

result of the 17th century, the creation of the modern mind.

What does a reinterpretation of the 17th century mean for people who are not scholars? Quite a lot, and Grayling exactly sees what a new understanding of the 17th century means for the future. All of our educational institutions are built around an educational research model. There was an incredible moment when 18th century educational institutions in Germany adopted the scientific research concepts of the 17th century into the modern Ph.D. Not much later, the French absorbed the research model into the medical profession, and this became the model for the educational systems of the West. An educated person produces knowledge through experimentation. However, research and democracy were not the only concepts that the 17th century produced. Science was created by polymaths who corresponded through strong but informal communication networks, united only by a love of knowledge and inquiry.

They shaped a new language as they used a knowledge of Greek and Latin to develop terms for new concepts that were formed from exploration. These lessons, too, are important and should be adopted into the educational systems. Grayling writes that the current era, built as it is upon the 17th century, contains overlapping problems and knots of contradictions. He states:

The solution is education. What a cliché that seems; yet like most clichés it is so deeply true that we cease to see its truth. Scarcely anywhere do we really educate. The time, technique, cost and commitment it would take to really educate are applied in very few places—only in the most elite and expensive schools, and in the graduate departments of the world’s top universities, hardly scratching the surface in world-population terms. It is not the fault of dedicated teachers at schools around the world—teachers are among the most important people on the planet, given what they can do in the way of in-

spiring and enlightening when they are really good at it, and are given the tools and opportunities to do it—but they rarely have enough of either (324).

If the 17th century created modern Western Civilization once, then it can do it again. What if the next revolution of thought comes in teacher education? What if the content fields have been falsely separated from the field of education because of the walls placed between the disciplines by the conceit of the research model? The great geniuses of history did not specialize, they explored and discovered, and teachers should be encouraged to study across fields for the purpose of creating the kinds of materials that are content-rich and that embed learning theory in a way that textbooks and workbooks do not. Then teachers could “really educate” and it would be something worth investing in. The 21st century could then mirror the 17th for its creativity and curriculum, but it could do so without the crosses and the corpses. **S**

Heaven Is Not For Real

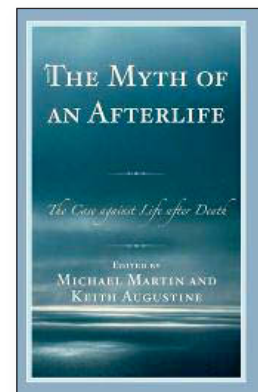
Review of *The Myth of an Afterlife: The Case against Life after Death* edited by M. Martin and K. Augustine

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IF THEY WERE AIMING FOR SUCCESS AND popularity, the editors of *The Myth of an Afterlife* have obviously not been paying attention to current trends in publishing that have given us such books as *Heaven is for Real*, *Proof of Heaven*, *Evidence of the Afterlife*, and *Consciousness Beyond Life*.¹ On the other hand, there was clearly a niche waiting to be filled by books skeptical of the immortality of the soul and the existence of the afterlife. But it turns out there are not so many of those. Perhaps this asymmetry reveals a peculiarity of the human mind: somehow the hypothesis that we *do* survive bodily death is more appealing than the alternative.

Not editors to surrender to popular

pressure, philosophers Keith Augustine and the late Michael Martin took it upon themselves to assemble a team of 29 valiant contributors to attack the afterlife “myth.” The result is an impressive volume composed of 30 essays, spanning 675 pages and organized in four parts. Part 1 addresses “empirical arguments for annihilation,” i.e., “the position that persons *permanently* cease to exist at biological death” (2). As it turns out, these arguments really amount to the daily bread and butter of cognitive neuroscientists, and thus this portion of the book reads like a crash-course in brain science. The “argument from brain damage,” for instance, uses neuropsychological evidence to show that



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“the destruction of the mind by the destruction of the brain is highly probable given the hypothesis that the mind depends entirely upon the functioning of the brain, but is highly improbable given the hypothesis that the mind can exist and operate independently of the brain.” If all brain functions have been turned off, “what’s left for a soul to do?” (121).

Parts 2 and 3 deal with broad philosophical, conceptual, and empirical issues that collectively aim at dismantling the plausibility of souls and the afterlife. Among the many problems surrounding the notion of a “disembodied afterlife” are vexing questions such as how could disembodied entities with no spatial locations interact with biological and physical systems, or recognize each other, or move, act, perceive, remember and think, all without a brain. The conclusion is that no coherent or desirable version of the soul could plausibly survive brain death.

Part 4 considers “dubious evidence for survival” and essentially debunks parapsychological data related to out-of-body, near-death, haunting, mediumnic and reincarnation phenomena, all, indeed, frequently adduced as evidence for the afterlife as they purportedly involve some type of dissociation between mind and body.

Combined with the robust neuroscientific evidence in favor of the complete dependence of the mind on the brain’s functioning presented in Part 1, the conceptual issues highlighted in Parts 2 and 3, and the very weak, scarce, and unreliable evidence for paranormal experiences suggestive of survival after bodily death (instead of the major challenge to contemporary materialism it is often purported to be) the book delivers a devastating blow to the last hopes of believers in the afterlife.

A considerable portion of *The Myth of an Afterlife* hinges on the brain sciences, mainly in supporting the “dependence thesis,” which states that “having a functioning brain... is a necessary condition (or prerequisite) for having any sort of conscious experiences. And if human consciousness most likely cannot exist in the absence of brain activity, then it must cease to exist when the brain dies” (3). The book reviews data from brain imaging, lesion studies, genetics, development, aging and dementia, diseases such as epilepsy, mind-altering drugs, brain stimulation, animal studies and evolution, all pointing to consistent, robust, coherent, specific and predictive mind-brain correlations for personality, memory, language, perception, reasoning, and basically all

the features traditionally ascribed to surviving souls. This leaves afterlife believers with the unsustainable alternatives of having either to reconcile this evidence with their belief, or to simply ignore it. However, the price of reconciliation might be just too high. In a chapter titled “The Dualist’s Dilemma,” Keith Augustine and Yonatan Fishman closely examine in a Bayesian fashion the likelihood of the afterlife given the current evidence, and conclude that the prospects for survival are not very promising. *The Myth of an Afterlife* thus provides what looks to me like a new argument, by asking not what is gained by a belief in the afterlife, but what is lost. What is lost is essentially the very value of scientific evidence, and especially that from brain science evidence.

Do neuroscientists concur with this approach? To my knowledge, there are no data directly addressing this question. A survey from 1998 found that less than eight percent of leading scientists from the National Academy of Sciences believed in “human immortality,” with biological scientists—probably including a fair share of those who study the nervous system—displaying the lowest rates of belief (7.1 percent).² However, a more general survey of medical and healthcare students and people attending scientific or public conferences on consciousness found widespread acceptance of the afterlife (between 40 and 70 percent).³

The tenacity of such beliefs might be explained by innate cognitive tendencies such as the automatic detection of agents and intentions, a bias for teleological and essentialist reasoning,⁴ or simply by our cognitive difficulty (or impossibility) to conceive of our own nonexistence.⁵ While a denial of immortality has lacked scholarly voices and due consideration as a respectable scientific and philosophical position, important books like this one might help tip the balance toward scientific evidence.

While many of the arguments in *The Myth of an Afterlife* make use of findings from the cognitive neurosciences to support the dependence thesis, the book does not address the biological and psychological *origins* of afterlife beliefs. However the book’s central thesis—that current mind

sciences actively disprove the survival hypothesis—could be further supported by neurocognitive explanations of why such beliefs arose and spread in the first place. The parapsychological section could be read as a display of successful cultural attractors for the afterlife belief, rather than deficient lines of evidence for the belief *per se*. Reports of hauntings might not be “real,” but they are certainly expected if the human brain is in some way tuned to the idea of the afterlife. Indeed, neuropathological syndromes such as out-of-body or near-death experiences,⁶ could be seen as the very *origins* of soul and afterlife beliefs,⁷ beliefs which, ironically, later co-opted these very experiences as evidence for their own validity.

The Myth of an Afterlife, however, stays focused on its main mission of dismantling the survival hypothesis, regardless of why humans tend to accept it. Its rigor, relentless argumentation, and careful attention to the evidence and to possible objections make it a major and unique contribution to a topic long neglected by scientists. Its main virtue is simply to take the idea of the afterlife and its consequences seriously, and see where this leads. Given the current success of neuroscience in establishing the neural basis of consciousness and thought, is it still honest to claim that we simply don’t know “what comes after”? If so, then, one might wonder what exactly the cognitive and brain sciences have been discovering and teaching us all along about the nature of the mind.

Much as biologists have stood up against creationism, medical doctors have fought misinformation about vaccines, and climate-scientists have been vocal about the reality of global climate change, it is time for neuroscientists and cognitive scientists to openly reject the myth of an afterlife and help spread the word that this idea is simply wrong. **S**

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