

FOUNDATIONS OF SECULAR BIOETHICS, A BIOCOSMOLOGICAL APPROACH

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ABSTRACT. *The purpose of this paper is not to oppose a religious perspective in bioethics; it only attempts to demonstrate that a secular approach to bioethics is a feasible, viable and also a solid one. I provide the basic arguments for rational bioethics and then use life science and physical theories of existence and life to support a universal and biocosmological approach to bioethics without necessarily relying on a supernatural entity, such as god. I also provide arguments to refute the two major criticisms made against a secular bioethical view; firstly to explain the issue of “purpose of life” in secular bioethics, and secondly how the universe (cosmos) could have “started” out of nothing or whether such an argument is a fallacy itself and “absolute nothing” is essentially an imaginary entity that cannot be real. These arguments follow parallel to a biocosmological philosophy and are linked to a number of scientific theories based on empirical evidence and observations in the fields of molecular biology, ecology, and physical cosmology.*

KEYWORDS: *Biocosmology, bioethics, natural selection, nothingness, purpose of life, rational (secular) ethics, religious ethics*

1. Introduction

Previously, many ethicists have argued that ethics does not have to be based on religion (Shaw, 2011). In other words, our morality can have a purely rational basis, which is congruent with the biocosmological view (Khroutski, 2001). Most people do not act ethically out of a fear of hell or for the desire to go to heaven. Accumulated evidence shows that atheists lead a life which is as moral as religious people’s lives. A good example is Japan where the majority of people lead a quite moralistic way of life which is based on social and cultural rules rather than a religion. I have presented a separate paper to explain this situation (Ghotbi, 2012).

We should also remember that religious decrees are very general and would still need to be interpreted with rational arguments on ethics and morality. For example, Christians interpret the Biblical instruction “Do Not Kill” in many different ways. Is it acceptable to kill animals, for food? Is it acceptable to kill a human being in self defense? Is it acceptable to kill a murderer as punishment? As can be seen in this example, rational arguments to make a moral decision for each specific case are still vital and the religious decree cannot provide all the needed ethical answers.

Even in instances where a religious decree and rationality provide the same answer, we still need rational arguments to reason about them (Shaw, 2011). A reasonable person would not say stealing is wrong only because god says so. Instead, we find reasons why god would not approve of stealing. In other words, actions are not decided as ethical and unethical only because a religion says so; one can find rational reasons to argue for such a decision.

Having said that, we understand that religions have a large impact on the ethical stance of people; even those who are not followers of a religion may be influenced by

religious beliefs. But there are tens and hundreds of more or less different religions which may provide a variety of different instructions and decrees over moral issues. As people from different cultures and religions move around the world and mix with other people, the need for a rational basis of ethical reasoning is felt more strongly. Fortunately, most religions accept that the human mind is capable of reasoning on moral issues and therefore this paper is attempting to strengthen the position of a secular approach to ethics based on rational thinking. We believe that a biocosmological approach to ethics can help explain a lot of the unknown in respect with human mind, reasoning and philosophical thinking.

2. Discussion

One commonly used argument against secular philosophies is the “purpose of life”. The argument says that if life ends with death, there is no purpose in it and it is hard to justify any human struggle as it is destined to end no matter what the result of the struggle is; life itself is a struggle, and it would have a purpose only if it would not end with death. Such an argument may have significant implications over the bioethical choices made by atheist ethicists: if the premise is accepted, secular philosophies may be assumed to incline towards a less ethical way of life because life does not have a purpose. Although this premise has already been proved to be wrong, here we use an alternative approach to defend the secular or rational position in bioethics.

There are many counter-arguments to this notion that I can simply refer to before starting to explain my own biocosmological perspective. For example, it can be said that because life ends with death, secular men may value it more and try to get the best of it, rather than waiting to die to start a better eternal life; as such, their ethics can also be as valid as non-secular and religion-based worldviews. However, a main issue of this way of reasoning is that both the argument and counter-argument only focus on a provisional assumption over the “ultimate” explanation of life (Scott-Phillips, 2011). A more challenging task is to focus on the “proximate” explanation in each argument and see which one can withstand the test.

The concept of ultimate and proximate explanations has been discussed in detail by Scott-Phillips et al. The “ultimate” explanation answers a question of “why” some trait exists. In this example, the non-secular explanation is that life cannot end with death because then life would lose its purpose, and the secular explanation is that life may end with death and still have a purpose because it is a unique opportunity that won’t come by again. However, the “proximate” explanation in this case would be an answer to the question of “how” life may not end with death to have a purpose (non-secular), versus “how” life may end with death and still have a purpose (secular)?

The religious (non-secular) explanation to the proximate question is that some supernatural entity, usually some god, makes that possible. In other words, our faith in god explains “how” life may not end with death. The problem of this argument is that it is based on its own primary premise and leads to circular reasoning. Here, I am going to offer a rational/secular explanation of “how” life may end with death and living things may still see a purpose in it. I use a biocosmological perspective to answer this question.

First, a secular philosopher would explain that life is all connected. The

connectedness of life is a well accepted scientific principle; it means that the various life forms in their ecological interactions with each other propagate life and result in a gradual advancement and an improved adaptation to the challenges of the environment. All various species that exist now, with a number of well over millions, use a universal genetic language that shows their common progeny from a primordial and elementary life form. All individuals within a population contribute to its gene pool and together preserve “life” and help continue the existence of that species as well as other species that depend on them. Thus it cannot be said that the life of an individual, whether human or non-human, is purposeless if it ends with death. The purpose of each individual life can be seen in the “network” of living things that together preserve life and allow adaptations to the changing environment. The theory of evolution through natural selection explains the process and is one of the strongest theories in science ever offered (Matthen, 2002). If we adopt such a worldview, environmental ethics becomes as significant as medical and social ethics because humans can be seen as a continuum of all life in general; this is also the position held in biocosmology where micro-cosmos and macro-cosmos are seen as connected.

Second, to understand “how” a living thing, whether human with amazing abilities of thinking or non-human and with little or no ability of thinking, struggles to live and to find a purpose in life, the same theory of natural selection offers a very simple and strong response. In a population of living things from any species, any individual that does not struggle to live will be screened out and only individuals will remain that have found a purpose to struggle in life, or have simply struggled to survive even if they cannot have an abstract understanding of why they are in such a struggle, like microorganisms, plants, and other living organisms that do not have the ability to think in abstract ways. This explanation in fact also explains why humans with the highest level of thinking ability among all life forms, may resort to religious concepts in order to find a purpose in life and thus struggle more! (Chochinov, 2005) (French, 1999) Our mind’s subconscious attempt towards a faith in god(s) may thus represent another mechanism to assure that we find an abstract reason as the purpose of life.

It should not be forgotten that it is probably only humans with thinking ability who have used religion and the concept of life after death to explain why they should struggle in a life that is destined to end anyway; other living things simply struggle to live. If the genes of living organisms did not influence them into a continuous struggle to live, they would be screened out at a very early stage. Only living things with a genetic structure that pushes them to try and live and reproduce, are naturally selected to stay and increase their progeny and their relative share in the gene pool. This ability of abstract thinking also is responsible for the fact that humans are known as moral agents, and why ethical and bioethical issues matter to them.

There is a separate issue which is somehow related to this discussion and the concept of biocosmology, and therefore I would like to explain here. The theory of evolution through natural selection can explain a wide range of traits and behaviors that are observed in all living organisms, including the most complex behaviors that are specific to humans. The theory of evolution also connects all life forms from the most primitive to the most advanced through bulks of evidence including the “universal”

triplet codes in DNA that govern the formation of polypeptide chains and proteins among all living organisms. The only piece that is lacking in the theory is how the first living entity was generated. The theory of evolution basically says that life is not generated but only evolves through natural selection.

One assumption to explain the generation of life was that there should have been a different environment at about 3.5 billion years ago which caused certain basic molecular units to come together to generate a primordial cell. This must also have been an “only one time” occurrence because current evidence shows all life forms have originated from a single progenitor. Craig Venter and his colleagues have been studying and doing research to estimate the minimum number of genes needed to define the most basic life form that we know of. They came up with a number of about 256 genes but in a recent study revised it to 382 (Glass et al, 2006). It is probably difficult to imagine how 300 functional genes, each composed of hundreds of nucleic acids, could randomly come together to form a primordial cell, and to do so only once in our planet. If there was an environment to make this chance phenomenon possible, why did it happen only once and in one form? In other words, why is there a universal genetic code instead of a couple of codes?

Scientists no longer believe that the primordial environment on our planet Earth was so different and special that it could lead to the generation of life. Instead, they assume that the first life form possibly came to our planet from somewhere else in the cosmos through a meteorite that hit the oceans. The most primordial life form on our planet should have started next to hydrothermal vents at the bottom of the oceans away from the detrimental effects of UV rays, and it must have used heat energy in sulfate-based reactions to support its metabolism. This hypothesis may be pure conjecture but is probably the best hypothesis that exists so far. It also serves to show that the interconnectedness of life is not limited to our planet only, but from a biocosmological perspective, it includes the whole universe. This is significant because it broadens the limits of ethics beyond medical, social and environmental ethics, to include the whole cosmos, thus a bicosmological perspective.

Finally, we should explain another common argument about the existence of our universe which is usually framed like this: “how is it possible that the universe or cosmos was born out of nothing?” There are two ways of responding to this question. The simple one is that if a creator is needed to explain the formation of the universe, it does not solve the basic premise of this argument because the other entity, the creator, is assumed to have existed forever. So this way of explanation ends again in circular reasoning. However, a more innovative way of responding to this question is this: “does nothing really exist”? What if we can use philosophical thinking to prove that what does not exist and can never exist is “nothing” itself?! This is important to our view of ethics because if our biocosmological perspective does not hold the existence of the cosmos itself, our ethical philosophies will also be dependent on another entity, outside the cosmos.

A number of astronomical physicists have been studying the history of our universe from its origin at about 13.7 billion years ago in a theory that has been widely known as the Big-Bang theory. However, contrary to popular assumption, they do not

make a reference to what existed before the Big-Bang. In other words, so far we have been able to use scientific methods to look back in time just that long, for 13.7 billion years. Questions such as ‘did our universe start from the black hole of another universe’, ‘do we exist in one universe of the many that have existed’, and ... have not been answered by scientific methods and any hypothesis is pure conjecture. I believe biocosmological philosophy provides the best answer to a question that science has not been yet able to answer. “Nothing” is something that could have not existed, ever! Let’s review all our assumptions of “nothing” that seem to have supported its existence in our mind as a basic fact.

3. Conclusion

In mathematics, we use zero (0) to represent nothing. But is it really nothing? So what are the minus numbers? Are they less than nothing, or do they exist at a scale that nothing exists?! We realize that zero represents a “relative” form of existence, as do minus numbers. Another way of assuming that “nothing” exists is when we think of empty space. Physicists have been able to show that what we consider to be empty space is filled with mysterious particles that react with the particles we know and this reaction is what causes the particles to have a mass (Close, 2012). Another common way of assuming that “nothing” exists is when we try to think of “nothing”. Commonly we end up thinking of darkness, which is simply a lack of light, or a lack of known objects, or a lack of comprehensible thoughts, but never an absolute “nothing”. Ironically, the non-secular cannot reach the thought of “nothingness” even with death, because they believe our life will not end with the cessation of our brain activity.

I invite you to read more about the popular wrong assumptions of “nothing” in more detail (Close, 2009; Krauss, 2000). Can we overcome our weaknesses in thinking and stop ourselves from making supernatural assumptions, when in fact the universe we live in, and the life we have been fortunate enough to hold on to, is so amazing, so mysterious and so beautiful. Can we value all that exists as long as we can and hold our ethics of life precious? Can we extend our understanding of ethics beyond the micro-cosmos to the whole existence and strengthen our biocosmological view of ethics? I believe these are questions that need to be answered rationally.

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