

A Response to “Against Cognitive Imperialism”

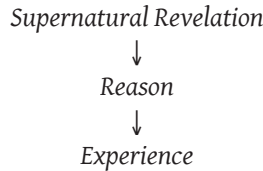
B. Alan Wallace

Abstract: *The author condemns the “hegemony” of scientific materialism, comparing it to the dominance of scholasticism during the Middle Ages. He points out that if we are to regard religious entities and spiritual experiences as “supernatural” and imaginary on the grounds that they cannot be measured and described objectively, then we must regard all our experience of the world as equally supernatural and subjective, since all we have is the subjective experience of the data of our senses. On this basis he seconds Harold D. Roth’s call for readmission of contemplative studies to the academy alongside the study of the “Church Scientific.”*

Hal Roth has cogently challenged many of the unquestioned assumptions of postmodernism and scientific materialism that are commonly presented by their advocates as being so obviously true that they feel no need to support their beliefs with either empirical evidence or rational argument. Scientific materialism dominates much of the thinking in the natural sciences and has made deep inroads in capturing the imagination of the public at large, while postmodernism continues to exert a considerable influence in the social sciences and humanities. Despite some deep ideological differences between these two belief systems, many intellectuals have adopted both of them, with the tenets of postmodernism laid over those of scientific materialism, like an eiderdown comforter laid over a granite mattress. With their combined domination of the sciences and humanities, they have turned modern institutions of higher learning into bulwarks of “unreflective ethnocentrism” and “cognitive imperialism.”

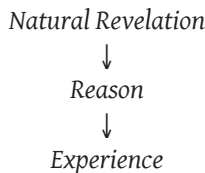
This situation bears a striking resemblance to the ideological and intellectual hegemony that medieval scholasticism exerted over European civilization until the early seventeenth century. Medieval scholastics believed that human knowledge stemmed from two sources: the Bible, consisting of God’s word, and the Book of Nature, which was created by

God. This implied an inevitable conformity between these two books, with the former dictating how to read the latter. This gave rise to strictly enforced hierarchy of knowledge:



A primary characteristic of this medieval hierarchy was a top-down insistence on conformity to an ideology that was considered to be essentially complete and perfect. Therefore, reason and experience were required to support that ideology, and it was against this ideological imperative that the pioneers of the scientific revolution revolted.

With the birth of the “Church Scientific” in the late nineteenth century, which biologist T. H. Huxley claimed was destined to achieve “domination over the whole realm of the intellect,”¹ a new hierarchy of knowledge emerged and has dominated Western academia, the media and secular society at large to the present day:



A primary characteristic of this modern hierarchy is a top-down insistence on conformity to a materialist ideology that is based on three fundamental assertions: (1) the universe emerged solely as a result of physical events occurring at the time of the Big Bang, (2) living organisms evolved solely from inorganic physical processes, (3) mental phenomena emerged solely from organic processes, and religious beliefs and contemplative experiences emerged solely from all the above. Virtually all academic research is required to conform to those three unquestioned and unsubstantiated articles of faith.

While only a small minority of the American public shares those reductionist beliefs, scientific materialists have been exceptionally adept at framing the issues between science and religion in ways that imply that those who disagree with them are suffering from naiveté, brain defects or at least an unfortunate genetic predisposition that leads them

to embrace superstitious beliefs about the supernatural. Anthropologist of religion Pascal Boyer, for instance, purports to “explain religion” and its “supernatural notions” using the lens of cognitive science, and such notions, he comments, “are generally derived not from what one has experienced but rather of what others have said.”² This would imply that all religious assertions are based on unquestioning allegiance to authority or mere hearsay, in contrast to the assertions of cognitive science, which are supported by compelling empirical evidence and rational argument. This article of faith on Boyer’s part utterly ignores (1) the whole range of religious experiences that are the basis for many religious beliefs—in particular, the discoveries made by the great contemplatives of the world’s religions—and (2) the many unquestioned assumptions that pervade virtually all discussions of the mind-body problem by contemporary cognitive scientists.³

George Lakoff, professor of cognitive linguistics at UC Berkeley, has highlighted the critical role that framing plays in setting the stage for any kind of discussion between rival worldviews. A frame, he explains, is a conceptual structure used in thinking, and he sets forth four principles pertaining to the significance of frames: (1) every word evokes a frame, (2) words defined within a frame evoke the frame, (3) negating a frame evokes the frame, and (4) evoking a frame reinforces that frame. He explains,

*Communication itself comes with a frame. The elements of the Communication frame include: A message, an audience, a messenger, a medium, images, a context, and especially, higher-level moral and conceptual frames. The choice of language is, of course, vital, but it is vital because language evokes frames—moral and conceptual frames.*⁴

Materialists frame religion in terms of its “beliefs” about the “supernatural” in contrast to science, which represents “knowledge” of the “natural world.” The frame of the “natural” is often defined in terms of its negation of the “supernatural,” which, in turn, has been defined as anything that cannot be explained by the laws of physics or biology.⁵ Let us assume for the moment that anything currently unexplained by physics or biology is supernatural. At present, physicists believe that the Big Bang occurred 13.7 billion years ago, but they are unable to explain what triggered the Big Bang. Since there is no natural explanation for this event, according to the above definition, the origins of the universe must be deemed “supernatural.” Biologists have concluded that the first living cell emerged from the dust of the Earth 3.6 billion years ago, but they have not been able to explain or replicate the exact conditions

under which life originated, so the origins of life must be classified as “supernatural.” Cognitive scientists do not know when living organism first became conscious in the course of natural evolution, nor do they know how this came about, so the origins of consciousness must also be relegated to the class of the supernatural.

While most physicists insist that the universe arose solely from physical causes, the very category of “the physical” has gradually evaporated from the robust, chunky matter of classical physics of the nineteenth century to insubstantial fields, probability waves and other mathematical abstractions of the twenty-first century.⁶ Moreover, leading experimental and theoretical physicists today are increasingly challenging the notion that we can know anything about the objective world as it exists independently of our methods of empirical inquiry and conceptual frameworks. Anton Zeilinger, for instance, one of the most distinguished experimental physicists working on the foundational issues in quantum mechanics, declares, “One may be tempted to assume that whenever we ask questions of nature, of the world there outside, there is reality existing independently of what can be said about it. We will now claim that such a position is void of any meaning.” Thus, all scientific beliefs about the objective world of nature, independent of the information we acquire by means of our observations and experiments, are, to quote Pascal Boyer, “generally derived not from what one has experienced but rather of what others have said.”

Most biologists and cognitive scientists today insist that that there were no nonphysical influences in the origins and evolution of life and consciousness on Earth, and anyone who questions their account is commonly accused of indulging in magical, irrational, religious or supernatural thinking—all of which runs contrary to scientific inquiry. But virtually all biological and cognitive scientific references to the category of physical phenomena are rooted in outdated notions of classical physics, and the simple reason for this is that few biologists or cognitive scientists have carefully studied the advances of physics in the twentieth and twenty-first centuries. Not uncommonly, their beliefs about the physical world are expressions of “naive realism,” the belief that we directly perceive the objective, physical world around us without any mediation by subjective, perceptual images created (at least in part) by the brain.

Neuroscientist Victor A. F. Lamme, for example, writes, “When a new image hits the retina, it is processed through successive levels of visual cortex,” implying that visual images exist independently in the objective world, transmitted from physical objects to the retina by way of electromagnetic fields or photons.⁷ But by the late nineteenth-century,

physicists understood that electromagnetic fields can be explained only in terms of pure mathematics, not as objective, material substances that mechanically interact with other phenomena, let alone ones that form themselves into visual images. Since the early twentieth century, physicists have known that photons are colorless and do not form themselves into images either. Even if images did exist independently of our modes of observation, they would be unknowable, for all our knowledge of them comes from the information we acquire by making observations that give rise to images. Therefore, Lamme's beliefs about images traveling through space to the retina and then being processed by the brain are derived not from what he or anyone else has experienced but from sheer conjecture, uninformed by modern physics.

Just as the objective visual appearances that we experience do not exist independently of our subjective visual faculties, so do sounds, smells, tastes and tactile sensations arise in dependence upon our other senses. Indeed, all our perceptual experiences of the world around us consist of these perceptual qualia, which do not exist objectively either in outside objects, in the physical waves and particles detected by our physical senses, or inside our brains. Although there are good reasons for believing that all our subjective sensory experiences have neural correlates in specific regions of the brain, no one has demonstrated that these qualia are identical to these brain processes or that they are even located within the physical space of the brain.⁸

If qualia have no location anywhere in physical space and bear no identifiable physical attributes—such as mass, electrical charge and momentum—there are no grounds for assuming that they are physical in nature. The only reasonable conclusion is that they are nonphysical, which, in the minds of scientific materialists, would imply that they must be supernatural. This conclusion also follows from the fact that at present no subjective experiences of any kind—including mental images, thoughts, desires, emotions and dreams—can be measured by any scientific instrument or explained in terms of physics or biology.

According to the previously cited materialists' definition of *supernatural*, the origins of the physical universe, life and consciousness must all be regarded as supernatural, and all subjective experiences also fit in this category. As for an absolutely objective, physical universe that exists independently of all subjective percepts and concepts, leading physicists declare that all assertions about this purely objective domain of existence are meaningless. So this imaginary realm does not even rise to the level

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of the supernatural, and all assertions about this objective reality are simply expressions of faith, based upon “natural revelation,” not upon reason or experience.

While the origins of the Big Bang, of life and of consciousness all remain a mystery, unexplained by the current laws of physics and biology, scientific materialists steadfastly believe that future generations of scientists will validate their present, unsubstantiated beliefs. Such assumptions warrant a deep sense of skepticism, but those who hold them must be granted their First Amendment right to exercise and express the beliefs of their Church Scientific. However, they should not be allowed the right to exercise the cognitive imperialism with which they currently dominate modern academia. Especially in public institutions of learning, the separation of church and state should be enforced not only for members of religious churches, but also for the congregation of the Church Scientific. By challenging the current academic trends of unreflective ethnocentrism and cognitive imperialism and embracing a more cross-cultural perspective that embraces alternate modes of knowing, including contemplative inquiry, we may witness the first true revolution in the mind sciences and a renaissance of the contemplative traditions of the world, East and West. ❧

Notes

1. *Encyclopedia Britannica*, 2006, Encyclopedia Britannica Online, s.v. “Huxley, T. H.”
2. “Gods and the Mental Instincts That Create Them,” in James Proctor, ed., *Science, Religion, and the Human Experience* (New York: Oxford University Press, 2005), 244.
3. B. Alan Wallace, *Contemplative Science: Where Buddhism and Neuroscience Converge* (New York: Columbia University Press, 2006).
4. George Lakoff, “Simple Framing: An Introduction to Framing and Its Uses in Politics,” www.rockridgeinstitute.org/projects/strategic/simple_framing.
5. Sharon Begley, “The Ghosts We Think We See,” *Newsweek*, Nov 5, 2007: www.newsweek.com/id/62337.
6. B. Alan Wallace, *Hidden Dimensions: The Unification of Physics and Consciousness* (New York: Columbia University Press, 2007), 16–26.
7. Victor A. F. Lamme, “Towards a True Neural Stance on Consciousness,” *TRENDS in Cognitive Sciences* 10: 11, (November 2006), 495.
8. Evan Thompson, *Mind in Life: Biology, Phenomenology, and the Sciences of Mind* (Cambridge, MA: Belknap Press, 2007).