

**"What Does It Mean To Be Human?"
In Search of a Theology of the Soul in an Age of Science:
Issues, Assumptions, Options, and Challenges**

By
Dr. Phil Lueck
Professor of Bible/Distance Education
Northwestern College (MN)
pel@nwc.edu

Introduction:

In May of 2000 I wrote an essay for the faculty newsletter of Northwestern College. The purpose was almost the same as that of this paper, except that it only dealt with two approaches: Non-reductive Physicalism as found in *Whatever Happened to the Soul? Scientific and Theological Portraits of Human Nature*, edited by Warren S. Brown, Nancey Murphy and H. Newton Malony, Fortress Press, 1998 and Substance Dualism, as reflected in *Body and Soul: Human Nature and the Crisis in Ethics*, by J.P. Moreland and Scott B. Rae, IVP, 2000.

Since then, there have been a number of new titles published related to the "search." One in particular is of special note: *In Search of the Soul: Four Views of the Mind-Body Problem*, edited by Joel B. Green and Stuart L. Palmer, IVP, 2005. This paper is drawn mainly, but not solely, from these three volumes.

The impetus for the original essay came from an article, entitled "Soulless" in the January-February 1998 issue of *Books & Culture*, a publication of Christianity Today. In it Allen C. Guelzo pointed out that "it is remarkable how little Christian thinkers have risen to meet the challenge of those who deny the soul." His comment was part of his review of several books on consciousness and the mind. Writing in basic defense of dualism, he said that "if consciousness is only an illusion, it is the greatest mistake human beings have ever made." It would seem that Guelzo's observation needs to be revisited. The field of neuroscience has been burgeoning since and it appears that it is pushing the envelope on the answer to the crucial question: **"What does it mean to be human?"**

It is the intent of this presentation to update my earlier essay by considering views within the spectrum of two perspectives: 1) dualism and 2) monism. Traditionally, dualism has been associated with some form of Cartesian dualism, the idea that the human person is both a body and a soul, and traditionally monism has been associated with a reductive or strictly physicalist view of the human person. As will become clear, this is an over-simplification of both perspectives and the spectrum of approaches between them.

My attempt is primarily a descriptive survey which will, hopefully, help us understand the *issues, assumptions, options, and challenges* that each of the various approaches present for the evangelical Christian. A select bibliography of both Christian and non-Christian sources is included at the end.

I. The Issues:

Probably nothing in the known universe is as complex as human nature. For example, the human nervous system with its 100 billion neurons, each with an average of 3,000 connections, means each human being has something like 100 trillion (10^{14}) synaptic switches!

- **Key issue:**

So, are we purely material/physical beings? In other words should we consider ourselves **monistic**? Or are we basically a material/physical body *and* a nonmaterial soul/mind? In other words should we consider ourselves **dualistic**?

Most, if not all, Christians have rejected monism. Many, if not all, Christians, and even some believers of other faiths, hold (or at least assume) some form of a dualist answer. Historically, Christians have believed that some form of body-soul dualism is an essential part of orthodox Christian teaching. As far as the historical development in biblical and theological studies is concerned, Nancey Murphy notes that "it appears that the question of the metaphysical makeup of the human person has not been perceived, throughout the course of Christian history, as a matter central to Christian teaching" (*Whatever Happened to the Soul?* 19). While this may be true, most would agree that it is an important issue in the modern period due to the rise and development of biblical criticism and historicism as well as the place that the concept of the soul has played in the history of Christian ethics and the interface between theology and science.

For example, on the one hand, almost half of *Body and Soul* by Moreland and Rae (229-349) is taken up with matters related to how substance dualism affects their approach to abortion, fetal research, reproductive technologies, genetic technologies, human cloning, euthanasia, physician-assisted suicide and the care of persons at the end of life. On the other hand, in *Whatever Happened to the Soul?* there is only one chapter ("A Moral Case for Non-reductive Physicalism"), which has examples of Christian ethics in nonreductive physicalism, along with examples of the assumed moral achievements of substance dualism as well as the apparent adverse moral consequences of the view of nonmaterial souls.

Today, many scientists and philosophers suppose that the person is but one substance - a material or physical body. Evolutionary biology and genetics both suggest our continuity with other life forms. The discipline of neuroscience has, for this view, completed the "Darwinian Revolution," bringing not only the human body, but the human soul/mind as well, into the sphere of scientific investigation. In particular, nearly all of the human capacities or faculties, once attributed to the soul/mind, are now seen to be functions of the brain.

From this we can see that it is imperative that we answer our crucial question: **"What does it mean to be human?"**

- **Subsidiary issues:**

- **Identity** raises the question as to whether terms such as the soul and the mind are the same, whether the soul and the heart are the same, and whether the mind and the heart are the same. They often appear to be interchangeable, in both the Old and New Testaments.
- **Conceptual** raises three questions. First, how does the concept of a nonmaterial soul/mind/heart interface with a material/physical body? Second, how do the concepts of consciousness or awareness relate to the biblical concepts of soul/mind/heart and the biblical concept of human beings being made in the "image of God" and all this to the idea of human personhood? Third, are the concepts of "being" and "person" the same? If so do they both have ontological status or is "person" just a functional term to describe certain characteristics?
- **Theological** raises the question about when things such as faulty brain development, brain damage, brain disease or brain death could seem to cause impairment or even dissolution of the person, how would these things affect their being a human "being" or "person?"

All these subsidiary issues and their related questions must be addressed and answered if we are to make any real progress in answering our crucial question: "What does it mean to be human?"

II. The Assumptions:

It is important to recognize how one's assumptions, especially those which support one's understanding of the science-theology interface, affect the way one will approach, not only the key issue, but the options. There are *three basic models* that deal with the science-theology interface reflected in the following *three questions*:

- The **Conflict Model** asks: "*Which comes first, science or theology?*" On the one hand, Christians tend to believe one must start with theology and then proceed to science, but only if science is in agreement with theology. On the other hand, scientists tend to believe one must start with science and then proceed to theology, but only if theology is in agreement with science. It is obvious that the "privileging" of either will sooner or later lead science and theology into a conflict model. For some, both theology and science will never be able to avoid this seeming inevitable tension and conflict when truth claims are made from each. This has led to a second model.
- The **Compartmentalized Model** asks: "*Why not allow science and theology to be sovereign, each in its own sphere?*" This is achieved by separating science and theology. It can be thought of as two parallel tracks that never come together. This reflects a compartmental model. It perpetuates the secular-sacred distinction.

It operates on the presumed assumption that reality and truth are accessed *either* through the facts of science *and/or* through the faith of theology. Probably the best known advocate of this approach is Stephen Jay Gould who, in his book *Rocks of Ages: Science and Religion in the Fulness of Life*, presents his argument for what he called *NOMA* (for *nonoverlapping magisteria*). This certainly seems to "resolve" the possibility for potential and/or actual conflict between the two. However, it dichotomizes or fragments the knowledge of reality and truth assumed in both. This is a very costly "peace" that denies both a truly full-orbed approach to doing both science and theology. This leads to the third model.

- The **Complementary Model** asks: "*Is it possible for science and theology to complement one another?*" Rather than creating the potential for conflict by seeking to privilege theology over science or science over theology or compartmentalizing science and theology to avoid conflict, this model seeks to build on the conviction that there is both an "authentic science" and an "authentic theology" and that efforts must be made to eliminate inputs from various kinds of pseudo or counterfeit science and theology. This is the complementary model, which allows each to contribute its own complementary answers to the questions without expecting each to have the exact same answers.

The complementary model does not totally avoid the need to consider the assumptions, discussed above, about the relationship of science to theology when considering the interface between the two. For the Christian who places biblical authority over scientific authority, one must minimally start with the evidence of Scripture. The crucial issue is whether scientific evidence, when considered, can then trump the Scriptural/theological evidence. This is especially critical when the theological evidence, based on Scripture, is presumed to be both relevant and sufficient to answer the scientific questions. In effect theology now trumps science.

The complementary model functions best when the assumption is accepted that both science *and* theology need each other to have a complete understanding of the issue under study. Historically, this has meant that some form of a "Double-Revelatory" theory, which assumes that God has "Two Books of Revelation." The first is the "Book of Nature (creation)" and theologically it is called "general revelation." The second is the "Book of Scripture (Bible)" and theologically is called "special revelation." Obviously, there are times when the preponderance of evidence will seem to come more from one of the two.

It should be noted that the issue of the appropriateness and degree it is for science to give scientific answers to metaphysical questions and for theology to give theological answers to scientific questions is at the very heart of the interface of theology and science debate.

III. The Options:

With regard to our crucial question: "What does it mean to be human?" there have been several classifications of ways to account for views of the nature of the person. I have attempted to describe the options through a two-category classification: dualism and monism. It will be clear that there is some over-lapping between these two classifications.

- **Dualistic Views:** There are at least four different forms of dualism.
 - **Radical Dualism** is where the soul (and/or mind) is totally separable from the body, and the human person is identified with the former. This is usually called Cartesian dualism because of its association with Rene Descartes. Sir John Eccles of Oxford University is, perhaps, the best contemporary proponent of Cartesian dualism.
 - **Substance Dualism** is the more traditional view of many evangelicals and the view of J. P. Moreland, professor of philosophy and Scott B. Rae, associate professor of biblical studies and Christian ethics, both at the Talbot School of Theology, Biola University and authors of *Body and Soul: Human Nature and the Crisis in Ethics*. They prefer Thomas Aquinas' philosophical-theological anthropology and call their version Thomistic substance dualism over against Cartesian substance dualism. Reformed philosopher John Cooper of Calvin Seminary, along with Roman Catholic apologists Peter Kreeft and Ron Tacelli, are among noted contemporary Thomistic substance dualists.

Substance dualism is also the view of Stewart Goetz, professor of philosophy and chair of the Department of Philosophy and Religion at Ursinus College and the first contributor to the *In Search of the Soul: Four Views* volume. He defends his particular version by relying on the "powers of introspection" and what he calls the "Simple Argument." The "power of introspection means that I, as an ordinary person can intuit (believe) that I am a soul that is distinct from my physical (material) body. Hence I am what philosophers and theologians term a substance dualist, or more simply, a dualist" (33). Goetz's Simple Argument for dualism can be summarized as following:

- I am essentially simple
 - My body is essentially complex
 - If I am identical with my body, then whatever is a property of the one is a property of the other.
 - Therefore, because I have an essential property that my body lacks, I am not identical with my body.
- **Emergent Dualism** is the view of William Hasker, professor emeritus of philosophy at Huntington College and the second contributor to the *In Search of the Soul: Four Views* volume. He says that while he is "quite comfortable with much of what Goetz has written" he is "very suspicious of both sorts of claims

to introspective awareness of one's 'true nature' and the simplicity argument" (62).

Hasker wants to take both the human soul and the human body seriously. On the one hand, Cartesian dualism has "too wide a gap opened between the mind and the body and between the mind and the world" (99). On the other hand, he contends that "in order to close this gap, mind must somehow arise from the structure and functioning of the biological organism, but is a substance in its own right, not a mere system composed of the elementary particles of microphysics" (100).

- **Holistic Dualism** sees the person as composed of separable "parts" but is to be identified with the whole, whose normal functioning is as a unity. The human being, therefore, does not have a soul, but *is* a soul or human being. This appears to be the stress of the Hebrew grammar of *Genesis 2:7* "and the man became a living being," not "soul" as in the King James Version. This has become the emphasis in much of recent evangelical theological anthropology. This view usually assumes that "being" and "person" are interchangeable.
- **Monistic Views:** There are at least three different forms of monism.
 - **Reductive Physicalism** is the view that a human person is purely a physical organism, whose emotional, moral, and religious experience will all ultimately be explained by the physical and biological sciences. This view is incompatible with historic orthodox Christian teaching, but is the standard view of contemporary neo-Darwinianism.
 - **Nonreductive Physicalism** is the view of Nancey Murphy, a professor of Christian philosophy at Fuller Seminary, and the third contributor to the *In Search of the Soul: Four Views* volume, where the person is a physical organism, whose complex functioning, both in society and in relation to God, gives rise to "higher" human capacities such as morality and spirituality.

Murphy is clear in what she says nonreductive physicalism is *not*. First, she denies that non-reductive physicalism is a denial of dualism. Second, she denies that the nonreductive part is a denial of the supposition that physicalism also entails the absence of human meaning, responsibility and freedom (115). However, she notes that because there is a wide variety of positions under the heading of nonreductive physicalism, as well as positions that are similar to nonreductive physicalism, but go by different names, it is therefore difficult for her to give a positive account of her understanding of nonreductive physicalism (115-116).

Despite what she calls the "terminological tangles," she seeks to sort through them and says: "For dualists, the concept of the soul serves the purpose of explaining what we might call humans' higher capacities," and concludes that in

the nonreductive physicalist view "these higher capacities must be explained in a different manner. *In part* [italics hers] they are explainable as brain functions, but their full explanation requires attention to social relations, to cultural forces and, most importantly, to God's action in our lives" (116).

Murphy's most recent exposition of her position is found in *Bodies and Souls, Or Spirited Bodies?* Cambridge University Press, 2006. The volume is part of their Current Issues in Theology Series. In four chapters she asks and answers four questions: 1) Do Christians need souls? Theological and biblical perspectives on human nature, 2) What does science say about human nature? Physics, evolutionary biology, and neuroscience, 3) Did my neurons make me do it? Reductionism, morality, and the problem of free will, and 4) What are the philosophical challenges to physicalism? Human distinctiveness, divine action, and personal identity.

In the Preface (ix-x) she states that: "My central thesis is, first, that we are bodies - there is no additional metaphysical element such as the mind or soul or spirit. But, second, this 'physicalist' position need not deny that we are intelligent, moral, and spiritual beings. We are, at our best, complex physical organisms, imbued with a legacy of thousands of years of culture, and most importantly, blown by the Breath of God's Spirit; we are *Spirited bodies*" (italics hers).

- **The Constitution View of Persons** is the view of Kevin Corcoran, associate professor of philosophy at Calvin College and is the final contributor to the volume *In Search of the Soul: Four Views*.

The crucial issue for Corcoran is the distinctiveness of his view. He notes that "what many may find surprising about my view is that while I do not identify myself with the immaterial soul or a compound of soul and body, neither do I believe that I am identical with the physical object that is my biological body. But how can that be? If I am neither an immaterial soul nor a compound of soul and body, how could I possibly be a physical object if I am not the physical object that is my body? The view of human persons I defend is known in the literature as the *constitution view* [italics his]. According to it, we human persons are constituted by our bodies without being identical with the bodies that constitute us" (156-157).

Another crucial issue for this view (but not limited to it) is the problem of *numerical sameness* and *qualitative sameness* as relative to the nature of the pre-resurrection and post-resurrection body (169-172).

A third, but perhaps more controversial, issue is the matter of "ethics at the edges of life." These arise because "according to the constitution view of human persons, human persons are essentially physical *and* [italics his] essentially psychological. One implication of the constitution view is that no early term

fetus constitutes a person. Another implication is that any entity once possessing, but having lost all capacity for, the relevant kinds of psychological states also fails to constitute a person; and, therefore, some organisms in so-called persistent vegetative states (PVS) no longer constitute persons" (.172). Corcoran's position is more fully explained in his latest book: *Rethinking Human Nature: A Christian Materialist Alternative to the Soul*, Baker Academic, 2006.

I should acknowledge that there are those who have made attempts at proving the existence of the soul/mind scientifically. One such is Kevin T. Favero's *The Science of the Soul: Scientific Evidence of Human Souls*, Edina, Minnesota: Beaver's Pond Press, 2004). I have read the book and had extended discussion with the author and I do not believe that Favero has given any real scientific evidence, but basically a rational argument for the human soul consistent with traditional forms of substance dualism.

IV. The Challenges:

There are three main areas of challenge related to a search of a theology of the soul.

- **Methodological:**

It is not the intent of this paper to get into the issues of *ontology* (the study of the nature of being and reality) or *epistemology* (the study of knowledge and, especially, how we know what we know). As important as they are to our key issue, we will have to forgo them. We can summarize the methodological challenges by asking three questions:

- *First*, what do we say about the role of science in "doing theology?" Do scientific descriptions really tell us the way things are, whereas theological descriptions are only subjective expressions of personal preference? This is often the way in which scientists view theological descriptions.
- *Second*, what do we say about the role of the Bible in "doing science?" Do our interpretations of the Bible provide us with truly relevant and sufficient scientific descriptions as well as theological ones? This is often the way theologians, especially conservative ones, view the relevancy and sufficiency of scientific descriptions drawn from Scripture.
- *Third*, how can we know reality and truth? On the one hand, is reality purely physical? And if so, are scientific descriptions the only way human beings have to find out the truth about the world in which we live and, most certainly, that would include what it means to be a human being? On the other hand, do theological descriptions give us the

ultimate truth while scientific descriptions only give us incidental and relatively unimportant details?

- **Theological:**

There are at least two crucial questions that face any of the dualist or monist options that attempt to answer our crucial question: "What does it mean to be human?"

- *First*, the question of the *origin* and *transmission* of the soul/mind or nonmaterial part of the human person has two possible views:
 - The **Creationist** view (not to be confused with the creationist-evolutionist debate) has God creating each new soul/mind or person and placing them in the body/brain at either conception or sometime between conception and birth. Many early church fathers accepted this view that God created each individual soul/person at the moment he gave it a body. Arguments cited in favor of creationism are:
 - Scripture distinguishes the origin of soul/person and body in texts like Eccl. 12:7; Isa.42:5; Zech. 12:1, and Heb. 12:9;
 - Creationism preserves the idea of the soul as a simple, indivisible substance better than traducianism;
 - Creationism makes more credible Christ's retention of a pure soul than does traducianism.
 - Creationism is the official view of the Roman Catholic Church and many in the Reformed tradition.
 - The **Traducian** view has the soul/mind or nonmaterial part of the human person passed on or transmitted to the infant in the act of being procreated by the parents. Some early church fathers, like Tertullian, held to this view, that each soul/ person is derived, along with the body, from one's parents. Arguments cited in favor of traducianism are:
 - Scripture supports it in texts like Gen. 2:2; Heb. 7:10; cf. I Cor. 11:8);
 - It offers the best theory for the whole race having sinned in Adam (cf. Rom 5: 12- 21);
 - It is supported by the analogy of lower life in which numerical increase is obtained by derivation;
 - It teaches that parents beget the whole child, body and soul, and not just the body,

- It was necessary for Christ to have received his soul from the soul of Mary in order to redeem the human soul. Most Protestants hold to the traducian view.
- *Second*, the question of the *status of the person* when the body dies has two views:
 - The **Soul Sleep** view holds that the soul/person "sleeps" between death and resurrection. This doctrine or teaching has been held sporadically in the church. It is not a heresy in the narrower sense, but it may be called a doctrinal aberration. The case for soul sleep rests principally on the following assumptions:
 - Human existence demands the unity of soul/person and body. If the body ceases to function, so must the soul/person;
 - The use of the term "sleep" for death in Scripture is assumed to point to the cessation of consciousness;
 - A state of consciousness between death and resurrection, which would be characterized by either bliss or woe, would assumedly and unwarrantably anticipate the judgment of the last day, when the basis for these experiences is determined. Martin Luther seemed sympathetic with a notion of soul sleep with the *parousia* (second coming of Christ) as the awakening.
 - The **Intermediate State** view, while holding that the normal human state is a union of soul/person and body, allows for the possibility of a disembodied conscious existence between an individual's death and the final judgment and consummation. The arguments cited for this view are:
 - It is held by both the analogy of God's existence as pure spirit (humankind being made in God's image and on the basis of such passages as Heb. 12:23 and Rev. 6:9-11.
 - While there is no sustained reflection on the intermediate state, some see a strong case in Paul's discussion in II Cor. 5:1-10. Here Paul seems to be struggling with his desire not to be "naked" (KJV) or "unclothed" (NIV). The understanding is that Paul did not want to experience "disembodiment," i.e. a separation of his soul/himself from his body after death.
 - II Cor. 5:8, is used to support the idea of an intermediate state. However, some note that it is not explicit as to whether the believer is consciously "awake" while "at home with the Lord." It is also pointed out that because the *parousia* was perceived as so real and imminent that it would have seemed irrelevant to reflect on the state of the dead (cf. I Thess. 4:13-18).

- **Practical:**

Stuart L. Palmer, one of the two editors of the *In Search of the Soul: Four Views* volume and associate professor of pastoral theology and psychology at Asbury Seminary says, in the concluding chapter, that he hears on occasion: "But does this really have anything to do with the Christian life?" (189). He says "my concern is to translate how the four positions championed by our contributors might relate to selected Christian practices and, conversely, how these practices might inform and assist in evaluating these four theories of human nature" (189-190). He deals primarily with the Christian practices of hospitality (194-205) and forgiveness (205-212) and concludes with some very insightful considerations of "From Practice to Theory" (212-215).

These "challenges" may seem to have taken us afield from our search for a theology of the soul and the key issue of what it means to be human. But it would seem that if any view wishes to take both Scripture and science seriously, there are some key questions, within the spectrum of both the dualist and monist perspectives that must be wrestled with.

For example, for *dualists*, who wish to stress that while we have a body, but we are not just our body, and we need our body, there must be a way to explain how a presumably immaterial soul interfaces with a very apparent material body as well as to how an immaterial soul can be said to exist without its material body. This is especially problematic, as I have noted, in the post-mortem between death and the resurrection.

Also, for the *monists*, who wish to ground their perspectives in some form of a physicalist view, there must be a way to account for the nature of those capacities that are usually associated with an immaterial soul and how such emerges or supervenes from the capacities of the faculties of the material body, and the question of what happens to those capacities when that body dies. This is especially problematic if our self-identity or souliness is embodied in a physical and mortal body and raises the question of how can these survive death?

Conclusion:

Integrating and reconciling the truth claims made by Christian theology with new theories in science, and especially neuroscience, is always challenging. If these two are viewed as mutually exclusive and incapable of being alternative or complementary explanations of similar phenomena, the situation will seem irreconcilable. But even when viewed as complementary and potentially reconcilable, reams of description and discussion may often become discordant because of the limits of our human faculties and our human penchant for hubris. So, in the midst of our quest for knowledge and truth, we must approach our task with a certain amount of humility and the recognition that we will never, this side of glory, know all knowledge and truth absolutely. I urge, however, the continued search for a theology of the soul in an age of science.

A Select Bibliography

Part I. Christian Perspectives:

Ashbrook, James B. and Carol Rausch Albright. **The Humanizing Brain: Where Religion and Neuroscience Meet**. The Pilgrim Press, 1997.

Beck, James R. **The Psychology of Paul: A Fresh Look at His Life and Teaching**, Kregel Academic and Professional, 2002.

Beck, James R. and Bruce Demarest. **The Human Person in Theology and Psychology**, Kregel Academic and Professional, 2005.

Boa, Kenneth. **Augustine to Freud: What Theologians and Psychologists Tell Us About Human Nature [and Why It Matters]**. Broadman and Holman Publishers, 2004.

Brown, Warren S, Nancey Murphy, and H. Newton Malony (eds.) **Whatever Happened to the Soul?: Scientific and Theological Portraits of Human Nature**. Part of the Theology and Sciences Series. Fortress Press, 1998.

Bruce, Barbara. **Our Spiritual Brain: Integrating Brain Research and Faith Development**. Abingdon Press, 2002.

Brush, Nigel. **The Limitations of Scientific Truth: Why Science Can't Answer Life's Ultimate Questions**, Kregel Academic and Professional, 2005.

Chappell, Dorothy F. and E. David Cook (eds.) **Not Just Science: Questions Where Christian Faith and Natural Science Intersect**, Zondervan, 2005.

Clayton, Philip. **Mind and Emergence: From Quantum to Consciousness**. Oxford, 2004.

Collins, Gary R. **The Magnificent Mind**. Word Books, 1985.

Colson, Charles W. and Nigel M. de S. Cameron, (eds.). **Human Dignity in the Biotech Century: A Christian Vision for Public Policy**. IVP, 2004.

Cooper, John W. **Body, Soul & Life Everlasting: Biblical Anthropology and the Monism-Dualism Debate**. Eerdmans, 2002 (Updated version).

Corcoran, Kevin J. **Rethinking Human Nature: A Christian Materialist Alternative to the Soul**. BakerAcademic, 2006.

Eccles, Sir John. **Facing Reality: Philosophical Adventures by a Brain Scientist**. Springer, 1970. "Cartesian."

_____ **The Wonder of Being Human.** Springer, 1984.

Evans, C. Stephen. "**Separate Souls: A Defense of 'Minimalist Dualism,'** Southern Journal of Philosophy, Vol. XIX pp.313-331.

Favero, Kevin T. **The Science of the Soul: Scientific Evidence of Human Souls.** Beaver's Pond Press, 2004.

Green, Joel B. (ed.). **What About the Soul?: Neuroscience and Christian Anthropology.** Abingdon Press, 2004.

Green, Joel B. and Stuart L. Palmer (eds.). **In Search of the Soul: Four Views of the Mind-Body Problem.** IVP, 2005.

Gregersen, Niels Henrik, Willem B. Drees and Ulf Gorman (eds.) **The Human Person in Science and Theology.** Eerdmans, 2000.

Hasker, William. **The Emergent Self.** Cornell University Press, 1999.

Jeeves, Malcolm A. **Mind Fields: Reflections on the Science of Mind and Brain.** Baker Books, 1994.

_____ **Human Nature at the Millennium: Reflections on the Integration of Psychology and Christianity.** Baker Books, 1997.

_____ (ed.). **From Cells to Souls - and Beyond: Changing Portraits of Human Nature.** Eerdmans, 2004.

Jones, D. Gareth. **Our Fragile Brains: A Christian Perspective on Brain Research.** IVP, 1981.

Larsen, Jerry. **Religious Education and the Brain: A Practical Resource for Understanding How We Learn about God.** Paulist Press, 2000.

Lints, Richard, Michael S. Horton and Mark R. Talbot (eds.) **Personal Identity in Theological Perspective.** Eerdmans, 2006.

MacKay, Donald M. **Brains, Machines, and Persons.** Eerdmans, 1980.

Machuga, Ric. **In Defense of the Soul: What it Means to be Human.** Brazos Press, 2002.

Middleton, J. Richard. **The Liberating Image: The *Imago Dei* in Genesis 1.** Brazos Press, 2005.

Moreland, J.P. and David M. Cioocchi (eds.) **Christian Perspectives on Being Human: A**

Multidisciplinary Approach to Integration. Baker Books, 1993.

Moreland, J.P. & Scott B. Rae. **Body and Soul: Human Nature & the Crisis in Ethics.** IVP, 2000.

Morris, Tim and Don Petcher. **Science and Grace: God's Reign in the Natural Sciences,** Crossway Books, 2006.

Murphy, Nancey. **Bodies and Souls, Spirited Bodies?** Cambridge University Press, 2006.

Myers, David. **The Human Puzzle: Psychological Research and Christian Belief.** Harper and Row, 1978.

Peterson, Gregory R. **Minding God: Theology and the Cognitive Sciences.** Part of the Theology and Sciences Series. Fortress Press, 2003.

Proctor, James D.(ed.). **Science, Religion, and the Human Experience.** Oxford, 2005.

Rollins, Wayne G. **Soul and Psyche: The Bible in Psychological Perspective.** Fortress Press, 1999

Swinburne, Richard. **The Evolution of the Soul.** Oxford, 1997 (Revised edition).

Van Leeuwen, Mary Stewart. **The Person in Psychology: A Contemporary Christian Appraisal.** Part of IFACS - Studies in a Christian World View. IVP/Eerdmans, 1985. Minimalist Dualism.

Van Peursen, C.A. **Body, Soul, Spirit: A Survey of the Body-Mind Problem.** Oxford, 1966

Part II. General Perspectives:

Ackerman, Sandra J. **Hard Science, Hard Choices: Facts, Ethics, and Policies Guiding Brain Science Today.** Dana Press, 2006. This is part of The Dana Foundation Series on Neuroethics.

Baars, Bernard, J. **In the Theater of Consciousness: The Workspace of the Mind.** Oxford University Press, 1997.

Cairns-Smith, A.G. **Evolving the Mind: On the Nature of Matter and the Origin Consciousness.** Cambridge University Press, 1996.

Chalmers, David J. **The Conscious Mind: In Search of a Fundamental Theory.** Oxford University Press, 1996.

Changeux, Jean-Pierre and Paul Ricoeur. **What Makes Us Tick?: A Neuroscientist and a Philosopher Argue about Ethics, Human Nature, and the Brain.** Princeton University

Press, 2000.

Churchland, Patricia Smith. **Neurophilosophy: Towards a Unified Science of the Mind/Brain.** The MIT Press, 1998 (tenth edition).

Crick, Francis, **The Astonishing Hypothesis: The Scientific Search for the Soul.** Charles Scribner's Sons, 1994.

Czerner, Thomas B. **What Makes You Tick?: The Brain in Plain English.** John Wiley and Sons, 2001.

Damasio, Antonio R. **Descartes' Error: Emotion, Reason, and the Human Brain.** G. P. Putnam's Sons, 1994.

_____. **The Feeling of What Happens: Body and Emotion in the Making of Consciousness.** Harcourt Brace, 1999.

_____. **Looking for Spinoza: Joy, Sorrow, and the Feeling Brain.** Harcourt, Inc. 2003.

Fisher, Len. **Weighing the Soul: Scientific Discovery from the Brilliant to the Bizarre.** Arcade Publishing, 2004.

Flanagan, Owen. **The Problem of the Soul: Two Visions of Mind and to Reconcile Them.** Basic Books, 2002.

Gazzaniga, Michael S. **The Mind's Past.** University of California Press, 1998.

Goldblum, Naolmi. **The Brain-Shaped Mind: What the Brain Can Tell Us about the Mind.** Cambridge University Press, 2001.

Gregory, Richard L. **The Oxford Companion to the Mind.** Oxford University Press, 2004.

Johnston, Victor S. **Why We Feel: The Science of Human Emotions.** Perseus Books, 1999.

Kandel, Eric R. **In Search of Memory: The Emergence of a New Science of the Mind,** W.W. Norton, 2006.

Koch, Christof. **The Quest for Consciousness: A Neurobiological Approach.** Roberts and Company Publishers, 2004.

McGinn, Colin. **The Mysterious Flame: Conscious Minds in a Material World.** Basic Books, 1999.

Nadeau, Robert and Menas Kafatos. **The Non-Local Universe: The New Physics and Matters of the Mind**. Oxford University Press, 1999

Newberg, Andrew, Eugene D'Aquili and Vince Rause. **Why God Won't Go Away: Brain Science and the Biology of Belief**. Ballantine Books, 2001.

Penfield, Wilder G. **The Mystery of the Mind**. Princeton University Press, 1975.

Penrose, Roger. **Shadows of the Mind: A Search for the Missing Science of Consciousness**. Oxford University Press, 1994.

Rose, Steven. **The Future of the Brain: The Promise and Perils of Tomorrow's Neuroscience**. Oxford University Press, 2005.

Searle, John R. **The Rediscovery of the Mind**. The MIT Press, 1992.

_____ **Mind, Language and Society: Philosophy in the Real World**. Basic Books, 1998.

Stapp, Henry P. **Mind, Matter, and Quantum Mechanics**. Springer-Verlag, 1993.

Warner, Richard and Tadeusz Szubka (eds.). **The Mind-Body Problem: A Guide to the Current Debate**. Blackwell, 1994.

Zeman, Adam. **Consciousness: A User's Guide**. Yale University Press, 2002.