

Chapter Three: Soul Searching

by William Creasy

Humanists are well familiar with previous conflicts between science and religion. One major conflict began with the Copernican idea that the Earth is not at the center of the Universe. Another was the Darwinian idea that humans evolved from other animals by a natural mechanism. It is important to consider the next major conflict between religion and science. The next conflict is already beginning and may be even more divisive than previous conflicts, because it involves a key aspect of most religious worldviews.

The conflict centers on the idea of the soul. Adam Carley, an information scientist, wrote in the Fall 1994 *Free Inquiry*,

A major new science-religion confrontation is shaping up, this time over the question of consciousness. Yet neither camp seems particularly aware of it. Whether sooner or later, this confrontation stands to surpass confrontations over Galileo and Darwin in historical importance. Galileo desanctified where we live. Darwin desanctified where we came from. Explaining consciousness will desanctify what we are.¹

Creationists who still dispute Darwinian ideas have shown that this kind of ideological conflict can be long-lasting and disruptive.

In discussing a topic as broad as the soul, much must be summarized. I begin with a very brief history of ideas about the soul and how these ideas have changed, followed by a discussion of some relevant current scientific research.

¹Adam L. Carley, "What is 'Consciousness'?" *Free Inquiry*, Fall 1994, Vol. 14, No. 4, 26-30.

Finally, I will present arguments as to why the idea of a soul is so attractive to so many people, why naturalistic ideas may be threatening to them, and what humanists may have to do to minimize the conflict.

First, what is a soul? The soul is central to many religious beliefs. Ideas about the soul affect the worldview of many believers and their ideas about the place of human beings in the world. They involve ideas such as free will and morality. A more complete reference is the recent book, *Are Souls Real?* by Jerome Elbert.³ Elbert is a physicist, and he approaches the question from a science background.

What do we mean by "soul"? Of course, it is possible to speak of a soul in common meaning, like music having soul. This meaning of soul is something touches you deeply or that someone has a dignity. The word "spirit" has similar naturalistic meanings to go with the supernatural ones.⁴

In a religious sense, a soul is typically a supernatural entity. It is an otherworldly substance in people that is connected in some way to God. It may (or may not) include some or all of the personality, or consciousness, and it may survive in some form after the death of the body.

The specific meaning of a soul has changed through history. The earliest ideas of the soul may have been explanations of the difference between living and dead bodies. Dead bodies appeared very similar to living bodies, but they seemed to be missing some vital force. Early words for soul or spirit were related to "breath," suggesting that it was thought that the animating force of life was related to breathing, possibly in the air that is felt but not seen.

Some of the ancient Greek and Hebrew philosophers thought that people had souls, but that the souls did not include most of the personality. People's personalities were

³Jerome W. Elbert, *Are Souls Real?* (Amherst, N.Y., Prometheus Books, 2000).

⁴Tom Flynn, "When Words Won't Die," *Free Inquiry*, Summer 2002, pp. 50-51.

related to their interactions with the world, so the soul survived death, but the afterlife was shadowy and indistinct. This idea is related to the modern superstitious ideas of ghosts. Ghosts are commonly thought to have vague goals or tenuous connections to reality, but they aren't real, complete personalities. The idea also survives today, in that anti-abortionists think that a human fertilized egg already has a soul, even without a personality. These ideas imply that the soul doesn't include a personality, consciousness, or worldly experiences.

With Plato and continuing through Descartes, with many modifications, the idea of a soul picked up the notion that it included personality and experiences. It came to include sensory information that originated with the physical body. The afterlife became more distinct and more lifelike, except on a spiritual rather than a material plane. Free will and conscious decisions required contributions from the soul. This is the idea of dualism, that the body and conscious mind are distinct, separate entities, which was advocated by Descartes.

From a scientific perspective, the hypothesis of the existence of a soul created a lot of inconsistencies. Even for the ancient Greeks, there were problems with the idea of the soul as an explanation. We can ask questions like the following about the nature of the soul. What is a soul made of, and how does it work? If the soul is responsible for decisions, then the soul can affect the physical body, but how do these effects happen? That is, how can a purely mental entity affect a purely physical one and vice versa? It is hard to see how measurements or observations would help to answer these questions, and traditional answers often seem arbitrary. If a soul doesn't interact strongly with the material world, as the ancient Greeks thought, it is a difficult hypothesis to address scientifically. The definition of the soul keeps slipping just beyond our ability to measure it. The soul idea doesn't really seem to explain anything.

However, the idea that the soul contains the entire conscious mind is probably more popular. It is a more well-formed problem to ask whether the soul is the same as consciousness. One can look at two broad, competing hypotheses about consciousness. The first is that it can be explained completely in natural terms as a function of the brain. The second is that consciousness is supernatural and it needs at least some contribution from a soul that is made of something that cannot be explained from natural laws.

Cognitive science and computer science research are currently providing an increasing amount of information regarding how the brain works. For most of the 20th century, the study of consciousness was intellectually disreputable, but it has developed significantly in the 1990's as a result of new medical imaging methods and computer models. One could speculate that a comprehensive theory of consciousness could be produced very soon, given the number of people and amount of effort being focused on it.

Several medical imaging techniques, particularly PET scans and MRIs, have allowed a tremendous increase in information for studying the workings of a living brain. For example, it is possible to take an image of the areas of the brain that are active during particular thoughts and actions. These studies are now being reported routinely.

There is also a lot of evidence that when small areas of the brain are damaged, peculiar limitations of perception or communication result. People who are undergoing brain surgery can have areas of the brain electrically stimulated, and they report particular thoughts or emotions that result. There is a huge amount of scientific evidence of this type that specific thoughts are localized in specific areas of the brain.

There is even plenty of common sense evidence to consider. It is clear that mental states, and even consciousness itself, can be affected by drugs, including alcohol or caffeine. Addictive drugs like cocaine and heroin have powerful effects on conscious feelings. The behavior of

hyperactive children is affected by Ritalin. People with mental illness improve when treated with drugs. For example, research by Oliver Sacks discussed in his book *Awakenings*⁵ showed that a neurotransmitter could bring people out of a coma, a startling effect of a chemical on the brain and on the resulting behavior of individuals.

These effects show that the brain is affected by chemicals, which are certainly natural materials. The effects include changes in personality and in conscious ways of thinking. This implies that the physical world can affect thoughts and that consciousness must be closely related to brain function.

For a scientist, the simplest explanation of this data is that since some behavior is clearly linked to regions of the brain, it implies that all mental functions are the result of brain activity. Most secular humanists would probably agree with this naturalistic explanation. But is this evidence good enough to be conclusive?

Unfortunately, at present there is no established, general hypothesis for the way consciousness works in terms of connections between neurons. But even if there were, is an explanation of brain function enough? Even if the entire brain were mapped and understood, would it be enough to explain the subjective experience of consciousness? Individual brains are unique and subjective feelings are so personal that a scientific explanation may not convince everyone.

David Chalmers⁶ separated the study of consciousness into two parts. The "easy" problem, according to him, is studying the physical and computational aspects of the brain. Even this is a complex problem of mapping connections

⁵Oliver W. Sacks, *Awakenings*, (Peter Smith Pub., 1990).

⁶David J. Chalmers, "The Puzzle of Conscious Experience," *Scientific American: Mysteries of the Mind* (Special Issue, 1997), pp. 30-37, reprinted from *Scientific American*, Dec. 1995.

between billions of neurons. The "hard" problem is explaining how the physical processes in the brain give rise to a subjective feeling of consciousness. He feels that this hard problem may be beyond science.

Indeed, an explanation of why consciousness feels the way it does, subjectively, is necessary for the scientific results to have a cultural impact on religion. If the explanation is only, "consciousness is located in a particular part of the brain," or "consciousness is associated with a lot of neurons firing in a particular pattern," then it won't mean much to people. They may continue to assert that there is something that is still beyond the reach of scientific measurements, and something that still justifies belief in the supernatural.

One way for an explanation to have a popular impact is if it provides an analogy between consciousness and something that is clearly mechanical, artificial, or alien. One reason that consciousness seems supernatural is because there is nothing else that we can observe or experience in the world like it. If we see something artificial that acts like it is conscious, that could have an impact.

It may not be long before someone builds a computer with a personality that is a good simulation of a human one. If this happened, it would show that a mind and personality can be completely produced by the natural functioning of a computer. This possibility was only science fiction even a few decades ago, but now computer technology has almost reached the point of having processing power that is comparable to a human brain.⁷ So this experiment may not be that far into the future. Proof that animals have conscious thoughts, or success in human communication with an extraterrestrial intelligence could also have an impact.

To understand the evidence that is needed to make a convincing case, the competing religious hypothesis about

⁷ Gregory S. Paul and Earl D. Cox, *Beyond Humanity: Cyber Evolution and Future Minds* (Rockland, MA, Charles River Media, Inc., 1996).

consciousness or the soul can be examined. Souls have been part of most, but not all, religions for millennia. Today, billions of people believe in religions that say that people have supernatural souls that survive in some form after death. Why is this idea so attractive?

To use a "new age" type of explanation (which actually dates back to the ancient Greeks), the idea of a soul provides the connection of people to each other and to the universe. Each person's subjective feeling of consciousness is not an action of one brain in one small location and for a short time. Rather, each consciousness, or soul, is connected in some way to the same type of soul in every other person's brain. The soul is also connected to the very substance of the universe, since a person's soul is in some way connected to God, the universal soul. This idea, if true, would mean that the subjective feeling of consciousness is a fundamental part of the entire universe. This kind of explanation is greatly oversimplified compared to complex religious dogma, but it may be the key to the sense of security and completeness that is provided to the believer.

This explanation gives rise to some reassuring ideas. People like the idea that some part of themselves and their loved ones will survive forever. They like to think that part of them is divine and connected to God. These are clearly very attractive ideas. It feels good to believe it. Of course, for science we would like to see clear, testable evidence for such claims, which does not seem easy to obtain.

On the other hand, the different religions don't agree with each other about the details of a soul's nature. For example, Christians or Muslims think that a soul is created for a human being at birth, and after death it goes to an afterlife that may depend on either the decisions one makes during life or on divine decree independent of one's actions. On the other hand, most Hindus and Buddhists agree with the idea of karma, in which a soul is not created but is continually reborn in new bodies until the soul achieves perfection. Within these extremes, there are a myriad of religions or

sects that have virtually every conceivable idea about the soul's nature.

In any case, the concept of a soul is central to the way many people relate their self-image and feeling of self-worth to other people and to their place in the universe. Without this key connection, they are left with many troubling questions about who they are and what they should do. The questions are alleviated by the sense of connection provided by faith in the soul. Unfortunately, the soul that gives rise to this faith would have to be supernatural, since nothing that can be observed in the natural world has the necessary properties.

The problem that naturalistic humanists need to be concerned with is finding a simple way to eliminate the need for the idea of the soul or to substitute naturalistic concepts in its place. Because the soul is so central, religions may find it impossible to accept a natural explanation. The Catholic Church has stated that it will maintain belief in the existence of the soul. However, Catholics and many liberal Protestant churches have been willing to accept many modifications in doctrine over the years to agree with new scientific advances. Today large numbers of Christians agree that the Bible contains errors, that the earth is billions of years old, and that life developed by a process of evolution. But the soul is a key concept. Christianity is about life after death and forgiveness of sins. Without an idea of a soul, it doesn't make much sense to talk about a life after death.

Like the idea of God or of the supernatural, there may not be a definitive proof that the soul doesn't exist, particularly if it has a vague meaning. Almost by definition, it is just not something we can measure. The best that science can do is show that it is implausible, or that it is not needed to explain what is observed in the world. So it seems that convincing most people that supernatural souls don't exist may be a very difficult job. However, if science develops a naturalistic understanding of consciousness, a

conflict between naturalistic and religious conceptual frameworks seems unavoidable.

One could ask, "What difference does it make if people want to believe in souls?" In other words, is it possible to agree to disagree? To some extent, there may not appear to be too much harm as long as the belief is limited or compartmentalized. However, there are problem areas that are consequences of belief in a supernatural soul.

For example, as world communication gets easier and more routine, contacts between people with different cultures are more and more common. It is not uncommon for people in America to have business dealings with people in China, Japan, or the Middle East. For these people to understand each other and work together, they need some common basis for understanding each other. It seems unlikely that this common understanding will come from everyone having the same religion. The understanding must come from common experiences and expectations about the natural world and the way that people should behave toward each other.

For example, systems of morality and ritual are specified by religions. The behavior of the individual members in following the religion is believed to determine the fate of their souls after death. This conviction leads to a strong sense that the behavior is not only correct, but it is mandatory. Toleration of the religions of other people must include an acceptance of the idea that the morality and rituals of all people are culturally determined or result from natural interactions of people in this life. The effect of the religion on the afterlife is merely a secondary, unproven assertion.

It is worth noting that belief in the soul is not necessary for humanists to treat other people as if they deserve respect and dignity. With or without supernatural souls, people are important and need meaning in their lives. From a humanist perspective, we can observe the importance of people just from interacting with other people without having any evidence about the existence of their souls. This feeling is an aspect of empathy. In particular, secular humanists don't

think there must be a supernatural substance of any kind to give people their value. It is possible to think about our worth in natural terms, from emotional or social impulses, without invoking supernatural concepts.

Human beings are closely connected with each other. But we are not connected through a supernatural agent like a soul. We are connected because we understand each other. We have empathy for others, and we can feel what others feel just by looking at the expression on their faces or from hearing their words. There is nothing supernatural about it, but there is a deep, profound connection regardless.

Many religions try to link moral behavior to beliefs about the soul. If a soul didn't exist, such religions argue, then people would not have any reason to be moral. But if we think about moral behavior, we find that it is usually based more on reciprocity. We are moral because this improves our present life and enables us to get along with others. If religious leaders continue to insist on linking good behavior to belief in a fictional soul, it may cause confusion among believers. People may lose respect for morality because the supposed basis of morality, the supernatural soul, has lost credibility. This could cause uncertainty, conflict, and a loss of values. Most people might continue to be moral. They just wouldn't understand why they should be moral.

A practical benefit of a naturalistic approach is that the understanding of consciousness could lead to a solution to many practical problems. If research is done to understand in detail how personalities work, it could have many advantages. This kind of understanding could transform the social sciences, just as the theory of evolution provided a theoretical basis for biology. For example, understanding how to modify behavior could greatly improve punishment and rehabilitation for criminals. Our prisons contain record numbers of inmates. If we improve methods for correcting the behavior of these people so they stop breaking laws, they could be released to contribute to society, rather than being a burden on it.

As another example, child rearing could be improved. If children could be taught socially correct behavior and educated with less stress on themselves, teachers, and parents, it would be a great improvement to society. Up until now, teaching has been improved based on trial and error. A detailed understanding of the way the brain works, in naturalistic terms, could provide a great advance.

This type of research will be done, although religious organizations may feel threatened by it and may try to get the government to ban it. The question is, will a reliance on the idea of a supernatural soul stop social progress because of fear of giving up the old ideas? Will this be the basis of the next conflict between science and religion?

It may be the job of humanists to try to break down the walls of resistance, to allow the new ideas about human nature to be accepted. We must also work to develop and provide a framework for an understanding of morality that includes the best of religious morality but doesn't depend on supernatural mythology or the concept of a supernatural soul. If scientific understanding indicates that human consciousness is not connected to the universe, then humanists must be able to deal with the questions and loss of certainty that follow from that understanding. If research shows that humans can't rely on God to solve our problems, then humanists must show that it is more important for us to be able to rely on each other.

The natural sciences show that the universe is not centered around human beings, and this may be difficult for some people to accept. As Adam Carley said, "Only we [secular humanists] carry light enough baggage to follow the trail wherever it leads."⁸ By being prepared for this conflict, perhaps humanists can be ahead of the curve in dealing with

⁸Adam L. Carley, "Consciousness, Math, and Aristotle," *Free Inquiry*, Fall 1995, Vol. 15, No. 4, pp. 33-34.

problems and promoting the advantages of a naturalistic alternative to the question of the soul.

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