out deny that these agents are (intuitively) represented as embodied, or give a greatly diminished role to the body. The problem I see is that every religion about which I know represents (most all of) their supernatural agents as embodied in various ways—iconography,

mythology, funerary rites, rituals, etc. (an obvious and limited exception being the theologically correct description of the Judeo-Christian-Islamic God). But, even if that is not evidence enough, let me bring it down to a personal level: first, am I cognitively neuro-atypical in representing my deceased loved ones hugging each other when a new one arrives in whatever supernatural realm into which they go? Second, am I intuitively challenged for not being able to represent Ganesh, the Hindu elephant-headed god, as disembodied? Or, would it take advanced level cognitive gymnastics even to attempt to represent either of those scenarios as involving disembodied minds? If I were talking about rare examples or atypical representations, I could understand everyone's reservation about resurrecting the body in the cognitive science and psychology of religion, but as it stands, very few see the emperor's naked body. And, to be clear here, I am not denying that humans cannot think in terms of mind-body dualism; I am only arguing that it is not the intuitive position which fosters belief in supernatural agents.

To my mind, there are two issues that underlie the hesitancy to embody supernatural agents (or recognize their embodiment); the empirical evidence gathered thus far, and trying to figure out what to do about the physical dead body of the deceased. (There is a third that I sometimes think might be in play, and that is a reluctance on the part of scientists—especially junior ones—to rock the boat.) Allow me to discuss these in turn.

I have never had a disagreement with the evidence. In fact, the evidence across all the experiments which have probed intuitive representation and continuation of mental states over physical body states for deceased individuals fall exactly how I or anyone else who has spent much time considering these issues would expect. My objections have always been directed at the theoretical interpretations of this evidence as a type of mind-body dualism which is boosted by the constraints of the specific methodologies employed. It is not that I think that supernatural agents eat or digest or excrete or sleep or perform a variety of other assorted mundane biological tasks (even though I can imagine it)—it is simply that those are not tasks that I (under standard conditions) represent them as doing. Most of my representations deal with them engaged in some social task such as hugging, talking, holding hands, or watching over me, from which their embodiment easily flows. This is why I have called this type of representation “social embodiment.” In the same way that I do not imagine a fictional character digesting unless it is integral to the story, or imagine one of my loved ones on the other side of the ocean as farting unless that is part of their “humorous” personality, these types of representations do not readily enter my mind. Contrariwise, most fictional characters and our representations involving our presently living absent loved ones capture them doing something socially significant. As David Lewis once [put it](#), Sir Arthur Conan Doyle did not have to point out that Sherlock Holmes had two nostrils for us to represent him as such. Nevertheless, how often has any of us represented Sherlock Holmes sitting on the toilet (unless it is in one of stories I have not read). And, how would we intuitively answer if asked whether Sherlock Holmes needed to defecate? If we did not think so because he is, after all, a fictional character, would it be correct to conclude that our representation of Sherlock Holmes is disembodied? I think most reasonable people would agree that our representation is not of a disembodied Sherlock Holmes. So, why is it when we use the same imaginative processes to imagine our deceased loved one or another supernatural agent that some would say they are disembodied such that they only have mental states?

Additionally, other experiments which have probed the relationship between the mind and the body through such thought experiments as imagining oneself as dead or imaging a mind transfer of oneself or another into another body or object have again all produced evidence with which I have no dispute. Again, to be clear, I have no objection to the evidence at all. The problem I have is theoretical. Some claim that these experiments support a type of intuitive mind-body dualism. The problem is that these are reflective tasks, not intuitive tasks. I have never denied that we, humans,

can think in terms of mind-body dualism; only that it is not our intuitive position.

This brings me to the second issue. In what sense can or would we say that Sherlock Holmes has a physical body (putting aside actors playing the character)? We don't really think he does, but we do provide him an imaginary body based on both his textual descriptions and our common knowledge of human physiology. Thus, when Doyle describes Holmes as holding something in his hand that is significant to the story we don't immediately wonder from whence his hand came! We tend to imagine fictional characters as having the necessary body parts to act in ways relevant to the story. The same goes for those real living people who are currently outside of our perceptual field. Our imaginings of them (what I have called offline social reasoning) usually involve them being somewhere doing something of social significance. Thus, if something that is usually a mundane biological task such as eating becomes socially relevant because it is that person's birthday, we are more likely to imaginatively represent it, in the same way that the afterliving deceased are represented as eating on *el día de los muertos* because it is socially relevant.

But, we are not imagining the afterliving deceased as using their physically dead and buried body as performing these tasks. This, methinks, is the cognitive obstacle that many researchers have had difficulty overcoming, especially in the case of the afterliving deceased. What to do with the dead physical body? Here I think there is a number of confusions taking place. First there is a confusion between the biological conception of death and the secular conception of death. Second, if we claim that the individual is still somehow alive after the death of his physical body, then it must involve some sort of dualism which does away with the physical body. Third, researchers fail to see the difference between a physical body and an embodied representation. Again, I will take these in order.

There are two conceptions of death which I think are often confused in the literature: the secular conception of death and the biological conception of death. The secular conception of death holds within it a scientific assumption that when biological functions cease, particularly in the brain, then the mind ceases to exist, thus annihilating the individual. The biological conception of death, however, simply describes how we determine whether a creature is alive (but perhaps sleeping or unconscious) or whether it is dead. The biological conception of death, as it has long been discussed and applied in the literature, only deals with how we, and other animals, recognize dead bodies. The essential intensions of this concept is the cessation of agency from the body, that death of the body is irreversible meaning that a dead body will not come back to life, and universality meaning that all physically living things die. The biological conception of death says nothing and suggests nothing as to the fate of the individual whose body that was. This is one of the reasons why afterlife beliefs come in so many flavors.

But surely the next question that comes to mind is, "how is that not supporting some sort of dualism since the individual is somehow surviving the death of his or her body?" Here is where confusing the biological conception of death and the secular conception of death becomes really misleading: whereas the biological conception of death is applicable only to the physical body, the secular conception of death makes the further assumption that the individual has ceased to exist because the body is dead. But, just because physical bodies die does not mean that we believe that individuals cease to exist. On the contrary, all of the experiments regarding afterlife beliefs have demonstrated that we intuitively believe that humans survive death. So why, oh why, do some researchers think that the secular conception of death becomes intuitive as we become older, especially since the cross-cultural evidence does not support such a folk secular conception. Contrariwise, what the anthropological record shows is that we folk view death of a person's body as a change in that person's location.

This is where offline social reasoning comes in again, and avoids the dualism trap. Our friends and

family are not always within our perceptual field. But, they do not have to be for us to think about them. When we do think about them, we imagine them being somewhere doing something. In order to have such imaginings, we provide them a body with our imagination. This imaginary body has the necessary prerequisites for performing whatever tasks we are imagining the person doing. Is this dualism? Are we wanting to say in the cases of our imagining a currently living but absent individual as somewhere doing something that she has left her body behind and become a disembodied mind? I don't think any of us would reasonably say that such imaginings support mind-body dualism. So again why, when we use the same cognitive mechanism to think about our deceased loved ones, are some researchers wanting to call this dualism? And, again, are we really imagining the deceased as disembodied?

As a quick aside, I have also been challenged on the difference between these two types of embodiment on the basis that the afterliving deceased are imagined with supernatural powers such as being able to see over great distances or read our thoughts. But, that is a product of imaginative abilities in the same way that I can imagine my wife who is not currently in my perceptual presence as flapping her arms and flying to work. Does that imagining imply dualism?

One additional note with regard to the evidence. I am not denying that, as the experiments have been performed, that (what have been called) mental states do and should receive more attention. I just don't think the break is between mental states and bodily states. I think that the break is between intentional and non-intentional states. This is one of the reasons that (what have been called) psychobiological states such as "hunger" make a robust appearance in these experiments, especially with children. Intentional states are not confined to the mental. They encompass the goals, desires, beliefs, rationality, and social behaviors of agents. So, whereas the mind-body dualism interpretation of the evidence has a difficult time accounting for why children are more likely to say that a deceased individual is hungry even though he does not eat, when interpreting this response using the Intentional Stance it is easier to see why the former but not the latter. Hunger is an intentional state that allows us to predict one's future actions, or goals. Eating is less so, save in certain social situations. What I am trying to say is that it is natural for us, humans, to focus and think more on another's intentional states than it is for us to think about his mundane, workaday, activities. (For an excellent discussion distinguishing these issues, see [here](#))

I have also been asked why I care so much about this. The reason is because I see the potential of this misstep I have perceived of setting back research in the cognitive science and psychology of religion for an extended period of time unless these issues are sorted. If I am right, folk intuitive mind-body dualism is our version of phlogiston. The longer we hold onto this idea, if it is mistaken, the harder and longer it is going to be for us to sort ourselves out. Additionally, this will increase the likelihood of our discipline being ignored or castigated because what we claim religious representations are in our labs share little in common with religious representations observed outside of our labs.

Again, how does mind-body dualism account for Ganesh?

So, is the emperor naked, or was it just an acorn?