

THE HUMAN MEANING OF THE BRAIN

by James S. Nelson

Abstract. This study attempts to show that brain research brings to light religious meanings. There is a physical basis of religion in that the way the brain has evolved makes possible the religious meanings of human experience. The brain grows out of and reflects the universe. The brain is an icon of God. In the analysis of the brain's various parts and functions the relational dimensions of reality are uncovered in their physical basis. This points to ultimate reality as social and to a social God. As such, the structures of reality, experienced through the brain, reflect the reality of God.

Keywords: brain; empathy; limbic system; meaning; neuroscience; other; relationality; religious experience; social God; symbol.

James B. Ashbrook and Carol Rausch Albright have written a courageous book, with the subtitle, *Where Religion and Neuroscience Meet*. The study of neuroscience, especially the brain, is conducted in a way that religious meanings are brought to expression. This is done to show that the study of nature in our time can bring to light the sacred in life and provide pointers to the meaning of God. This is a venerable task, one that has an ancient classical basis in Christian theology, which in our time has received little or no attention. This book brings up the question of the physical basis of religion in biology, not to prove the necessity or truth of religion or even its credibility but to attempt a coherent vision of the experience of what is ultimate in human meaning, with the intention of showing meaning in religion.

In William Placher's recent book, *The Domestication of Transcendence* (1996), there is a discussion of how the understanding of God, beginning in the modern period, moved to a "greater univocity," that is, a specificity where the multiple meanings of signs, whether natural or rational, are lost. In the Middle Ages, as Michel Foucault expresses it, "the universe was folded in upon itself: the earth echoing the sky, faces seeing themselves

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reflected in the stars, and plants holding within their stems the secrets that were of use to men” (quoted in Placher 1996, 128). So also during the Renaissance, as Ian Hacking recorded, “there were signs, real signs, written by God on nature. People spoke with signs, but so did the world around us” (1975, 81). By the seventeenth century the human meaning and working of things were not a part of the nature that scientists dealt with. The sense of the loss of metaphor in nature is finely noted by Peter Gay:

It is not so much that the philosophers despised fancy, but that in their scientific way of thinking, they sharply separated fancy from reality. In their literary writings, allegory had become a useful, transparent convention, and in their scientific writings metaphor was being replaced by the severe unpictorial language of mathematics. . . . It was different in the Christian millennium. Allegory, metaphor, figurative interpretations, retained their place precisely because they were never reduced to mere linguistic devices or literary frills. This was only reasonable: since God had scattered traces of His intent throughout creation, the man schooled in the ways of the divine language might read sacred meanings everywhere. (Quoted in Placher 1996, 129)

THE BRAIN REFLECTS THE UNIVERSE

The Humanizing Brain as a project is an example of what Karl Popper calls a bold hypothesis. It is on the basis of such bold hypotheses that advances are made in human knowing, especially in scientific knowledge. The theme of this book is that the brain is an icon of God. In how the brain functions and the experiences it makes possible there are pointers to the meaning of God and how such meaning is embedded in nature. The beginning of the project has its basis in the claim that the brain reflects the universe. “Mind comes out of nature and does not function apart from nature” (Ashbrook and Albright 1997, 105). The brain mirrors the universe that gave it birth. As the human brain evolved we can see developing the bodily basis of all that we feel and imagine and about which we reason. It is upon the basis of brain development that an increase in empathy with a reality different from the experiencing self progressively grows. Out of brain evolution arises an increasing sense of oneness with the whole created order through every level of organization. It is out of this capacity that the ultimate context of sacred meaning and order develop. Thus we are able to bring to meaningful expression the context where God or the ultimate emerges. That the brain is the condition for such sacred experiences is grounded in how it arises out of nature and is the condition of the experience of the natural order.

RELIGIOUS EXPERIENCE: A BIOLOGICAL BASIS

Basic to the approach to God in *The Humanizing Brain* is that the way the brain develops in mammals and humans is necessary for the concrete

experience of God. Such experience is thus biologically based. Paul MacLean refers to the “old mammalian brain” as being where the limbic system is contained (MacLean 1990). This system is referred to as “the emotional mind.” In humans there is the neocortex, or what MacLean calls “the rational mind.” “In the following chapters we suggest affinities to the limbic system and the neocortex in understanding God as nurturing and purposeful respectively” (Ashbrook and Albright 1997, 54). The embeddedness of the experience of God is mediated through nature, especially in the way one part of nature, the human brain, is constituted. Through the brain humans evolve to feel related to the universe, especially out of the limbic system, the basis of emotions, and, feeling at home in the universe, find the context of ultimate experience as a place for a graceful presence. Such is the basis for the experience of God, whether called by that name or not.

The basis for human relatedness to the universe and life is through the emotions, grounded in the limbic system of the brain. As emotions develop they offer a kind of guidance system for how a person functions in enhancing the fulfillment of capabilities in various areas of human existence. An individual’s need for attachment, built up by nurture, gives identity and the experience of mind, as correlated with the functions of the neocortex in rational purposive actions. From this basis a person’s sense of the real is established, as well as the moral guidance necessary for relationships, as humans are nurtured out of traditions before they have rational foundations for them. The empathetic structure of human life, arising out of the limbic system in harmony with other potentialities of the human brain, points to an essential structure of reality that opens humans to the meaning of God. “We have been contending that the structuring of reality as we know it reflects the reality of God” (Ashbrook and Albright 1997, 87).

The appropriateness of brain research and the experiences arising out of the potentialities of the brain correlate to a God whose universality is based on the relationality manifest throughout the entire universe. Here a social view of God, as put forward by Charles Hartshorne, is deemed to be in harmony with certain structures of the brain, so that

the deity is the supreme case of the social principle . . . God orders the universe . . . by taking into his own life all the currents of feeling in existence. He is the most irresistible of influences precisely because he is himself the most open to influence. In the depths of their hearts all creatures (even those able to “rebel” against him) defer to God because they sense him as the one who alone is adequately moved by what moves them. He alone not only knows but feels (the only adequate knowledge, where feeling is concerned) how they feel. (Quoted in Ashbrook and Albright 1997, 87–88)

What is important here is that the biology of the brain is a founding element in religious experience. In the social conception of God, God is not

alien, strange, or distant, and certainly not escapist, but naturally a part of what gives meaning to human existence.

ETHICS, RELIGION, AND THE OTHER

The connection between ethics and religion has its basis in the empathy that has its ground in the limbic system of the brain. On this basis human caring for the other marks a most remarkable evolutionary adaptation. The extended nurture of children in the human community developed elements of sharing in care for others. In a similar way, religion appeared which encouraged a sensitivity to the other, the non-kin, the stranger, and the enemy, as persons to be loved as oneself. This sensitivity, or feeling for the other, an empathy that evolved with the brain, is reflected in the relationality intrinsic to the whole of reality. This relationality is experienced as order in nature, which is not unrelated to a moral order in the mind that is expressed in parts relating to other parts and to a whole. This interrelated order of the physical and moral is expressed in ancient myths and rituals that enact and constitute an expression of meaning that reaches out to an experience of unity with the whole of reality. This is biologically based in the separation call of mammals, in the felt loss of a nurturant reality. In MacLean's words: "Perhaps we can trace to this situation [of the separation call] the evolutionary roots of the unity of the family, unity of the clan, unity of the larger societies, as well as the human philosophic yearning for an abstract kind of unity" (Ashbrook and Albright 1997, 108). It is through the brain that the human experiences a oneness with the whole created order, so that the brain bears the weight of human destiny in opening the human spirit to the unity of being which is God. In Emily Dickinson's words: "The brain is just the weight of God" (quoted in Ashbrook and Albright 1997, 109). Thus is experienced the glory of divine destiny. The ability of the brain to engage in symbolic conceptualization is the basis of human ethical identity and the positing of the other as a reality worthy of care set in an ultimate context of a religious dimension.

THE NATURE OF REALITY: GOD

Our authors express their purpose in these words: "In this book, we have been developing the assertion that the evolutionary emergence of the brain reflects—implicitly—the nature of the universe in which human beings find themselves" (p. 110). The human search for meaning is built upon a genetic heritage that, having arisen out of nature, is related to the mystery of what really matters. The natural foundations of evolution are intimately related to this significance of what is important. What is ultimate or sacred in human experience of the universe conditions the way God is experienced. In experiencing the meaning of the universe we have formed our perceptions of God. The human is the image of God (*imago dei*), and "the

nature of God is expressed in the universe and in its most complex emergent entity, the human brain" (p. 145). As God is the mystery of the ground of all being, the divine or ultimate is the truth about the whole of reality. Therefore, God more than ever can be thought of or comprehended and is the judgment on all distortions of reality. There are clues to the human meaning of being in the universe in the experience that comes through and out of the structure of the brain and its workings. These clues are related to how the structure of reality reflects the reality of God. As the brain reflects the structure of the universe that brought it to birth, so the capacities that are born of brain functioning provide us with insights into the reality of God.

Humans have brains that enable them to seek for meaning and purpose, feel emotionally connected to nature and other humans, reach out for larger contexts to situate their deepest longings, and develop values that point to a sense of ultimate fulfillment. These potentialities give persons religious capacities. In and through the brain humans are able to find that the sense of reality is relational and molded by emotional empathy. This structure is exemplified at all levels of organization in the universe and is true at the level of ultimate reality, or the divine. God is the supreme example of relational empathy and sensitivity, the persuasive power of love. It is Whitehead's conviction that without this sense of relational love, we could not understand the being of God. Without a brain that mirrored this relational sensitivity in its various parts, especially in the limbic system, we could not know God. "God, in effect, is structured into the empathic processes of the limbic system and these processes, in turn, reflect the nature of ultimate reality" (Ashbrook and Albright 1997, 89). Here we see that the structure of reality reflects the reality of God, and to the extent that the brain, which has evolved out of nature, provides the means of relating to the universe and its meanings, the sense of oneness with an encompassing reality is what is structured by the brain and the experiences derived from it. From this analysis, it can be seen that the brain has theological significance, and out of its meanings religious interpretations arise. We see here great promise in the relations of religion and neuroscience. The promise of finding religious meanings in scientific research that correlate with the great traditions of religious knowledge and interpretations will provide inestimable value in guiding the fortunes of humankind, giving to them a more solid basis.

CONCLUSIONS

What can be drawn from this challenging book? If through an analysis of the brain there is a reflection of God, what questions arise regarding the theological task in relation to human knowledge, especially knowledge coming from scientific research? What is the nature and purpose of the

theological task? Since this book makes religious claims within the study of the biological and social sciences, the place of such knowledge in illuminating religious claims and theological understandings is crucial. What this implies is the creation of new conceptualities, original ways in which forms of thought will penetrate more adequately the realities and meanings of religion and their grounding. While this may cause discomfort to some, there is no way forward in religious discourse that bypasses the world of nature, especially the brain, in making intelligible the reality and nature of God.

If the brain and the meanings derived from its analysis, based on religious tradition, bear the glory of divine destiny, as our authors have attempted to show, neuroscience cannot be neglected in the development of religious understanding. If persons embody the divine image, the study of the brain and all nature reflects God's glory.

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