In response to my paper on possible phylogenetic divergence in the case of theistic percepts, Gallup and Maser argue that an alternative — and more heuristic — approach to studying religious phenomena can be found in neuroanatomical mapping of cognitive functions that seem to play some role in this category of thought. On the one hand, the argument is sound and will probably come to be prescient; cognitive neuroscience should begin to emerge as an increasingly important player in the newly overlapping fields of cognition and comparative religion. Indeed, initial strides have already been taken in just this area (Shaver & Rabin 1997). But on the other hand, it is somewhat misguided in that it implies that neurological methods are alternative rather than complementary ways to go about seriously studying the cognitive foundations of religion.

The representational systems outlined in my article are inherently brain-based, and there is, as Gallup and Maser point out, reason to assume some degree of localization of the general aspects associated with them. Until comparative neuropsychologists are able to discern the seemingly subtle differences in the brains of humans and our closest living relatives, however, we can produce only admittedly speculative hunches as to the unique adaptive functioning of the neuroanatomical regions in question. However, it is worth pointing out that there are considerable morphological differences between humans and chimpanzees in precisely the area of the brain that is presumed responsible for allowing the attribution of mental states. The human prefrontal cortex has expanded substantially over the past 5-8 million years, is significantly larger than homologous structures of the African great apes, and occupies more of the cerebral mantle (Povinelli

*Florida Atlantic University
While size alone does not present a compelling case for mentalistic competencies, and, indeed, can be taken to mean that the cerebral organization of great apes is just a smaller version of our own, it is also possible that such human encephalization houses specialized neural systems and that the swelling reflects ancestral selection pressures that favored unique cognitive operations for representing minds.

Yet, even if this proves correct, we must be exceedingly careful when applying neuroanatomical reasoning to the area of religion, else we shall find ourselves promoting the right frontal cortex as something like the modern-day pineal gland as the rightful holder of the soul. It must be remembered that no definitive consensus has been reached in relation to the correspondence between cognitive modules and their regionalized appearance in the brain; organized, rule-based structures of information-processing have been postulated as arising through either extraordinarily complicated networks of neural pathways or via compartmentalized bundles of neurons devoted to specific domains. Not surprisingly, there is evidence to support both sides (see contributions in Gazzaniga 2000).

Given the current state of affairs, then, it is questionable that neuroanatomical mapping is any more heuristic an approach to studying the cognitive underpinnings of theism than the behavioral framework I have outlined. Nevertheless, this does not reduce to a competition between cognitive neuroscience and comparative behavioral studies for preeminent status in investigating the evolutionary origins of theistic percepts and religious behaviors. As a true interdisciplinary enterprise, the explanatory toolkit of modern cognitive science should include an eclectic array of important research findings from diverse fields. Because religious categories impinge upon everyday psychological processes, this is particularly essential for theorists interested in tracking the emergence and rampant transmission of religious phenomenology in the human species (see Barrett 2000).

In focusing primarily on the former, I selected findings from work done in developmental psychology and cognitive primatology for my analysis because of these fields’ strong potential to inform us of the evolution of modularized cognitive processes seemingly involved in representation of causal agency. These core processes, I argued, serve as the grindstone upon which all non-natural agent concepts are initially processed and sharpened. Other than gracefully caviling that I have resurrected the spirit of Descartes