## THE HUMANIZING BRAIN: A CLINICIAN/PASTOR RESPONSE

by Mary Lynn Dell

Abstract. The Humanizing Brain is an effort by theological scholars to integrate neuroscience and theological constructs into a cohesive evolutionary and developmental scheme. The primary strength is a developing dialogue between neurodevelopmental theory and process theology. The book's widest appeal should be to theologians exploring religious and spiritual manifestations in the brain and neurosciences. The relatively simplistic science may limit significant usefulness to broad neuroscientific and medical communities, although neuroscientists and sophisticated lay readers with interests and backgrounds in theology may find The Humanizing Brain quite informative and interesting.

Keywords: behavior; brain; creation; development; process theology; psychiatry; neuroscience.

This essay may vary from typical *Zygon* entries in that it will be neither cutting-edge physical, biological, or mathematical science of a theoretical nature nor the theology that might be deconstructed and reconstructed to explain the plights of humans in a postmodern age. Although I have the education, degrees, and interests to dialogue with the authors of *The Humanizing Brain* from those academic and abstract vantage points, my task is to comment on the work from the practical perspectives of practicing clinicians and clergy/pastoral theologians. In other words, what does the book add to the education of medical students, psychiatry and neurology residents, and medical colleagues? Secondly, "will this preach" in the pulpit and help a pastor through tight spots during the week?

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Regardless of his or her discipline or education, every reader must be impressed by the tremendous awe and respect Ashbrook and Albright share not only for the brain and neuroscience but most importantly for the God who masterminded the human nervous system. The brain not only contains the secrets of humanity but also is a substantial key to God and God's entire creation: "we use the mind-producing brain as the primary lens with which to understand clues to God's way of being God. . . . It reflects the trajectory of evolution and the perspective of a transcendent cosmos" (Ashbrook and Albright 1997, xv). "The human brain is the most complex entity, for its size, that we know of in the universe, and for that reason we see it as our premiere expression of the central tendency toward complexification in our universe. We believe that explorations of the nature of our brain can help us better understand 'the way things really are'—in our brain and in our world" (pp. xix—xx).

This obvious respect for neuroscience is seen repeatedly throughout the book, especially in sections on the reptilian brain and in descriptions of the positive potentials of the neocortex in frontal lobes. This attitude is instrumental in engaging readers and helping them sense again in new ways the wonders and depths of God's creation. Practically speaking, these examples from science and facts and linkages between theology and the natural world provide a wealth of sermon illustrations!

This book could be entitled "The Humanizing Brain: Where Process Theology and Neuroscience Meet." If one were not initially a process theologian, one could not help but be converted by the end of the book. C. Robert Mesle has written the most eloquent, succinct summary of process theology I have read:

God is love. That is, God is the unique Subject, whose love is the foundation of all reality. It is through God's love that all things live and move and have their being. God is the supremely related One, sharing the experience of every creature, and being experienced by every creature.

God's power in the world is necessarily persuasive, not coercive. God acts by self-revelation. God, who is the source of our freedom, *cannot* coerce the world.

Jesus, too, had freedom. He chose to be fully responsive to God's call and love. His life and death thereby revealed the character of God's love and God's call to each of us.

Because God loves perfectly, God suffers with the world, calling us in each moment through divine self-revelation, sharing a vision of the good and the beautiful. God *cannot* overrule our freedom, but awaits our free response, constantly and with infinite patience seeking to create the best that can be gotten from each choice we make.

God is omniscient, knowing everything there is to know, perfectly. But this means knowing the future as open, as a range of possibilities and probabilities, not as fixed or settled.

God is co-eternal with the world and shares the adventure of time with us. There has always been a world of some sort in which God has been creatively active.

God is omnipresent. Every person (indeed, every creature) in every moment is

experiencing God as the ground of both order and freedom. God at once makes freedom possible and calls us to choose the good, to choose God's vision for the world. Thus, God works in the world by continual and universal self-revelation.

But our experience of God is inherently interwoven with our experience of the world, so that these shape each other. God struggles to reach us through the dark glass that obscures our vision. Thus, revelation is omnipresent and ongoing, but always ambiguous.

Similarly, God is the ground of the world's becoming. In nature as in history, God acts in the world by self-revelation. But here, too, the power of God is inher-

ently interwoven with the power of the world.

Évery event reflects both the power of God and the power of the world. The world may be more or less responsive to God, but there are no separate events in our world standing outside the laws of nature and history at which we can point and say, "God alone did that." (Mesle 1993, 8–9)

Ashbrook and Albright share Mesle's understanding of process theology and weave it into their interpretations of neuroscience, particularly as they discuss the God who is continuing to create and co-create with humans.

God may also participate interactively in creation. When causation in the universe was seen as unidirectional, people postulated a God who was omnipotent—the Big Boss running the show. But if the nature of causation in the universe, from top to bottom, is basically interactive, then one can envision God as interactive. Such a God does not "pull strings" but participates in a reality subject to multiple causations. Such a God deals with us humans as "created co-creators." In this view, the very nature of the created reality is process, and God acts within this process interactively. (p. 149)

One of the practical uses I recommend for *The Humanizing Brain* is as a secondary text in theology classes exploring process theology, or in a pastor study or continuing education group focusing on applications of particular schools of thought and theology to current events and thinking.

Viewing neuroscience through the lens of process theology unquestionably accounts for the uplifting, optimistic tone of the book. The human mind-brain through the eyes of a hellfire and damnation revivalist would read much differently. Nevertheless, many pastors may raise the concern that the upbeat, positive, process-theology-driven mood of the book undermines the realities of free will and sin in any God and human relationship. Personally, and as a pastor, I prefer to read and preach love, forgiveness, and the miracles of continuing creation any day, but I would have appreciated more from the authors on the brain and the temptations and snares it must face as part of its human condition. On two occasions early in the book it seems as if we were promised such a well-rounded treatment:

While we believe in a loving, gracious, and beneficent context for human life, we also recognize the presence and threat of that which is not loving, not gracious, and not beneficent. For a host of reasons, the brain can lose its adaptability, turning integrative cooperation into destructive dysfunction. (p. xxxiv)

Nothing can match its majesty; nothing can approach its complexity; nothing can detract from its sophistication. It, and it alone, provides entrance to all that is

human and humane, yes and all that is distorted and dysfunctional, in our known world. (p. 7)

The authors have a pleasant discussion of reptilian rituals and aggression in the section "The Reptilian Brain as a Human Problematic." Although they quote James 3:16 and 4:1 and Romans 7:21-24 ("Wretched man that I am!" NRSV), the comparisons that follow of aggression and gang violence to the highly biologically determined reptilian aggressive behaviors undermine the accountability and conscience involved in human acts of violence. Although I assume that this was not the authors' intention, some readers might infer that, because acts of aggression, deception, and territoriality may be biologically programmed in the lower brain of humans, individuals should not be held accountable morally—or perhaps should be excused—if otherwise healthy frontal lobes do not override the primitive behavioral impulses. This type of thinking abounds in the minds of those with conduct disorders and personality disorders. Such individuals are not likely to be reading *The Humanizing Brain*, but I would have appreciated the authors' expanded thoughts on sin, evil, moral accountability, and suffering in their model of mind-brain. Similarly, more complex, evolutionarily advanced parts of the brain are discussed in terms of play, empathy, nurturance, and motivation. As a Christian and clergy person, I believe one hundred percent in the potential for good in the human body, mind, and spirit. However, that one hundred percent faith and belief in goodness coexist with the practical experience and skepticism of a child and adolescent psychiatrist who treats the causalities and results of limbic systems, neocortex, and frontal lobes gone awry. The authors' next work should focus on theological and pastoral resiliency of the human mind-brain outside the sanctuary of the church or laboratory.

While *The Humanizing Brain* serves as a handy, thoughtful vehicle for the exchange of simplified theological precepts and versions of neuroscience among theologians, I would carefully screen my colleagues in the scientific and medical community before recommending the book to them. The descriptions and explanations of neuroanatomy, neurologic functioning, and behavioral neuroscience are too simplistic for anyone who has studied neuroscience at the graduate or medical school level. To give this book to such a scientist or professional who does not already hold a sympathetic view of theology or philosophy could conceivably increase cynicism for the authors' goal—a synthesis of theology and neuroscience into a cohesive whole. On the other hand, for scientists and clinicians who are tolerant of well-intentioned efforts of theologians "cross-training" in science, *The Humanizing Brain* would be a thought-provoking, welcome addition to their theological understanding.

The Humanizing Brain is certainly a progressive and impressive effort to integrate two worlds heretofore considered separate and distinct in modern times—the human brain and theology/religion. It excels as a vehicle

of dialogue for theologians, scholars, and pastors interested in process theology and the neurosciences. The next step, perhaps by adding a scientist who considers herself/himself to be a scientist first and theologian second, might be to consider applications of these discussions to the modern scientific community and the practice of clinical neuropsychiatry.

Finally, I have a few thoughts on appropriate target audiences for *The* Humanizing Brain. As I was reading the book initially, I confess I felt a moderate amount of ambivalence about its usefulness, not to mention whether or not it might be a book of groundbreaking multidisciplinary significance. Upon further reflection, I realize my hesitation resulted from wearing all my caps simultaneously, and not systematically considering the merits of this work in relationship to specific readership categories. For instance, I would not uniformly recommend The Humanizing Brain to physicians and other biomedical scientists, particularly neurologists, psychiatrists, and others well versed in the neurosciences. The book's explanations of neuroanatomy, neurophysiology, and evolutionary development are too simplistic and contain too many "near misses" in terms of usual neuroscientific ways of conceptualizing these issues. The primary exception to this statement would be scientists and physicians with interest in and appreciation of theology and spirituality who would overlook minor scientific flaws and focus on the religious and philosophical components of the book. As I noted previously, Ashbrook and Albright have written a wonderful work for theologians and pastors seeking to expand their knowledge base and stretch their conceptualization of God's creation to new horizons, particularly from a process theology perspective. Indeed, this could be identified as a fine treatise on "applied process theology."

I hope *The Humanizing Brain* will be marketed to commercial bookstores catering to a college-educated clientele of all backgrounds. Many thoughtful, intelligent individuals with personal intellectual curiosity and interest in religion and/or the mysteries of the brain will find *The Humanizing Brain* an articulate, clearly written, thought-provoking work on the interdependent relationships of neuroscience and theology.

## REFERENCES

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