

What Does It Mean to Be Human?

Posted on [August 23, 2012](#) by [Fr. Ted](#)

What Does It Mean to Be Human?

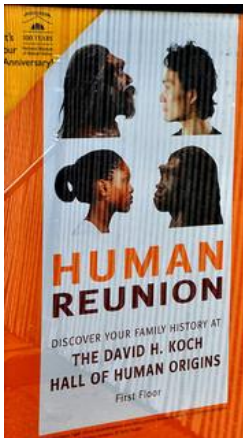


Once that question arose within my heart and mind, it fascinated me and gave and still gives direction to my life and to my search for meaning and truth. I started college as a chemistry major, but the questions that I encountered in the humanities were the ones that intrigued me the most. As much as I respected science and the truths it discovered and proclaimed, I came to believe that biology, chemistry and physics alone could not answer the

question: What does it mean to be human?

In fact, the physical sciences often seemed to doubt that the question itself had any meaning since it was searching for an answer beyond mere physical existence.

The physical sciences teach us many facts about life but I did not believe that a purely chemical analysis of the human body, even when 100% accurate, could ever reveal the meaning of being human or the meaning of life. Such knowledge was beyond the limits of science. For those who like the TV show, *BREAKING BAD* (and I have not followed it through the seasons), there is a brief moment in the first season in which Walt still doing research as a young chemist is puzzled by the fact that a complete chemical analysis of the human body cannot quite account for the entire mass of a human being – there is (at least in the show's chemical analysis of a human) just that tiniest bit that remains unaccounted for which that episode suggests is part of the mystery of what it is to be human.

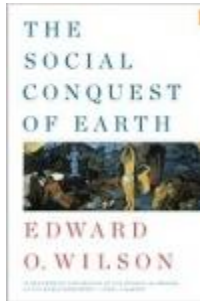


In college, my interest as a result of questioning what it means to be human moved from chemistry to anthropology then psychology as well as sociology, and then to theology. As a junior in college I read Teilhard de Chardin and was taken by his integration of science and theology in explaining humanity. But de Chardin was as anathema to the anthropology professors at Ohio State as he was, so I discovered, to the professors at seminary.

But, for me, the question remained in various expressions: What does it mean to be human? What does it mean to be a human? What is the meaning of being human? What is it to be human?

I have never lost curiosity concerning what it means to be human, and while theologically finding a harbor in the anthropology of Orthodox Christianity, the question remains as fresh in my mind, and as much as part of the mystery of the universe as ever. While theology showed the aspirations of the human spirit in seeking meaning in the universe beyond the self, still we humans

have a physical existence which can be studied by science which imparts a significant answer to the question. We are part of the empirical universe and can be studied in part by the scientific method.



So I read with great interest E.O. Wilson's [The Social Conquest of Earth](#), knowing that his view is a scientific one, but a scientific one that rejects any value coming from theological or even philosophical reflection. Wilson is an atheistic materialist, who teaches absolute biological/genetic determinism. His views are antithetical to what I have come to believe about what it is to be human. And yet, I found his book an enjoyable read offering an overview of millions of years of evolution which has led to the development of human beings. What is obvious to me in that history is that evolution does not appear to be a slow and consistently paced development but there are long periods of slow and little change followed by sudden bursts of significant changes.

But I am getting ahead of myself. In this blog series I intend to comment on my reading of THE SOCIAL CONQUEST OF EARTH. In that book Wilson puts together a story of how the evolution of the social creature, the human, might have occurred. It is the story of what Wilson calls:

“EUSOCIALITY, THE CONDITION of multiple generations organized into groups by means of an altruistic division of labor, was one of the major innovations in the history of life. It created superorganisms, the next level of biological complexity above that of organisms.” (Kindle Loc. 2181-84)



His definitions conform to and are limited by his biologically predetermined notions of what life is. Humans are one of the few organisms that have developed eusociality, and we are by far the largest creature to have done so. It is a development that has enabled humans to conquer the earth. Eusociality exists in a few other creatures, mostly insects like bees and ants, but it has served humans particularly well in their conquest of the planet.

Humans according to Wilson have evolved uniquely of all creatures on earth.

“Overall, it seems now possible to draw a reasonably good explanation of why the human condition is a singularity, why the likes of it has occurred only once and took so long in coming. The reason is simply the extreme improbability of the preadaptations necessary for it to occur at all.” (Kindle Loc. 768-70)



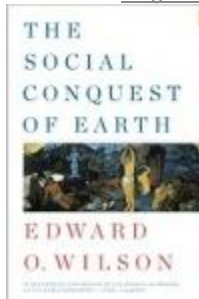
The existence of humans is highly improbable according to Wilson and according to his take on evolution, and yet here we are. And despite our success on the planet, evolution has not favored other species with our peculiar qualities which also seems unusual. The high improbability of our existence and the success of our species has led to very divergent views as to how or why this happened. That divergence in modern times has led to the adversarial views of science and religion, which we will eventually address in this blog series. But first we will look at a few things that make humans unique and Wilson's storyline of how we got here.

Next: [A Few Unique Traits of Humans](#)



A Few Unique Traits of Humans

Posted on August 25, 2012 by Fr. Ted



This is the 2nd blog in this series which began with [“What Does It Mean to be Human?”](#) In this series I am looking at the recent book by evolutionary biologist Edward O. Wilson, [The Social Conquest of Earth](#). Wilson presents in well written manner a storyline with plot of how the anthropological and evolutionary evidence can be read to give us an idea of how possibly humanity emerged on earth. Wilson dismisses religious interpretation of human being, which will be part of what I react to in this blog series. Wilson offers his materialistic answer to the question, **“What does it mean to be human?”**:

“The biological human mind is our province. With all its quirks, irrationality, and risky productions, and all its conflict and inefficiency, the biological mind is the essence and the very meaning of the human.” (Kindle Loc. 1706-8)



The “biological mind” is the interesting phrase. As an atheist committed to materialism, there can be no mind beyond the biological, and yet the exact relationship of mind to brain is not perfectly clear. Wilson will be in the camp of those who dismiss free will and for whom consciousness presents a particular challenge because there can for him be nothing that is not biologically based.

We will come back to these issues in a future blog, for now we will continue to look at what Wilson sees as unique to the human species:



“Besides the bulging forehead, oversize brain, and long, tapering fingers, our species bears other striking biological features of the kind biological taxonomists call ‘diagnostic.’ This means that in combination, some of our traits are unique among all animals:

- *A productive language based on infinite permutations of arbitrarily invented words and symbols.*



- *Music, comprising a wide array of sounds, also in infinite permutations and played in individually chosen mood-creating patterns; but, most definitively, with a beat.*

- *Prolonged childhood, allowing extended learning periods under the guidance of adults.*

- *Anatomical concealment of female genitalia and the abandonment of advertisement of ovulation, both combined with continuous sexual activity. The latter promotes female-male bonding and biparental care, which are needed through the long period of helplessness in early childhood.*



- *Uniquely fast and substantial growth in the brain size during early development, increasing 3.3 times from birth to maturity.*

- *Relatively slender body form, small teeth, and weakened jaw muscles, indicative of an omnivorous diet.*

- *A digestive system specialized to eat foods that have been tenderized by cooking.” (Kindle Loc. 1404-21)*



It is interesting that some of the very things Wilson sees as unique to humanity would also be noted by Theists who accept the claim of Genesis 1 that we humans are created in the image and likeness of God. And it was vigorously discussed throughout Christian history what exactly about us is in God's image? Many Church Fathers agreed that it is not a

physical trait and they like Wilson looked to such things as language, symbolic and abstract thinking, creativity – using things which exist in nature to further create such things as art and music AND inventing and manufacturing things which don't exist in nature for art and science, modesty and virtue, controlling sexual activity and the formation of moral thinking, creativeness in using foods even in symbolic and sacramental ways.



Though some evolutionary biologists downplay the difference between human intelligence and that of other species, many admit that human intelligence is so different from the intelligence of any other species that evolution cannot really account for this difference.

“Michael

Tomasello and his co-workers in biological anthropology, developed during the past three decades. These researchers point out that the primary and crucial difference between human cognition and that of other animal species, including our closest genetic relatives, the chimpanzees, is the ability to collaborate for the purpose of achieving shared goals and intentions. The human specialty is intentionality, fashioned from an extremely large working memory. We have become the experts at mind reading, and the world champions at inventing culture. We not only interact intensely with one another, as do other animals with advanced social organizations, but to a unique degree we have added the urge to collaborate.” (Kindle Loc. 3621-27)



Memory and culture and intentional collaboration would also be noted by theologians as ways in which humans are different from all the rest of creation.



“The creative arts became possible as an evolutionary advance when humans developed the capacity for abstract thought. The human mind could then form a template of a shape, or a kind of object, or an action, and pass a concrete representation of the conception to another mind. Thus was first born true, productive language, constructed from arbitrary words and symbols.” (Kindle Loc. 4486-88)

What was also born along with “true, productivity language” is the notion of truth. There is no such thing as truth or fact or science without the conscious observer. This is a new truth that has been revealed through quantum physics. There is no truth without a conscious observer. We humans in fact exist to discover truth. We have a purpose in nature and Wilson though he doesn’t seem to recognize it, uses the gift of conscious observation to seek out truth. Truth doesn’t just come to him, he has to consciously choose to seek it, to uncover it hidden in the natural world. Evolution has in fact brought into existence the very beings needed to consciously observe the universe.

For theists at least, that humanity has a purpose comes as no surprise. That evolutionary biologists don’t recognize conscious observation as a product of the evolutionary process speaks more about their ideological commitment to determinism than it does of their commitment to revealing truth.

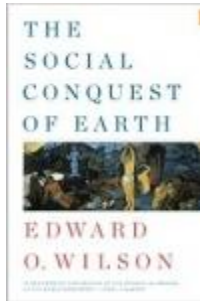
Before getting to issues which atheists and theists disagree on, the next blog will take a very quick tour through 120 million years of history that were the needed prerequisite to our current situation on planet earth.

A Very Quick Tour of Evolutionary History

Posted on [August 30, 2012](#) by [Fr. Ted](#)



This is the 3rd blog in this series which is reflecting on E.O. Wilson's book [The Social Conquest of Earth](#). The first blog in the series is ["What Does It Mean to be Human?"](#) and the previous blog is [A Few Unique Traits of Humans](#).



Wilson is an effective story teller and he does offer a potential history of how evolutionary history unfolded leading to the appearance of modern humans. That is the heart of his book, and I recommend you read his book because the history is fascinating. Even if you have doubts about evolution, you can still see how evolutionary theorist piece together and interpret the evidence they have before them. Certainly as Wilson describes the evidence and the history there are lots of uncertainties, possibilities and probabilities that make up the story, and while it may be the best construct of the existing evidence, one realizes some of this history is guesswork and some parts of the history no doubt are going to be overturned as new evidence is discovered. That certainly is the nature of science and the meaning of "truth" in the evolutionary context. While Wilson is committed to evolutionary theory, it does seem to me in the book he expresses in various ways that the story he is telling is possibly the story based on current evidence but some of the story is interpretation and educated guesses to fill in gaps in knowledge.



That evolutionary theory is constantly undergoing change based on new discoveries and evidence is made obvious in such news reports as as found in England's THE INDEPENDENT, [Fossil Discovery Rewrites the Story of Human Evolution](#). Some will argue the sensational headline's claim that the discovery "rewrites" the story of human evolution is an exaggeration,

nevertheless my read of Wilson is that he would be totally comfortable with rewriting chapters in his book if new evidence led to new theories or a new storyline. We will get back to debates between science and religion in this series in the near future.

Wilson offers an overview of what his book is about:



“LIKE ALL GREAT PROBLEMS in science, the evolutionary origin of humanity first presented itself as a tangle of partly seen and partly imagined entities and processes. Some of these elements occurred well back in geological time, and may never be understood with certainty. I have nevertheless pieced together those parts of the epic on which I believe researchers

agree, and filled in the remainder with informed opinion. The sequence, given in broad strokes, is the consensus I believe to be correct, or at least most consistent with existing evidence.” (Kindle Loc. 762-67)

Before getting to the controversies between science and religion, below are a few facts from Wilson’s evolutionary timeline which I found interesting. Keep in mind Wilson’s term “eusociality” which means multiple generations of a species living together with “an altruistic division of labor.” Humans have eusociality as do some bees and ants. Very few species have actually developed this trait despite its apparent evolutionary advantage.

“The eusocial insects are almost unimaginably older than human beings. Ants, along with their wood-eating equivalents the termites, originated near the middle of the Age of Reptiles, more than 120 million years ago.” (Kindle Loc 725-26)

“The oldest known stone tools, knapped crudely to serve some function or other, date to 6–2 million years before the present.” (Kindle Loc. 677-78)



“The first hominins, with organized societies and altruistic division of labor among collateral relatives and allies, appeared at best 3 million years ago.” (Kindle Loc 7207-28)



“By two million years before the present, the favored australopithecine line had begun the transition to the still-larger-brained Homo erectus. This species had a brain smaller than that of present-day Homo sapiens, but it was able to shape crude stone tools and use controlled fire at campsites. Its populations spread out of Africa, blanketing the land up into northeastern Asia and pushing south all the way to Indonesia.” (Kindle Loc. 1378-82)

“By 200,000 years before the present, the African ancestors had come anatomically closer to contemporary humans. The populations also used more advanced stone tools and may have engaged in some form of burial practice. But their skulls were still relatively heavy in construction.” (Kindle Loc. 1426-27)



“Burials began at least 95,000 years ago, as evidenced by thirty individuals excavated at Qafzeh Cave in Israel. One of the dead, a nine-year-old child, was positioned with its legs bent and a deer antler in its arms. That arrangement alone suggests not just an abstract awareness of death but also some form of existential anxiety.” (Kindle Loc. 4502-4)

“Only around 60,000 years ago, when Homo sapiens broke out of Africa and began to spread around the world, did people acquire the complete skeletal dimensions of contemporary humanity.” (Kindle Loc. 1428-29)

The “creative explosion’ that began approximately 35,000 years ago in Europe. From this time on until the Late Paleolithic period over 20,000 years later, cave art flourished. Thousands of figures, mostly of large game animals, have been found in more than two hundred caves distributed through southwestern France and northeastern Spain...” (Kindle Loc. 4507-9)

“Flutes,’ technically better classified as pipes, fashioned from bird bones, have been found that date to 30,000 years or more before the present.” (Kindle 4551-2)



“In a very early time, from the Late Paleolithic period through the Mesolithic period, the cultural evolution of humanity ground forward slowly. At the beginning of the Neolithic period, 10,000 years before the present, with the invention of agriculture and villages and food surpluses, cultural evolution accelerated steeply. Then, thanks to the expansion of trade and by force of arms, cultural innovations not only increased

faster but also spread much farther.” (Kindle 1619-23)

There were so many other aspects of the story that I found fascinating, but the above are a few “highlights” of the human evolutionary story according to Wilson. I value the

comments for what they contribute to an understanding of what it means to be human. To be human is not simply to be the passive victim of biological determinism. To be human is to create, is to feel, is to worship and is to believe in something greater than one's self. We'll turn now to a more controversial aspect of Wilson's writings: his criticism of religion.

Wilson's Critique of Religion

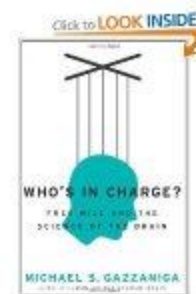
Posted on [August 31, 2012](#) by [Fr. Ted](#)

This is the 4th blog in this series which is reflecting on E.O. Wilson's book [The Social Conquest of Earth](#). The first blog in the series is ["What Does It Mean to be Human?"](#) and the previous blog is [A Very Quick Tour of Evolutionary History](#).



At one time it was thought that *"Theology is the mother of all sciences"* since all sciences were in search of truth and thus flowed from theology, the study of the revelation of truth. But then in the 18th Century Age of Enlightenment science divorced itself from religion and sought truth not in divine revelation but in the empirical world alone. Science came to believe that the only truth worth seeking and the only real knowledge was empirical truth. All truth was thought to be in the material world. Even the truths of philosophy and the humanities was pushed aside. There was no meaning to being human since there was nothing beyond the empirical world.

Obviously the thinking of atheistic science was in direct conflict with the notion of religion that there is more to the universe than the empirical world. Today, there is debate not only between science and religion but within science as to whether consciousness and free will are just illusions created by biochemistry or whether they exist and cannot be fully accounted for by pure materialism. Even some atheists and scientist now acknowledge there are "forces" at work in the universe and within humans that may not be merely chemical reactions. The arts too and the humanities also raise questions and doubts as to whether atheistic empiricism can in fact answer all the questions we can raise in the universe. [See for example my blog series that began with [The Brainless Bible and the Mindless Illusion of Self](#) in which Michael S. Gazzaniga's [WHO'S IN CHARGE?: FREE WILL AND THE SCIENCE OF THE BRAIN](#) and Raymond Tallis' [APING MANKIND:NEUROMANIA, DARWINITIS AND THE MISREPRESENTATION OF HUMANITY](#) challenge the



assumption that humans do not have free will. Both authors are scientists who accept evolution and Darwinian claims but admit conscience and free will are real forces at work in the empirical world.]

While E.O. Wilson is negative toward religion and philosophy, he does in his book throw a bone to art.

Picasso expressed the same idea summarily: “Art is the lie that helps us to see the truth.” (Kindle Loc. 4484-85)



←Hyperbolic Crochet Coral Reef

“The successful scientist,” waxes Wilson, adding a little charm to what some might say is an otherwise inhuman way of conceiving truth, “thinks like a poet but works like a bookkeeper” (Kindle 4452). But in the end for all the intelligence, cleverness and inventiveness of the human mind, Wilson sees humanity as basically not in any meaningful way different from the flow of lava, the fluttering of a leaf in the wind, or the weight of a rock. There is no free will, and even consciousness may be an illusion of biochemistry.

But Wilson wants to be clear he does embrace the notion that the only truth worth knowing or that can be known is empirical truth.

“Science is not just another enterprise like medicine or engineering or theology. It is the wellspring of all the knowledge we have of the real world that can be tested and fitted to preexisting knowledge. It is the arsenal of technologies and inferential mathematics needed to distinguish the true from the false. It formulates the principles and formulas that tie all this knowledge together. Science belongs to everybody. Its constituent parts can be challenged by anybody in the world who has sufficient information to do so. It is not just “another way of knowing” as often claimed, making it coequal with religious faith.” (Kindle Loc. 4742-46)

Interestingly though in Wilson's writing he allows plenty of room for uncertainty – within the evolutionary worldview there is a lot that is currently not known or which can



and will be changed by future discoveries. But for all that uncertainty, Wilson has no doubt that religion has nothing to offer in terms of knowledge. However, of science and scientists, he recognizes there is a very human element which exerts great force on how science is done.

“Science grows in a manner not well appreciated by nonscientists: it is guided as much by peer approval as by the truth of its technical claims. Reputation is the silver and gold of scientific careers. Scientists could say, as did James Cagney upon receiving an

Academy Award for lifetime achievement, ‘In this business you’re only as good as the other fellow thinks you are.’” (Kindle Loc. 4453-56)

Returning to literary thinking (and Wilson is a good writer), he notes:

“What counts in science is the importance of the discovery. What matters in literature is the originality and power of the metaphor” (Kindle Loc. 4467-68).

So we do have non-materialistic forces at work in science: peer approval, reputation, significance. These are not forces easily measured in a scientific way, and yet according to Wilson they are important to the scientific enterprise.



Theoretical Physicist Carlo Rovelli says:

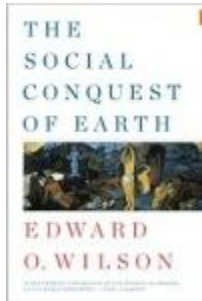
“Science is not about certainty. Science is about finding the most reliable way of thinking, at the present level of knowledge.... It’s the lack of certainty that grounds it. Scientific ideas are credible not because they are sure, but because they are the ones that have survived all the possible past critiques.”

It is a different way of knowing than theology or revelation.

[Wilson's Critique of Religion \(II\)](#)

Posted on [September 5, 2012](#) by [Fr. Ted](#)

This is the 4th blog in this series which is reflecting on E.O. Wilson’s book [The Social Conquest of Earth](#). The first blog in the series is [“What Does It Mean to be Human?”](#) and the previous blog is [Wilson’s Critique of Religion](#).

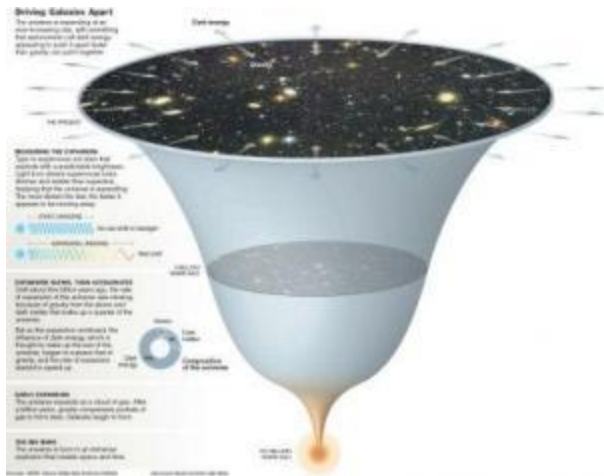


Wilson recognizes that there is a problem for scientists, though he portrays it as a problem for all humanity.

“We are terribly confused by the mere fact of our existence, and a danger to ourselves and to the rest of life. Religion will never solve this great riddle.” (Kindle Loc. 202-4)

The unanswered question, and perhaps unanswerable question for scientific materialists, is “Why do we exist at all?” Why is there something instead of nothing? Questions which can only be asked if there are conscious observers of the universe – but even consciousness itself is called into question by some neuroscientists. Wilson dismisses religion’s answers to these questions because there are a multitude of religions on earth each which comes up with its own explanation but with no ability to prove its answer is any more reliable or true than any other religion’s answer. Thus for Wilson religion is nothing more than human speculation and fantasy.

“... the solution of the riddle has been left to science. What science promises, and has already supplied in part, is the following. There is a real creation story of humanity, and one only, and it is not a myth. It is being worked out and tested, and enriched and strengthened, step by step. I will propose that scientific advances, especially those made during the last two decades, are now sufficient for us to address in a coherent manner the questions of where we came from and what we are.” (Loc. 249-53)



Wilson holds true to his philosophical materialism and atheism. The answers to the life’s most important questions must be found alone in the physical materials of which we are made. In doing this Wilson will ultimately have to say there is no meaning to being human and the questions of why we exist can only be answered in the cause and effect nature of physics, which also turns out to be the limits of the answer. This explanation can take us back through the chain of cause and effect to the

primordial Big Bang, but nothing can be known beyond that point. Beyond the material existence, there are no answers and nothing more to know about the universe. Nothing exists beyond the material world and thus what humans can observe and measure, though Wilson admits the human mind is capable of creating all kinds of fantastic myths

about gods and heavens. These religious stories **served** (past tense) an evolutionary purpose according to Wilson.

“The creation stories gave the members of each tribe an explanation for their existence. It made them feel loved and protected above all other tribes. In return, their gods demanded absolute belief and obedience. And rightly so. The creation myth was the essential bond that held the tribe together. It provided its believers with a unique identity, commanded their fidelity, strengthened order, vouchsafed law, encouraged valor and sacrifice, and offered meaning to the cycles of life and death. No tribe could long survive without the meaning of its existence defined by a creation story. The option was to weaken, dissolve, and die. In the early history of each tribe, the myth therefore had to be set in stone.” (Loc. 211-16)



Creation “myths”, and thus religion itself, emerges in evolution in the eusociality of conscious human beings. Why consciousness itself arose and what evolutionary benefit it serves is not answered. And some scientists, such as Raymond Tallis ([APING MANKIND:NEUROMANIA, DARWINITIS AND THE MISREPRESENTATION OF](#)

[HUMANITY](#)) claim that consciousness appears to be of no evolutionary advantage since responding by instinct is so much quicker and a better tool for survival. Thinking slows the human animal down. Wilson has to drop the questions about what it means to be human and why we exist because the answers cannot be found in the material world. So he tries to set a paradigm in which different questions are asked.

“The creation myth is a Darwinian device for survival. Tribal conflict, where believers on the inside were pitted against infidels on the outside, was a principal driving force that shaped biological human nature. The truth of each myth lived in the heart, not in the rational mind. By itself, mythmaking could never discover the origin and meaning of humanity. But the reverse order is possible. The discovery of the origin and meaning of humanity might explain the origin and meaning of myths, hence the core of organized religion. Can these two worldviews ever be reconciled? The answer, to put the matter honestly and simply, is no. They cannot be reconciled. Their opposition defines the difference between science and religion, between trust in empiricism and belief in the supernatural.” (Loc. 217-23)



The “creation myth” (read “religion”) for Wilson is nothing more than an evolutionary device which helped the humans survive. However, such myths can only emerge in conscious human beings, beings who are free to think, speculate, try to understand their universe. Consciousness makes it possible for us to know the universe in a way different from how all other creatures know the universe. And it is this same consciousness and free will which make it possible for folks like Wilson to philosophically reject the existence of both consciousness and free will. On the other hand, scientists like Tallis at least readily admit that consciousness enabled humans to free themselves from biological determinism. Humans now affect their own evolutionary history – medical science for example by being able to keep alive many humans affects the human gene pool by rescuing it from the ravages of natural selection.



← Minerva: Goddess of Learning

This becomes part of the strangeness of Wilson’s thinking. On the one hand he totally accepts the notion of biological or evolutionary determinism as the power which guides human history. He rejects the notion that we can ever get above or escape biological determinism which is part of his rejection of religion. On the other hand he sees scientific rationalism as able to escape these evolutionary benefits such as the creation myth or religion. Rationalism thus is a force no longer subject to biological determinism.

By his own logic, one might conclude that scientific rationalism is also simply an evolutionary device which temporarily serves a purpose, but which our species will eventually evolve beyond. By Wilson’s own logic, scientific reasoning is not eternal truth, but is limited and conditioned by the current conditions on earth. It too will pass away.

Also as previously noted he does accept that there are social forces (peer pressure for example) which shape the scientific world and which influence what gets researched and what gets ignored. Scientists have their own biases, which include anti-religious biases. Thus his rejection of religion is very selective in what he doesn’t allow as real. He follows a philosophical path, not the pure claimed objectivity of science.

Next: Wilson’s Critique of Religion (III)

Wilson's Critique of Religion (III) Posted on [September 7, 2012](#) by [Fr. Ted](#)

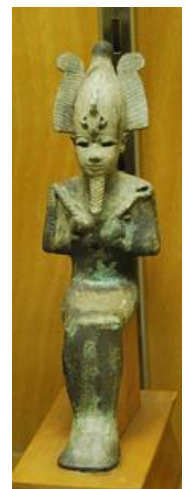
This is the 6th blog in this series which is reflecting on E.O. Wilson's book [The Social Conquest of Earth](#). The first blog in the series is ["What Does It Mean to be Human?"](#) and the previous blog is [Wilson's Critique of Religion \(II\)](#).



Wilson maintains that religion emerges among humans as an evolutionary tool which aids survival. As biological creatures, at least according to this model, humans are predestined by the laws of nature and physics in mechanically following the path of cause to effect. He does not seem to acknowledge on any level that the emergence of consciousness altered biological determinism. Consciousness enables humans to make choices that shape and affect even their evolution as well as that of all the species in the world which humans manipulate through agriculture or genetic modification. But he does seem to imagine that scientific rationalism can get above mere evolution even though other philosophies or religions cannot. Why this is true is not obvious nor explained, but as a person philosophically committed to atheistic materialism he holds these things as absolute truths in a world that has not absolutes, he would say, except the laws of nature.

"By what force of evolutionary dynamics, then, did our lineage thread its way through the evolutionary maze? What in the environment and ancestral circumstance led the species through exactly the right sequence of genetic changes? The very religious will of course say, the hand of God. That would have been a highly improbable accomplishment even for a supernatural power. In order to bring the human condition into being, a divine Creator would have had to sprinkle an astronomical number of genetic mutations into the genome while engineering the physical and living environments over millions of years to keep the archaic prehumans on track. He might as well have done the same job with a row of random number generators. Natural selection, not design, was the force that threaded this needle." (Kindle Loc. 852-58)

Wilson dismisses a God-theory since he claims creating the history of the cosmos — as it is believed to have unfolded according to scientific rationale and theory — would be "a highly improbable accomplishment even for a supernatural power." Or perhaps it is impossible only for a supernatural power of which he can conceive, for many believers would say that is exactly what makes God God. Wilson says there cannot be a supernatural power like the Creator proclaimed by Western religions, but that is the limits of his faith and thinking, not a fact that can be established. He says God cannot be like the Creator revealed in Scripture, therefore there must be no God. By his own accounting the existence of humans is highly improbable anyway. So it would seem an atheistic theory of random events in a series of cause and effect relationships is no more statistically likely to occur than God creating the universe. Why we humans exist is an improbable situation, yet obviously not impossible. But the bottom line is that humans brought into being by an unintentional series of events that strangely brings into existence



consciousness as well and beings who are able to measure and effect the ongoing unintentional process of the unfolding universe is in reality no more likely to be the explanation for why we are here than is the notion that God created us. In both scenarios there is a logical improbability. Yet against all odds, here we are and we are consciously engaging the world around us to understand the processes at work. In Wilson's own words:

"Overall, it seems now possible to draw a reasonably good explanation of why the human condition is a singularity, why the likes of it has occurred only once and took so long in coming. The reason is simply the extreme improbability of the preadaptations necessary for it to occur at all." (Kindle Loc. 768-70)



So whereas science may offer to us a theory or explanation following cause-and-effect principles which can trace our development through the billions of years of cosmic history, all it is tracing and explaining is our mere physical existence. It does not account for the existence of our ability to consciously look at ourselves and the universe and to effectively change the course of scientific determinism. We do this in our breeding habits for ourselves and for plants and animals in our agricultural endeavors. We also are altering the path of determinism through our work in quantum physics, where the existence of a conscious observer changes the very nature of what happens.

The ability to reason and think abstractly and see beyond our biological selves has emerged as a force in the universe and in the evolutionary process. The emergence of philosophical and religious thinking serves, even Wilson acknowledges, an evolutionary advantage for humans. But he limits that advantage to his ideas of eusociality without offering any explanation or evidence of why it must be so that the existence of religion can serve no purpose but a social one.



← The Gate of Paradise

Religions on the other hand can look to the appearance of consciousness, of rationality, of imagination, of creativity, of spirituality as enabling us to engage the universe in new ways not limited to or by physical existence. That there may be beyond the physical world, meaning and purpose is something that evolution itself has brought us to.

For theists, we came to the point that we now have as human beings, we are gifted by God or by the evolutionary process with mental and spiritual characteristics that enable us to know the world in new ways and to answer questions which science itself cannot answer about what it means to be human and why we are here.

Wilson's Critique of Religion (IV)

Posted on [September 11, 2012](#) by [Fr. Ted](#)

This is the 7th blog in this series which is reflecting on E.O. Wilson's book [The Social Conquest of Earth](#). The first blog in the series is ["What Does It Mean to be Human?"](#) and the previous blog is [Wilson's Critique of Religion \(III\)](#).



Wilson's critique of religion follows a pretty standard line of thinking, but doesn't seem to acknowledge the complexities of religious tradition and the ways in which religion have overcome his notions of religion being an evolutionary tool of tribal unity. For religions, especially monotheistic ones, have shown long ago that they have the ability to unite diverse peoples overcoming old tribal

divisions. Even a simple story as St. Jacob of Alaska's work among warring native Alaskans shows tribal exclusivism and hatreds being brought to a peaceful end as the previous warring tribes came to accept each other as brothers and sisters in Christ. Christianity carved out of the old Roman Empire a new race – different from Jews and Gentiles – the Christian people. The Emperor Constantine seems to have recognized that Christianity can create a unity out of an empire divided by geography, language, gender, race and religion. (So too Islam has achieved that same notion – a brotherhood of believers). Old tribal divisions were ended. But Wilson ignores history and writes:



"Religious believers today, as in ancient times, are not as a rule much interested in theology, and not at all in the evolutionary steps that led to the present-day world religions. They are concerned instead with religious faith and the benefits it provides. The creation myths explain all they need to know of deep history in order to maintain tribal unity. In times of change and danger, their personal faith promises stability and peace. When faced by threat and competition from outside groups, the myths assure the believers that they are paramount in the sight of God. Religious faith offers the psychological

security that uniquely comes from belonging to a group, and a divinely blessed one at that. At least within the immense throngs of Abrahamic faithful around the world, it promises eternal life after death, and in heaven, not hell—especially if we choose the right denomination within the many available, and pledge to faithfully practice its rituals.” (Kindle Loc. 4306-13)

What Wilson describes is certainly what Christianity and Islam within their own ranks have endeavored to overcome. Religion doesn't simply sanctify inescapable evolutionary determinism, but strives to overcome biological “predestination” through sexual morality, in working to protect and help the weaker elements in society, in opposing euthanasia and eugenetics, or slavery in all forms. Religion has led the work against selfishness and self-centeredness teaching self-sacrifice, philanthropy and altruism.

Wilson however does not see positive value in religion, but rather sees religion as always being a way for some people to oppress others. It is not to God that religion's adherents demand obedience, but to themselves and their institutions, so Wilson thinks. Thus for him religions are always self serving. There certainly have been times in history where this has been true, but many religions would acknowledge those are the moments in which the religion has failed; that is not the main teaching of religion which seeks God's will and recognizes God, not humans, as Lord. Wilson, however, asks:



“Yet let us ask frankly, to whom is such obeisance really directed? Is it to an entity that may have no meaning within reach of the human mind—or may not even exist? Yes, perhaps it really is to God. But perhaps it is to no more than a tribe united by a creation myth. If the latter, religious faith is better interpreted as an unseen trap unavoidable during the

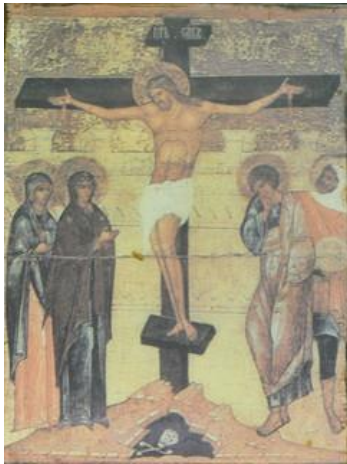
biological history of our species. And if this is correct, surely there exist ways to find spiritual fulfillment without surrender and enslavement. Humankind deserves better.” (Kindle Loc. 4326-30)

The question of course to be asked is if Wilson is consistent in his thinking, won't he have to admit that the tribal thinking is then not the fault of religion but nothing more

than the product of biological determinism? The tribal divisions of humankind in this scenario are inescapable and even ridding the world of religion can change nothing, for people will be people as is in our genes. So his rants against religion are nothing more than a meaningless rage against the mechanistic universe – which he believes in – whose determinism cannot be resisted.

“Why, then, is it wise openly to question the myths and gods of organized religions? Because they are stultifying and divisive. Because each is just one version of a competing multitude of scenarios that possibly can be true. Because they encourage ignorance, distract people from recognizing problems of the real world, and often lead them in wrong directions into disastrous actions. True to their biological origins, they passionately encourage altruism within their membership, and systematically extend it to outsiders, albeit usually with the additional aim of proselytization.” (Kindle Loc. 4700-4705)

Wait a second.....What did he just say?



In his last sentence Wilson faults religion for extending altruism to their own members and then systematically extending it to others. So religion is rejected because it advocates love for others? So he rejects religion both because it advocates love for others and because it is divisive, because it separates people and because it unites them. Bottom line is he rejects religion and will not admit that religion does challenge us in our biologically determined thinking to overcome our self-centered limitations.

Religions indeed have been competitive and oppositional, but religion does offer hope, beauty, goodness, and an ability for humans to evaluate their social actions in terms of morality and truth.

A world without religion will offer us what? Some humans (the atheistic scientists) ruling the world to eliminate the weak and to create a genetically modified humanity in their own image and likeness with no ability to know where this all will lead. It is another version of the utopian ideals that brought Fascism and Communism to power in the mid-20th Century.

Humans devoid of love and humility will not create a better world. Humans when they understand themselves as serving a Lord God have the potential at least to suppress their selfish genetic tendencies and to serve their fellow human beings.

Wilson's Critique of Religion (V)

Posted on [September 13, 2012](#) by [Fr. Ted](#)

This is the 8th blog in this series which is reflecting on E.O. Wilson's book [The Social Conquest of Earth](#). The first blog in the series is ["What Does It Mean to be Human?"](#) and the previous blog is [Wilson's Critique of Religion \(IV\)](#).



“THE ARMAGEDDON IN THE CONFLICT between science and religion (if I may be allowed so strong a metaphor) began in earnest during the late twentieth century. It is the attempt by scientists to explain religion to its foundations—not as an independent reality within which humanity struggles to find its place, not as obeisance to a divine Presence, but as a product of evolution by natural selection. At its source, the struggle is not between people but between worldviews. People are not disposable, but worldviews are. Was Man made in the image of God, or was God made in the image of Man? This is the heart of the difference between religion and science-based secularism. Which alternative is selected has profound importance for human self-understanding and the way people treat each other. If God made Man in His image, a belief suggested by the creation stories and iconographies of most religions, it is reasonable to suppose that He is personally in charge of humans. If, on the other hand, God did not create humanity in His image, then there is a good chance that the solar system is not special within the ten sextillion or so other star systems in the universe. If the latter alternative were widely suspected, devotion to organized religions would fall off significantly.” (Kindle Loc. 4124-35)

Wilson's critique of religion is based on his own sense of the weakness of religious arguments. He imagines that if religious people realized the size and vastness of the universe they would abandon notions of a Creator. It is partly because he cannot envision or allow for a being that is so great as to bring the entire cosmos into existence. And since he believes only in material existence, some form of life – divinity – which is not limited by corporeal realities is not possible in his thinking. But that may be more the limitation of his imagination than any facts that can disprove such a being as God.



← Copernicus' clock

The European discovery of the “New World” occurred at a time when many of the assumed truths of the Bible were being challenged by new discoveries. Some could not believe that a “New World” could exist since it wasn’t mentioned in the Bible. And some indeed came to doubt that the Bible was the sole source of truth. But what was most being challenged was the very nature of the Bible itself – was the Bible the source of scientific knowledge and discovery? Or was the Bible offering an understanding of what it meant to be human – revealing the truth about God and humans in the culturally conditioned languages of historic people?

That the Bible gave no indication of the existence of the Americas is problematic mostly if you think the Bible is the source of all knowledge. But the number of things which have been discovered in nature which are not mentioned in the Bible is staggering, not to mention the numbers of inventions which human technology have created. The very notion of what the Bible is or what it means that the Bible is the Word of God has been undergoing change through time. It was a human understanding that was undergoing change, not what the Bible says. The text of the Scriptures were still there but scientific, geographic and astronomic discoveries were revealing aspects of the universe that were not revealed in the Bible. It was the reading of Scripture in a particular way that was being challenged and changed.



The love of God for the world will not be diminished if it is discovered that God loves the rest of the universe just as much as He loves our world, or that He created other beings in other solar systems. For me at least, the discovery of other inhabited worlds is not much different than the discovery of the New World by Europeans and the discovery that the New World was inhabited. It doesn’t mean the Bible is wrong, but our reading of it and the assumptions we make about the Bible may be way off base.

Indeed some people’s faith will be challenged if it can be shown to them that their reading or understanding of the Bible was simply errant. But others will continue to marvel at the mysteries of the universe and the meaning of life which are both hidden and revealed in the Scriptures.

Wilson does point out what he sees as the growing divide between those committed to a scientific understanding of the universe and those who still acknowledge a religious faith as being part of their understanding.



“On these basic questions a division widened during the twentieth century between religious believers and secular scientists. In 1910 a survey of “greater” (starred) scientists listed in American Men of Science revealed that a still sizable 32 percent believed in a personal

God, and 37 percent believed in immortality. When the survey was repeated in 1933, believers in God had fallen to 13 percent and those in immortality to 15 percent. The trend continues. By 1998, members of the United States National Academy of Sciences, an elite elected group sponsored by the federal government, were approaching complete atheism. Only 10 percent testified to a belief in either God or immortality. Among them were a scant 2 percent of the biologists.” (Kindle Loc. 4139-45)

There is no doubt that many committed to a scientific understanding of the universe see no place for religion in their lives. Atheism offers a fairly straightforward logic and rationale which appeals to the intellect of many. It can point to the failures of religious groups in behavioral terms and the contradictory claims of religions as evidence to the limitations of supernatural claims for truth. If one assumes that the empirical universe is all there is, then atheistic science offers a pretty good explanation as to how things work.



Yet, for some of us, the truths of science, which we don't refute, do not answer those questions which we can ask – why do we exist? What is the meaning of life? What is the meaning of being human? The answers to those questions lie beyond the capacity of science to answer because they are questions which look beyond the limits of the material universe for answers. The search for meaning is also a search for hope. That we can

consciously perceive beauty, mystery, spirituality and love in the universe defies mere scientific explanations. (We will briefly consider in the next few blogs some of Wilson's thoughts on these things). Consciousness and conscience speak to us about an experienced dimension which is not limited by the material universe. Indeed imagination, consciousness, abstract thinking, conscience and problem solving give us hints that evolution, whatever the truth of it is, brings into existence something not predicted by materialism, something which exists in an unknown relationship with the

empirical brain, something that sets humanity apart from mere biological existence and from all other species on earth. And this “intelligence”, the mind, the heart, the soul or the self – whatever words we want to apply to it – enable humans to think beyond themselves and the physical universe. Humanity can aspire for something greater than limits imposed upon us by our physical nature. Such “spirituality” is as real in our lives and world as is the material universe.

Biological Determinism

Posted on [September 17, 2012](#) by [Fr. Ted](#)

This is the 9th blog in this series which is reflecting on E.O. Wilson’s book [The Social Conquest of Earth](#). The first blog in the series is [“What Does It Mean to be Human?”](#) and the previous blog is [Wilson’s Critique of Religion \(V\)](#).



When it comes to issues in which science and religion are at loggerheads, I don’t think Genesis 1-3 was written as a modern science textbook, and so it asks and answers a different set of questions than modern science is addressing. The Bible is answering the question, “What does it mean to be human?” The physical sciences study humans as part of the empirical universe and are not concerned with questions about meaning nor about whether there is something more to being human beyond the physical realities they study.

Not everything that physical scientists study or claim is viewed as hostile to religion by all who believe in God. Some issues which put religion and science at odds really are issues which I might frame as being that set of believers who are biblical

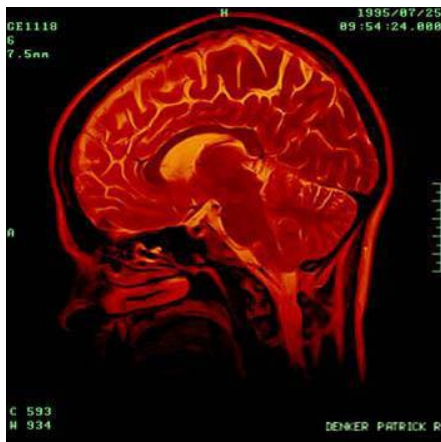
literalists vs. science. These are issues that not all Christians have any concern over because not all Christians are biblical literalists. Arguments about “creation science” fall in this category. While Christians believe in a Creator, not all Christians would agree that the Genesis creation narrative is to be read as a scientific text book nor even as a factually historic account of what happened. Even numerous Patristic writers acknowledged that Genesis 1 might be better understood in terms of eons instead of days.



Some other issues which science and religion debate can be thought of as philosophical disagreements – for example debates about free will or the existence of a soul often are arguments which are framed in terms which are philosophical assumptions and not just scientific facts. If one assumes that everything in the universe can be explained by empirical cause and effect, then one philosophically cannot allow “miracles” or a soul to exist. Also, some issues are just fundamental disagreements in faith issues which are not going to be bridged by offering proofs. If one comes to a belief that God exists, that conclusion may be reached by personal experience and evidence which one sees in history or in the lives of others, but these truly become issues of personal faith (what I believe) which others may never experience or understand. My own experience in life

has led me to conclude that the physical sciences, whose basic truths I accept, still do not and cannot answer the question what it means to be human. I accept on faith that humanity cannot be fully understood by reducing ourselves to the basic chemical reactions which happen in the body. I accept that chemistry and physics can offer a completely true picture of what transpires in our bodies without offering the complete truth about what it means to be human. I don't think a human being is explained by reducing him or her to those atomic or subatomic interactions. I believe there is more to being human than mere chemistry.

Consequently I am not in the philosophical camp of atheistic materialism, and I don't assume that anything a human does is explained by biological determinism – the basic cause and effect explanation which Wilson does accept. Empirical cause and effect may accurately describe the biological and chemical reactions which compose all of the carbon based life forms on earth, but I do not believe they fully explain what it is to be human. I do accept the idea that humans have free will and a soul, and that we are social beings and that there is also a sociological reality which is not purely based in materialism. Humans cooperate on a grand scale by sharing abstract ideas and emotions through language, art and religion.



Of course since we are biological beings, all mental activity will show up as a biological activity, but that doesn't mean the biological activity is the sole or complete explanation of the mental activity. Thus I think consciousness is real and does somehow exist as an entity distinct from the biological brain activities to which it is related. That neuroscience can detect chemical and electric impulses in the brain is expected – we are spiritual beings whose spiritual lives are experienced through our physical bodies. Prayer involves our entire physical selves. Spirituality and physicality are not separable in a human being.

Wilson looks at all issues of being human purely from the point of view of biological determinism and assumes biology can explain everything about being human.

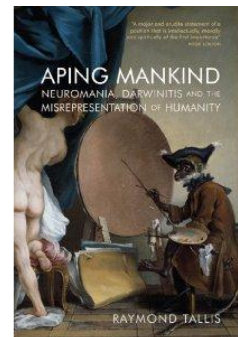
“ARE PEOPLE INNATELY GOOD, but corruptible by the forces of evil? Or, are they instead innately wicked, and redeemable only by the forces of good? People are both. And so it will forever be unless we change our genes, because the human dilemma was foreordained in the way our species evolved, and therefore an unchangeable part of human nature. Human beings and their social orders are intrinsically imperfectible and fortunately so. In a constantly changing world, we need the flexibility that only imperfection provides.” (Kindle Loc. 3883-87)



Believers can certainly accept Wilson’s contention that humans are both capable of good and evil, and are influenced by forces which are either good or evil. The disagreement would be with his statement that only by changing our genes can human behavior be changed. His thought is pure biological determinism, while the Orthodox Christian tradition would say the very purpose of religion is to call us to overcome such “genetic” or moral limitations on our free will. We certainly would not agree that all changes in humanity require a genetic change. We do believe there are things to which we are genetically disposed, but that does not completely determine what we do. Wilson writes:

“Still, we cannot escape the question of free will, which some philosophers still argue sets us apart. It is a product of the subconscious decision-making center of the brain that gives the cerebral cortex the illusion of independent action. The more the physical processes of consciousness have been defined by scientific research, the less has been left to any phenomenon that can be intuitively labeled as free will. We are free as independent beings, but our decisions are not free of all the organic processes that created our personal brains and minds. Free will therefore appears to be ultimately biological.” (Kindle Loc. 4625-30)

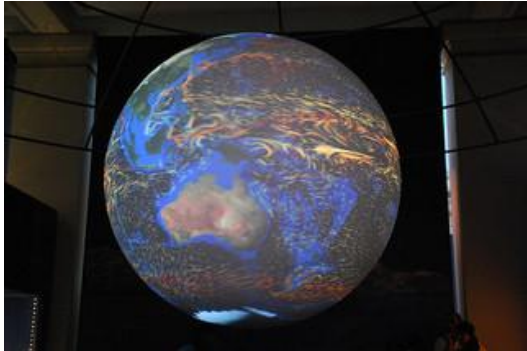
Free will certainly appears ultimately to be biological especially if the philosophical assumption is that anything human is ultimately explained as solely or merely a biological function. Wilson’s philosophical assumption leads him to conclude that free will must be a merely a biological function. We would say that free will in as much as it involves thought certainly involves the brain and so there are cerebral processes that must be happening whenever one is engaged in thought. Our disagreement with Wilson would be a reductionist approach that says thought or free will must be coterminous with neurological activity. Certainly the writings of atheist scientist [Raymond Tallis](#) on the existence of consciousness challenge the assumptions of Wilson and perhaps are more congenial with the assumptions which theists make about what it is to be human.



Biological Determinism (II)

Posted on [September 19, 2012](#) by [Fr. Ted](#)

This is the 10th blog in this series which is reflecting on E.O. Wilson's book [The Social Conquest of Earth](#). The first blog in the series is ["What Does It Mean to be Human?"](#) and the previous blog is [Biological Determinism](#)



Those committed to atheistic materialism assume there is no reality beyond the empirical universe (the physical universe which they can measure and study by the scientific method). Simultaneously they take the results of their studies as proof that their assumptions are true. Thus for example because neurological activity can be detected medically when a person is thinking or praying, they assume this proves there is no such thing as spirituality or free will or even consciousness. Yet what

their studies merely show is that humans are pneumatic-psycho-somatic beings: we are spirit, mind and body beings and all three aspects of our humanity work together. In traditional Christian writings on prayer, while the terminology may vary, we still find the claims that we pray with our bodies, souls, hearts, minds, wills and that the goal is to have all of these aspects of our existence working together. Prayer, at least in the Orthodox Christian tradition, is an activity that involves the body.

Spirituality is not opposed to the body but it is through the body that we come to experience God. So we would assume that prayer activity as with any mental activity would show some kind of relationship to the body, specifically the brain. But establishing a relationship between mind or consciousness and the brain doesn't prove that mental activity – consciousness, self or free will – is nothing but brain biochemistry. It only shows the two, as would be expected, are related.



Wilson writes about consciousness:

"Consciousness, having evolved over millions of years of life-and-death struggle, and moreover because of that struggle, was not designed for self-examination. It was designed for survival and reproduction." (Kindle Loc. 229-30)

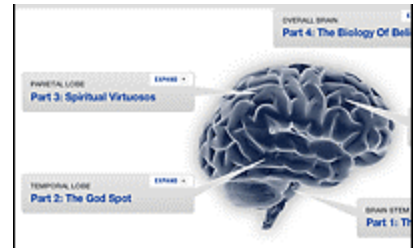


Wilson boxes himself in with his materialist presuppositions. He says, without offering the convincing evidence for why it must be so, that consciousness evolves but is not designed for self-examination. Consciousness for Wilson is only a tool from natural selection for survival and reproduction. Yet other atheistic writers like Raymond Tallis have challenged that very point. Tallis says consciousness appears to be of no evolutionary advantage to survival and reproduction and says

current scientific theory cannot account for the appearance of consciousness. The fact that it has not emerged in other species might in fact be proof of its limited usefulness for survival. Wilson cannot

prove his claim because his claim is based in his philosophical ideas of atheistic materialism not in pure science. He cannot prove that that consciousness “is not designed for self-examination.” Consciousness is a very inconvenient fact for those committed to absolute materialism. For consciousness cannot be predicted from biochemistry nor completely accounted for by evolution theory nor explained by the incredibly complex neural networks of the brain. Wilson speculates:

“Within a generation, we likely will have progressed enough to explain the physical basis of consciousness. But—when the nature of consciousness is solved, will we then know what we are and where we came from? No, we will not. To understand the physical operations of the brain to their foundations brings us close to the grail. To find it, however, we need far more knowledge collected from both science and the humanities. We need to understand how the brain evolved the way it did, and why.” (Kindle Loc. 235-40)



Here Wilson acknowledges that despite his firm assertions in the book, there is much to being human for which science has not been able to account. It is a subtle acknowledgement of the tenuous nature of some scientific theories regarding humanity. We do not know yet why the brain evolved the way it did nor how. But what is obvious is the brain does have the capacity for self-examination.



We have the ability to realize abstract things, to realize our own limitations in the universe, to understand that there are powers and forces in the universe greater than ourselves (even our collective human self), and that this conscious self-awareness does serve a purpose, not only for our survival but also in attuning us to a spiritual life. At a conscious level we make choices and however that intellectual activity of choice is related to the biochemistry of the brain (and it is and must be since we are also physical beings), being human involves a mental/spiritual dimension which is not completely explainable by the physical sciences. The physical scientist if he/she is philosophically committed to atheistic materialism will say that there can be no explanations beyond the physical, but that is an assumption and belief. We who believe in God think differently and do not have to find ways to disprove the existence of consciousness or free will, for we see that they do in fact exist.

Biological Determinism (III)

Posted on [September 21, 2012](#) by [Fr. Ted](#)

This is the 11th blog in this series which is reflecting on E.O. Wilson’s book [The Social Conquest of Earth](#). The first blog in the series is [“What Does It Mean to be Human?”](#) and the previous blog is [Biological Determinism \(II\)](#).



← Eve & Adam in Paradise

There certainly is a debate among humans as a whole and among Christians themselves as to whether it is more proper to speak of humans as naturally inclined to evil or naturally attracted to the godly. The Western Christian tradition has tended since the time of St. Augustine to assume the natural state of humans is the fallen state or our inclination away from God from which we need to be saved. The Eastern Christian tradition tends toward speaking about the original condition of humanity before the Fall as the humans natural state, with sin being part of the world of the Fall but not what is natural to humans. St. Maximos the

Confessor is said to have believed that we are naturally inclined toward the good and we have to consciously choose or will ourselves to do evil.

Wilson writes in his book about his take as an evolutionary biologist:

“In summary, the human condition is an endemic turmoil rooted in the evolution processes that created us. The worst in our nature coexists with the best, and so it will ever be. To scrub it out, if such were possible, would make us less than human.” (Kindle Loc. 960-62)



Here we see Wilson expressing his belief in biological determinism. Humans cannot arise above their genetic history for that history is ingrained in our genes and has become part of who we are. Other scientists have taken Wilson to task for this stubborn belief in biological determinism which denies that the rise in intelligence and consciousness and free will has had any impact on humanity. For example, John Hogan, writing in the scientific magazine DISCOVER, [War, What is it Good For?](#), rejects the biological deterministic notion of Wilson that humans are predestined to go to war. Hogan totally acknowledges the brilliance of Wilson in biological studies, but rebukes Wilson for perpetuating *“the erroneous- and pernicious- idea that war is ‘humanity’s hereditary curse.’”* Hogan is one scientist among many that do believe human evolution has led humans to a level where they are no longer passive

victims of their own heredity, but rather who have because of consciousness begun to shape their own evolution.

While some scientists may only lately be coming to the realization that humans can transcend their own evolutionary history, such a belief has been core to theistic thinking for thousands of years. The entire basis of Torah, Christian spiritual Tradition and the Quran is that humans can choose to obey divine commands that go against their genetic tendencies. Humans can choose to love and obey God and love neighbor even when their impulses lead them in a different direction. Compassion, selfishness, altruism, forgiveness, self sacrifice and love all are ways in which humanity can choose to behave differently than their biology may be telling them. Humans can transcend their animal nature.



Consider also the article [Beyond the Brain](#) by Tanya Marie Luhrmann in the Summer 2012 WILSON QUARTERLY. Luhrmann claims medical science has learned in dealing with psychiatric disorders that ideas based in biological determinism simply don't work in the treatment of many psychiatric patients. She writes:

"It is now clear that the simple biomedical approach to serious psychiatric illnesses has failed in turn. At least, the bold dream that these maladies would be understood as brain disorders with clearly identifiable genetic causes and clear, targeted pharmacological interventions (what some researchers call the bio-bio-bio model, for brain lesion, genetic cause, and pharmacological cure) has faded into the mist. ...



All this—the disenchantment with the new-generation antipsychotics, the failure to find a clear genetic cause, the discovery of social causation in schizophrenia, the increasing dismay at the comparatively poor outcomes from treatment in our own health care system—has produced a backlash against the simple biomedical approach. Increasingly, treatment for schizophrenia presumes that something social is involved in its cause and ought to be involved in its cure. ...

The pushback against purely biomedical treatment is also occurring with other psychiatric illnesses. The confident hope that new-generation antidepressants would cure depression—those new miracle drugs such as Prozac and Zoloft that made people thinner, sharper, and “better than well,” in psychiatrist Peter D. Kramer’s apt phrase—dimmed when the public learned that teenagers committed suicide more often while taking them. No simple genetic cause for depression has emerged. There is clearly social causation in the disorder, and it too looks different in different cultures, shaped by particular causes, social settings, and methods of treatment. In the standard psychiatric textbook, Harold I. Kaplan and Benjamin J. Sadock’s Comprehensive Textbook of Psychiatry, depression is now mapped out with a host of factors, some of them biological, many of them not, and the recommended treatment includes psychotherapy.

In part, this backlash against the bio-bio-bio model reflects the sophisticated insight of an emerging understanding of the body—epigenetics—in which genes themselves respond to an individual’s social context.



We are deeply social creatures. Our bodies constrain us, but our social interactions make us who we are. The new more socially complex approach to human suffering simply takes that fact seriously again.”

Thus, while Wilson believes evolutionary biology is proving the genetic basis for every aspect of human behavior, other scientists are disproving these very ideas.

Whatever evolution can teach us about human history, it cannot answer the question of what it is to be human. Theists would say this is true because the meaning of being human and the forces which shape us are found in

God not in our genes which are simply the physical means by which the divine plan is being worked out in the world of the Fall.

Evolution and the Ethical Human

Posted on [September 24, 2012](#) by [Fr. Ted](#)

This is the 12th blog in this series which is reflecting on E.O. Wilson’s book [The Social Conquest of Earth](#). The first blog in the series is [“What Does It Mean to be Human?”](#) and the previous blog is [Biological Determinism \(III\)](#).



← The Temptation of Eve & Adam

Eastern Orthodox theologians assumed from the beginning of human existence that humans had a natural relationship to God and a natural inclination to move toward God. In their interpretation of Genesis 3, they see humans as making a critical choice to be self-centered and self-serving; humans freely chose to engage in self-love rather than love which is directed toward God and neighbor. Humans, who were created with a unique blend of physical features and divine/spiritual ones, in

rejecting the divine life, further embraced their animal nature. So unlike the theory of evolution which has humans having nothing but an animal nature, traditional Christian thinking is that humans gave up the transcendent life to live a life limited by all the conditions that limit every other animal species. Both evolution and traditional Christian thinking thus do recognize there is a commonality

between all other creatures and humans. But the monotheistic tradition of the West says humans were created to transcend a merely animal existence. Morality and spirituality at their best are efforts by humans inspired by God to return to that transcendent life which humans gave up by their own selfishness. Morality thus matters greatly in religion, for it is our effort to be fully and truly human and to reject any idea that everything about humanity is determined by our genetic makeup.



Wilson in his writings betrays a hostility toward religious ethics (without stating why). Perhaps because as one locked into biological determinism he feels humans should just follow their genetic desires so he doesn't value any self denial. He doesn't really believe in free will, so he doesn't think we can transcend our biology

anyway. Traditional morality shaped by religious experience or revelation is to be rejected as antiquated, and a new morality based in science is to govern human behavior.

“Whatever the outcome, it seems clear that ethical philosophy will benefit from a reconstruction of its precepts based on both science and culture. If such greater understanding amounts to the “moral relativism” so fervently despised by the doctrinally righteous, so be it.” (Kindle Loc. 4119-21)



←Dachau Crematorium

A morality based in “both science and culture” is one totally governed by human reason and rationality. It is limited by how reasonable or rationale humans really are. Wilson is OK with moral relativism as it applies to traditional morality, but he is not amoral – he advocates biological diversity, so moralities which contribute to diversity are to be promoted. Raymond Tallis, another

scientist and atheist, sees all kinds of red flags in Wilson’s notion that science and scientists should determine morality. As I reported in my blog [The Brainless Bible and the Mindless Illusion of Self \(II\)](#):

“Tallis sees the risks and dangers to humanity that the ideologues of the new neuroscience represent in more stark terms. The danger of what Tallis calls neuromania can be seen for example in the writings of Julian Savulescu who argues that ‘as technology advances more rapidly than the moral character of human beings, we are in increasing danger. We must therefore seek biomedical and genetic means to enhance the moral character of humanity.’ Savulescu is saying that it is biomedical tinkering and genetic engineering which are going to be needed to help humanity deal morally with the changes being brought about by

modern technology. The belief that scientists can biomedically engineer a morally superior human being causes Tallis to conclude: ‘Be afraid, be very afraid.’”

To be fair to Wilson, he is opposed to biomedical engineering of a superior human being:

“I hope, and am inclined to believe on moral grounds, that this form of eugenic manipulation will never be permitted, in order that humanity can at the very least avoid the socially corrosive effects of nepotism and privilege it is bound to serve.” (Kindle Loc. 1691-93)



And yet a foundation for his moral beliefs is hard to determine. “Science and culture” give us very little guideline for what would be the basis of his morality. On the one hand he believes humans cannot escape their genetically predetermined warlike natures, but then without offering a shred of evidence that “science” can overcome our genetics, he trusts that science and reason can create a new ethics and apparently a new humanity. It is after all science and not human tradition or revealed religion which alone in his opinions determines morality. So scientists will be the new priesthood enforcing their own morality based in their own ideas of what is reasonable.

Wilson is not however a moral relativist – he only advocates moral relativity when it undermines traditional human and religious morality. Wilson writes:

“Humanity is strengthened by a broad portfolio of genes that can generate new talents, additional resistance to diseases, and perhaps even new ways of seeing reality. For scientific as well as for moral reasons, we should learn to promote human biological diversity for its own sake instead of using it to justify prejudice and conflict.” (Kindle Loc. 1445-48)



He would “promote human biological diversity for its own sake” (emphases mine). This is his own version of a pro-life attitude. He opposes humans determining their own genetics because it knows this will limit genetic diversity as scientists create humans in their own image and likeness. The weak, unwanted and sick will be cast off, left to die if they are allowed to be conceived at all under a purely rational system of morality. Wilson is not amoral or immoral in his thinking but does believe, again without offering any proof for this belief, that scientific humans can create a superior morality for the

world. This utopian thinking has been a frequent child of the Enlightenment where it is believed (even

when evidence is against it) that ignorance is the greatest human problem. And in this thinking ignorance can be cured by education and if not by education by scientific masters who govern the world with their pure rationalism. Laws would be created based on scientific reason that would outlaw any irrational behavior. And yet this belief in the power of human reason to create a better morality flies in the face of his equally held belief of a biological determinism which humans cannot escape. We cannot escape our genetics (at least he denies that religion can help us transcend our genetic limits) and yet by some form of magic, a morality based in science will lead to a human breakthrough from its genetic chains. It is the magic of science which for Wilson will break the genetic curse – science will by some miracle yet unknown to us transcend the limits of genetics. Science in this thinking is another Utopian philosophy or a new religion. Wilson is a prophet of this new revelation and religion.

It is true that science has indeed used the inventiveness of the human mind to create technologies capable of solving or curing many human problems and ailments. Yet humans will be humans. This is a truth that religion has recognized in its call for a transcendent morality. Humans left to their own devices will be self-serving and law will not be able to change that. That requires human ascetical effort.

A last moral point from Wilson:



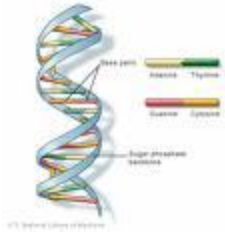
“I am further inclined to discount the widespread belief that robotic intelligence will in the near future overtake and potentially replace human intelligence. This will certainly occur in the categories of raw memory, computation, and synthesis of information. Algorithms might in time be written that simulate emotional responses and human-like processes of decision-making. Yet even at their most extreme and effective, these creations will still be robots.” (Kindle Loc. 1693-97)

Here is a point which many theists can welcome from Wilson. There is something unique about humans which makes them different from all other creatures on earth and which will not be replaced by ingenious human technology. We have a unique place in our world.

Social Conquest And Being Human

Posted on [September 26, 2012](#) by [Fr. Ted](#)

This is the 13th blog in this series which is reflecting on E.O. Wilson’s book [The Social Conquest of Earth](#). The first blog in the series is [“What Does It Mean to be Human?”](#) and the previous blog is [Evolution and the Ethical Human](#).



In this the final blog of this series, I want to consider a few thoughts from Wilson which I found interesting for various reasons. First, Wilson, staying true to his belief in biological determinism, says there is a constant balancing act in humanity between the selfish gene and individual and the altruistic nature of communal living. It is this genetic balancing act which influences so much of human society.

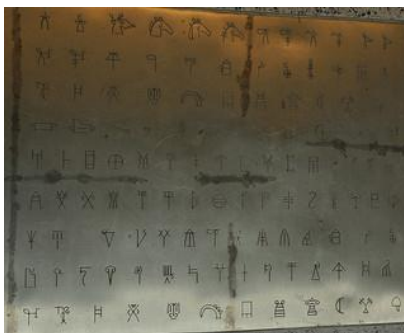
“Nevertheless, an iron rule exists in genetic social evolution. It is that selfish individuals beat altruistic individuals, while groups of altruists beat groups of selfish individuals. The victory can never be complete; the balance of selection pressures cannot move to either extreme. If individual selection were to dominate, societies would dissolve. If group selection were to dominate, human groups would come to resemble ant colonies.” (Kindle Loc. 3914-18)

“Selection at the individual level tends to create competitiveness and selfish behavior among group members—in status, mating, and the securing of resources. In opposition, selection between groups tends to create selfless behavior, expressed in greater generosity and altruism, which in turn promote stronger cohesion and strength of the group as a whole.” (Kindle Loc. 4419-21)

For Wilson all is controlled by genetics. Consciousness and self-willed decision making – whether individual or the collective – has little role in human behavior. This is an area where I think biological determinism cannot in fact fully describe what it is to be human nor can it offer any answer to the question, what does it mean to be human? There is for Wilson no difference between the eusociality of ants and humans. All such behavior is genetically determined, so humans do not rise above their genetically determined behavior. Such thinking seriously handicaps anyone observing human behavior for it denies what we can observe about human behavior.



Yet Wilson does at moments recognize the absolute uniqueness of humanity among all the creatures on earth.



“HUMAN BEINGS CREATE cultures by means of malleable languages. We invent symbols that are intended to be understood among ourselves, and we thereby generate networks of communication many orders of magnitude greater than that of any animal. We have conquered the biosphere and laid waste to it like no other species in the history of life. We are unique in what we have wrought.” (Kindle Loc. 270-73)

Humans are indeed unique, and the world seems to be well suited for their surviving and thriving. Biological science can say no more than that the existence of humanity is the end result of a very long cause and effect process. The end result of this process – the existence of intelligent, conscious human beings – is highly improbable, and despite the success of humans on the planet, more species have not evolved with our particular characteristics of consciousness and conscience. It is indeed miraculous that we exist at all.

“THE EXPLOSION OF INNOVATIONS that lifted humanity to world dominance surely did not result from a single empowering mutation. Even less likely did it come as some mystic afflatus that descended upon our struggling forebears. Nor could it have been due to the stimulus of new lands and rich resources—enjoyed also by the relatively unprogressive species of horses, lions, and apes. Most probably it was the gradual approach to and final attainment of a tipping point, the crossing over of a threshold level of cognitive ability that endowed Homo sapiens with a dramatically high capacity for culture.” (Kindle Loc. 3598-3603)



It seems that in this concluding comment Wilson admits that the evolution of humans cannot be completely explained by genetics alone. There is epigenetics, and there is the effect that human culture itself has on the continued development of humans, their intelligence and their consciousness. There are forces at work in the world that cannot be completely explained by materialism alone. Wilson

rejects because of his own beliefs any notion that “some mystic afflatus” had any impact on our human ancestors. Yet humans have continued to aspire to levels beyond the limits of their own biology. They have shown an ability to create cultures which work against genetic desire or determinism. Humans have shown in their conscious creation of culture to reflect something far greater than their genetic makeup can account for. In humans we see glimpses of the divine.



Psalms 8:3-6

*When I consider Your heavens, the work of Your fingers,
The moon and the stars, which You have ordained,
What is man that You are mindful of him,
And the son of man that You visit him?
For You have made him a little lower than the angels,
And You have crowned him with glory and honor.
You have made him to have dominion over the works of Your hands;
You have put all things under his feet...*