

Ethical Implications of the Academic Battle between Evolutionists and Interventionists¹ in
the Search for Truth about Origins

Mihai Bijacu

Introduction

The issue of origins, though very complex in all its intricacies, is relatively easy to define in terms of the existing controversy. For centuries before the scientific revolution started, a prevalent theory of origin has been in existence, and it stated that life has been created by God. Everybody accepted it and conducted their lives accordingly. However, in the last centuries, the paradigm has shifted so completely that, now, the majority of scientists believe that life has appeared only through the naturalistic processes of evolution.

Despite this fact, the controversy is not dead, and, especially in the last decades, the world has seen a resurgence not only in the claim that the world was created by God, but also that we can scientifically prove that.² Thus, we are witnessing today something that very much resembles a war between the two philosophical systems - interventionism and evolutionism - in which each of the two sides tries to do the best possible to convince the

¹ In this paper, the term “interventionist” is used to describe all scientists and theologians that believe in God’s direct intervention in nature and that reject that evolution was his method of creation. This category includes young earth creationists, old earth creationists, Intelligent Design advocates and others. Also, the term “evolutionist” describes the scientists and theologians that believe the world appeared (or was created) through darwinian evolution (or other kinds of evolution) and, in the case of theologians, do not believe in God’s direct intervention in the creation of life.

² As seen in the extensive interventionist literature of Biblical Creationism, Islamic creationism, Intelligent Design, etc.

audience³ that they have the correct view of reality.

This is not, however, what science should be and how scientists should behave. Linus Pauling describes science as “the search for the truth--it is not a game in which one tries to beat his opponent, to do harm to others. We need to have the spirit of science in international affairs, to make the conduct of international affairs the effort to find the right solution, the just solution of international problems, and not an effort by each nation to get the better of other nations, to do harm to them when it is possible. I believe in morality, in justice, in humanitarianism.”⁴ Although talking about a different topic of science, Pauling’s words are most suitable for describing our controversy. He is talking about the only thing that should matter in the quest of the explanation of origins, the truth. Scientists should be concerned about discovering the truth in this matter, and as Pauling says, one should not try to harm or beat the opponents. The only thing to be beaten is the lack of knowledge.

Problem

Scientists and authors on both sides of the issue fight with almost no regard to personal/relational and academic integrity. The controversy is very real and fierce, almost like a war, in which ethical boundaries are not respected and, because of that, the recipients of knowledge, students and anyone who tries to understand this subject, are prejudiced. Even the people actively involved in the controversy are prejudiced too

³ Anyone who is interested in the topic of origins: scientists, clergymen, layment, students, etc.

⁴ Linus Pauling, *Linus Pauling on Science and Peace; the Nobel Peace Prize Lecture* (Santa Barbara, CA: Center for the Study of Democratic Institutions, 1964), p. 17.

Purpose

In this context, the purpose of this paper is to explore the ethical implications of the controversy in regards to integrity, in order to discover a common ground of disagreement through which knowledge can be responsibly spreaded, and its recipients can benefit greatly.

Justification

I have become aware of the necessity of this paper when surveying literature on both sides of the controversy and seeing that, in some instances, some very good arguments (on both sides) were rendered useless because of the way they were put together, when some of the pieces used were less than ethical from my Christian perspective. It is possible that many of the scientists and scholars involved in this controversy, and subsequently, many of the recipients might not be aware of these ethical implications and thus, might accept (or reject, for that matter) a certain argument on wrong bases, which sometimes amounted to an unjust bias in treating the topic of origins. This, in turn has the potential to impede the search for truth in finding out our origins.

Methodology and Limitations

Given that the opponents deal with each other on mainly two levels (personally and academically) I have sought to identify misconducts in these two areas: personal/relational integrity, where the parties involved need to respect each other and treat each other as

equals⁵; and academic integrity, where both sides should be honest with what they themselves say and with what the others say.

Thus, the first chapter would center on the relational integrity with discussing two tactics, *ad hominem* attacks and straw man arguments, and the second chapter would analyze examples of a lack of academic integrity when scientists are sometimes dishonest with their answers to challenges (in the idea that they do not address the core issue) and with what they know or don't know.

The limited space of this paper will influence the number of examples used here. Instead, I will try to limit the discussion to the situations that entail most destructive potential for the spreading of knowledge. This is why I chose not to refer to the more blatant cases of academic dishonesty, like the Piltdown man hoax,⁶ for example, which were repudiated by scientists as soon as the truth came out. They are too direct to not be observed and discarded. I chose, instead, to refer to the cases that seem to pose a more subtle threat to conflictual integrity. In the same lines, after studying the way arguments were passed on by the two sides, I discovered that non-interventionists were much more prone to go over boundaries of integrity⁷ than their interventionist peers, because of the lack of space, I decided to use only evolutionists as examples.⁸

⁵ Relational integrity also needs to be understood in relation to the audience as I will show, several times, in the paper.

⁶ See, for example, Erich A. Von Fange. *In Search of the Genesis World. Debunking the Evolution Myth*. Saint Louis: Concordia Publishing House, 2006, pp. 137-160 and also Jonathan Wells. *Icons of Evolution*. Washington, DC: Regnery Publishing, INC., 2000, pp. 217-219., etc.), For data alterations see, also, Robin Levin Penslar (Ed.). *Research Ethics. Cases & Materials* (Indianapolis: Indiana University Press, 1995), pp. 56-61.

⁷ Perhaps, because they feel that they are absolutely right and that the alternative theory is unjustified because it appeals to a supernatural cause (infringing, thus on the limits of naturalism within which most science operates today).

⁸ This doesn't mean that interventionists are not showing a lack of integrity too, but because I felt the

1. Issues with Interpersonal/Relational Integrity

A. *Ad hominem* Attacks

The first unfair practice that comes to mind when dealing with controversies is the most abhorable of all, that is, the *ad hominem* attacks. One might not expect to find such dirty attacks in scholarly circles, since we have been presented by the media with the impersonal, objective image of the scientists. Unfortunately, not only are they present, but they are present in abundance. “There is another characteristic element in litigation that also appears repeatedly in the evolution debates: the *ad hominem* denigration of the representatives of the other side, and the assertion that the opponent said things he or she didn’t really say.”⁹

For lack of space, I will refer here to only one of the most recent ones. In 2000, Jonathan Wells (one of the founding members of the Intelligent Design movement) published a now very famous book on the theory of evolution from the point of view of interventionists. The book, *Icons of Evolution*, deals with some of the evidence that are widely used in support of the theory of evolution (like, the Miller-Urey experiment,

interventionist audience is done less justice (due, perhaps, to the adherence to materialism of most media) I thought it would be more relevant to the discussion to treat the statements of those that say they are absolutely right (the non-interventionists, that is).

⁹ In this paragraph, Edward Sisson makes a comparison between what lawyers often do in order to win a lawsuit and what opponents of intelligent design do to get their argument across. The tactics referred to here are as follows: “In litigation, lawyers regularly seize upon any action by the other side’s lawyers that can be characterized as evidence that the lawyer is deceitful, incompetent, confused, or acting in bad faith. The goal is to get the judge to discount the credibility of the other side’s spokesman.” - Edward Sisson. “Teaching the Flaws in Neo-Darwinism” in William Dembski (Ed.). *Uncommon Dissent. Intellectuals Who Find Darwinism Unconvincing* (Wilmington, DE: ISI Books, 2004), p. 91.

Haeckel's Embryos, the four-winged fruit flies, etc.), and Wells sets out to show how they are either a misrepresentation of the truth (like in the case of the peppered moth) or they do not offer conclusive evidence since most of the time people already assume evolution as true and only then use the "icon" (like in the case of the homology in vertebrate limbs).

Because the "icons" that Wells attacks are some of the most powerful symbols of the theory of evolution, some of the reactions to his book have been less than academic (to say the least) even if they come from some very reputable scholars.¹⁰ Wells describes very well how the critics responded to him: "When my book *Icons of Evolution* was published in 2000, critics greeted it with rave reviews. I have been truly amazed at the outpouring of warmth from some of my fellow scientists, who have been trying to outdo each other in the superlatives they bestow on my work. In my case, however, "rave review" doesn't mean extravagant praise, but wild and furious denunciation; the outpouring of warmth has been a firestorm of vilification; and if the superlatives become any more spiteful I may have to enter the witness protection program."¹¹ Some of the superlatives that are bestowed upon him are a stark reminder of Richard Dawkins' famous statement about those that don't believe in evolution, an *ad hominem* argument in itself: "It is *absolutely safe* to say that if you meet somebody who claims not to believe in evolution, that person is ignorant, stupid or insane (or wicked, but I'd rather not consider that)."¹² For example, the critics say of him

¹⁰ I do not want to suggest, though, that all answers to his book have been *ad hominem* attacks, because some have chosen to attack what he said and not what he is.

¹¹ Jonathan Wells. *Critics Rave over Icons of Evolution: A Response to Published Reviews* - published on June 12, 2002 on the Discovery Institute web page at <http://www.discovery.org/a/1180> (accessed August 15, 2013).

¹² Richard Dawkins, "Put Your Money on Evolution," *The New York Times* (April 9, 1989), p. 35. - emphasis mine.

that he is “conspiring to purge evolution from American education”¹³, an impostor (implying doubt on his academic background)¹⁴, that he is driven by an evil motivation¹⁵, etc.

Anyone reading the critics’ reviews (Wells lists them at the beginning of his response) can see that there are better ways to answer. Labeling all interventionists “as Bible-quoting know-nothings who refuse to face up to the scientific evidence”¹⁶ doesn’t help the evolutionist’s cause, because directly attacking the challengers would not make the challenges go away. The audience which is still debating on what is the truth about origins, will see that nothing has been done to refute the interventionists’ arguments, but instead evolutionists¹⁷ chose to attack their opponents simply because they are “guilty of the one unforgivable sin in modern biology: [they are] openly critical of Darwinian

¹³ Jerry A. Coyne, "Creationism by Stealth," *Nature* 410 (April 12, 2001), p. 746.

¹⁴ “This kind of distortion, misleading by the omission of important information, is the basis of *Icons of Evolution*. Its author, Jonathan Wells, appears to come from an unusually strong academic background, but the truth is more complex”, Kevin Padian and Alan Gishlick, "The Talented Mr. Wells," *The Quarterly Review of Biology* 77:1 (March, 2002), pp. 33-34.

¹⁵ That is, to destroy darwinism.

¹⁶ Phillip E. Johnson. “Evolution as Dogma. The Establishment of Naturalism” in William Dembski (Ed.). *Uncommon Dissent. Intellectuals Who Find Darwinism Unconvincing* (Wilmington, DE: ISI Books, 2004), p. 24.

¹⁷ Just as mentioned in the introduction, one must not think that this behavior is limited only to the non-theistic approaches. As a Christian, I might like to think that, but unfortunately, this is not the case. Interventionists (even Christian sometimes use the same tactics with evolutionists, for example, on the Christian Research Institute blog, one of the contributors, Hank Hanegraaff, rejects Richard Dawkins arguments from his new book “The Greatest Show on Earth”, by relying on the same *ad hominem* tactics. He tries to show a connection between the sexist and racist views advanced by Darwin and what Dawkins says, thus implying that Dawkins would support the same ideas, which evidently is not the case. See http://www.equip.org/hank_speaks_out/exposing-richard-dawkins/ (accessed August 13, 2013). The interventionists examples of lack of integrity could be included in a future expanded version of this paper, since the topic of conflictual integrity applied to the controversy over origins is very crucial in setting the lines of arguments in the spread of knowledge.

evolution”¹⁸ Sadly, we can see that it has come to a point when even theists that accept evolution misrepresent their interventionist colleagues, as we can see, for example, in John Haught’s opinion on creationists: “In my experience it is almost impossible to win an argument with creationists on how to interpret scripture.”¹⁹ That interventionists’ opponents label them all as creationists (in an obviously derogatory manner) points to the fact that interventionists are not shown adequate respect and consideration so as to be differentiated by what they believe. Sisson describes this poignantly when he writes that “the authors aligned with the scientific establishment always label skeptics of unintelligent evolution “creationists” in an attempt to box all doubters in with young-earth Christian fundamentalists, while adding sneering comments that denigrate their intellectual integrity. But if you read the advocates of intelligent design, you will find that these accusations are false.”²⁰

B. Straw man arguments

Not only are interventionist scientists attacked, but their sayings as a whole are misrepresented too. It is very well known that in various occasions, evolutionist are misquoting interventionists on what they actually believe. The starkest case of all, in this matter, is the problem with the fixity of species concept, which many evolutionists still attribute to interventionists, although this has not been true anymore for a long time now. Even the renowned evolutionary biologist Douglas Futuyma fell in this trap when he stated

¹⁸ Wells, *Response to Critics*.

¹⁹ John F. Haught. *Responses to 101 Questions on God and Evolution* (New York, NY: Paulist Press, 2001), p. 78.

²⁰ Sisson, p. 91.

that “[t]he fundamentalist, in contrast, believes that everything in the world, every species and every characteristic of every species, was designed by an intelligent, purposeful artificer, and that it was made for a purpose.”²¹ The key word in Futuyma’s representation of the interventionist perspective over the world is *every*. Futuyma believes, or at least he says he believes, that creationists affirm that everything we see today, all the forms that different species have, has been created in this exact appearance by a creator from the beginnings. However, this is not what interventionists believe, and this is why it is so easy for other evolutionists to refute interventionist theories of origins on this base, by showing how different characteristics of some species have appeared through micro evolution. David Quammen, an American science, nature and travel writer, has written an article in the National Geographic Magazine entitled “Was Darwin Wrong?” in which he (after acknowledging that there is a controversy over origins) purports to show his audience that evolution is the best explanation of how life appeared. In one of his arguments one can clearly see a case of straw man technique. In talking about the many species of finches that exist in the Galapagos islands, he asks: “”Why should remote islands contain such diversity? His [Darwin’s] answer was that isolation - plus time, plus adaptation to local conditions - lead to the origin of species. It seemed more logical than *assuming they had been created and placed in the Galapagos individually*”²².

In other words, interventionists believe that a designer has created every living

²¹ Douglas Futuyma. *Science on Trial* (Sunderland, MA.: Sinauer Associates, Inc., 1995), p. 56. The same is stated by Theodosius Dobzhansky in his famous essay, “Nothing in Biology Makes Sense Except in the Light of Evolution”, *American Biology Teacher* 35 (1973), p. 127: “[Creationists] fancy that all existing species were generated by supernatural fiat a few thousand years ago, pretty much as we find them today.”

²² David Quammen. “Was Darwin Wrong”, *National Geographic* 11 (Nov. 2004), p. 27 - emphasis in original.

organisms as we see today; however, we can see in nature that some traits appear through micro evolution (Darwin's finches, for example); therefore, interventionists are wrong, and the theory of evolution is right. What Quammen is missing here (and other evolutionists that still believe this about interventionists) is that by the middle of the last century "most of the leading special creationists had long since abandoned belief in the fixity of species and had embraced extensive - and extremely rapid - organic evolution within the originally created "kinds", mentioned in the first chapter of Genesis."²³

By using such straw man arguments, evolutionists are doing no good to the advancement of truth, but are merely patting themselves on the back for this accomplishment. Any serious researcher of the controversy would feel disrespected (to say the least) when faced with this kind of lack of honesty, as any reasonable person would see that the refuted argument was never (or at least not anymore) believed by the opposing party, and with this we can signal another case of a lack of academic integrity that is prohibiting the spread of knowledge.

2. Issues Related to Academic Integrity

A. Answering questions that are not asked

One of the biggest argument of interventionists against the theory of evolution is the fact that life is too complex to arise by chance²⁴. For example, in the case of the DNA

²³ Ronald L. Numbers. "Ironic Heresy. How Young-Earth Creationists Came to Embrace Rapid Microevolution by Means of Natural Selection" in Abigail Lustig, Robert J. Richards and Michael Ruse (Eds.). *Darwinian Heresies* (Cambridge University Press, 2004), p.87.

²⁴ For example, L. R. Croft, lecturer of biology at the University of Salford, after quoting A.G. Cairns-Smith on saying that the formation of nucleotides on the primeval earth is a 'gigantic implausibility' says: "I would go a step further and say that it is a gigantic impossibility!" L.R. Croft. *How Life Began* (Darlington: Evangelical Press, 1988), p. 50. See also Charles B. Thaxton, Walter L. Bradley, and Roger L.

molecule, the atoms that form it can be linked in so many ways that the probability of them connecting in the right way as to form a meaningful DNA molecule just by chance is astronomical. Thus,, interventionists draw the conclusion that it is more likely that an Intelligence has created it.

It is with the answer to this challenge that we have a problem. When trying to show that the interventionists are wrong, evolutionists do not attack the heart of the matter, that is, the actual very small probability of the random formation of a DNA molecule, but they dwell on lateral issues that are not at stake. Douglas J. Futuyma, for example, tries to address this issue and suggests a solution: "... creationists claim that the probability of life evolving from nonlife is vanishingly small. One of their arguments is that spontaneously formed nucleotides would be so dilute in the primitive ocean that they would have hardly any chance of aggregating into nucleic acids. But this ignores the fact that chemicals will accumulate in some places even if in the ocean as a whole they are greatly dispersed; or that organic compounds commonly adhere to surfaces, and so would be concentrated on the surfaces of sand grains of clay particles."²⁵

In other words, interventionists, when they bring in the probability argument, ignore the possibility that the initial nucleotides became accumulated in some isolated spots, which would have increased the chance of them forming a DNA molecule. But, Futuyma is not addressing the heart of the matter here. The main problem with life's appearing by chance (and in this case with the DNA) is not that nucleotides are too dilute in

Olsen. *The Mystery of Life's Origin* (Dallas, TX: Lewis and Stanley, 1984), p. 58-66.

²⁵ Futuyma. *Science on Trial*, p. 134.

the primordial ocean (to which, their concentration in different places would represent a solution, as Futuyma advances), but the fact that even in very concentrated solutions that contain all necessary nucleotides, there is still a very very small chance that a functional DNA molecule would arise by chance²⁶, not to mention the fact that several other components need to be present there in order for life to appear.²⁷

Thus, in this case, we can observe how the audience is misled to think that a challenge has been met, where, in fact, only marginal issues have been addressed and not the core. Anyone who tries to understand the question of origins would feel offended by an answer that doesn't even touch the point, and thus would be less inclined to trust what other writings of the same author have to say. Again, lack of academic integrity has negatively affected the understanding of a difficult topic.

B. Presenting opinions as academic certainty

In relation to what has been said above, comes another problem about abiogenesis. Not only evolutionists don't have an answer for how different types of molecules that are necessary for life (like DNA, RNA, proteins, etc.) appeared naturally, but they do not actually know how life itself appeared. Not knowing, though, is not a problem for science,

²⁶ "Forming DNA in abiogenesis experiments seem to be even more difficult than making proteins. Nucleotides link together under experimental conditions, but do not form a helical DNA molecule. The formation of a helical structure requires that the sugars that are part of the DNA be attached by specific 3'-5' links rather than the 2'-3' links predominant in abiogenesis experiments." - Leonard Brand. *Faith, Reason and Earth History* (Berrien Springs, MI: Andrews University Press, 1997), p. 97.

²⁷ "The following components of life, at least, must be present for a biological entity to survive and produce more of its own kind: proteins, DNA and/or RNA (nucleic acids), membranes, enzymes (to catalyze biochemical reactions), ribosomes (or the equivalent, for producing proteins), energy source and a method of processing energy, and a method of replication." - Brand, p. 101-102.

because this is what scientific research is trying to overcome. However, a problem of integrity does arise, in this controversial topic of origins, when scientists reject any non-natural alternative theory of origins claiming that they have proof that life has sprung on its own.

There is an abundance of research, articles, books and journals dedicated to topics related to abiogenesis. Many experiments have been done in the past²⁸ and many will be done from now on too. Many new data has been discovered about the intimate structure and function of life²⁹ through these experiments and many theories about how life might have sprung from inorganic matter populate modern biological journals some with higher acceptance in the scientific community and some almost forgotten. However, there is no unified theory about how life appeared and the controversy on this topic among scientists is still unresolved. All theories have merits of truth but all fail to present an accurate and complete picture. The heart of the matter is the difference between how life might have appeared (what scientists suggest through different abiogenesis theories) and how life actually happened (which hasn't been discovered yet). When asking for a direct answer about abiogenesis it is clear that scientist do not know how life evolved from non-living matter. Or, like Phillip E. Johnson, the father of the Intelligent Design movement, puts it: "Whether one finds the gradualist scenarios for the development of complex systems

²⁸ The most famous one is, undoubtedly, the Stanley-Miller experiment - see more in Stanley S. Miller and Harold C. Urey, "A production of amino acids under possible primitive earth conditions", *Science* 185 (July 1959), pp. 245-251.

²⁹ The RNA-first theory is based on the capacity of RNA to partially act in an enzymatic fashion - for more information on theories of abiogenesis see chapter 1 of Dean H. Kenyon and Gary Steinman, *Biochemical Predestination* (New York, NY: McGraw-Hill, 1969).

plausible involves an element of subjective judgment. It a matter of *objective fact*, however, that these scenarios are speculations.”³⁰

Unfortunately for the advancement of knowledge about the truth of our origins, such an admittance of honesty is rare. Sadly, on this matter, scientists do not want to acknowledge the fact that they don't know how life appeared³¹, because, this way, they might be forced to admit that they reject alternative theories not based on facts, but on philosophical choice, a fact astutely identified by Johnson: “What the science educators purpose to teach as “evolution”, and label as fact, is based not upon any incontrovertible empirical evidence, but upon a highly controversial philosophical presupposition.”³²

Even from a behavioral point of view (in which the end of convincing students on the veracity of the theory of evolution might justify such dishonesty) this is not a wise tactics since as people become more aware of this they will start to distrust their educators and what they advance. “The controversy over evolution is therefore not going to go away as people become better educated on the subject. On the contrary, the more people learn about the philosophical content of what scientists are calling the “fact of evolution”, the less

³⁰ Phillip E. Johnson. *Darwin on Trial* (Downers Grove, IL.: InterVarsity Press, 1993), p. 37, emphasis in original. See also, Fazale Rana and Hugh Ross. *Origins of Life. Biblical and Evolutionary models face off* (Colorado Springs, CO: NavPress, 2004). After exploring some of the intricacies of the prebiotic soup theory, at the end of the chapter “Where’s the Soup?”, Rana and Ross conclude that: “Research over the past fifty years has failed to produce a viable explanation for self-assembly of prebiotic compounds on or in Earth” - p.105. And again, in the epilogue: “... the last two decades of research have moved the scientific community no closer to understanding - at least in naturalistic terms - life’s origin.” - p. 225

³¹ Which, as mentioned before would not render their efforts useless, but would just present an objective point of view on the situation.

³² Johnson. *Evolution as Dogma*, p. 24.

they are going to like it.”³³ It is here where the problem with insincerity and lack of integrity resides. An immediate purpose of convincing the students (or listeners) of the veracity of one’s ideas might be achieved, but the more desirable long-term purpose of spreading true knowledge will be forfeited. Francis Canavan identifies this potential for lack of academic integrity when he talks about teachers that present a less than best (or accurate) piece of information to an uninformed audience: “one [the teacher] can play on the immaturity and insecurity of students, but only at the risk that they will eventually grow up and see through what has been done to them. Any teacher worth his salt, however convinced he may be of the truth of his own views, must want results more lasting than that.”³⁴ His suggestion is that “a good teacher must aim at *reasoned* assent.”³⁵

Conclusion

Science and knowledge would have much to gain if all people involved in the controversy would be true to themselves and to each other. Integrity in every matter is to be preferred to a lack thereof because the former has the power to become the motor for future research, whereas the latter will eventually spread distrust. It is no shame to acknowledge that we don’t know, for example, what the mechanisms responsible for the apparition of life are (in the case of evolutionists), or what the mechanisms responsible for the geologic column are (in case of creationists/interventionists). If both parties are honest

³³ Ibid.

³⁴ Francis Canavan, S.J. “The Problem of Indoctrination” in Sidney Hook, Paul Kurtz, Miro Todorovich. *The Ethics of Teaching and Scientific Research* (Buffalo, NY: Prometheus, books, 1977), p. 29.

³⁵ Ibid - emphasis in original.

on this matter, it will only help others pick up the issue and conduct more research that will most likely shed new light on the controversy.

Unfortunately, as we have seen, most attempts by interventionists to have their alternative theory of origins³⁶ taken into consideration and discussion amid the scientific community, have been met with replies that, at large, do not address the interventionists' challenges, but attack side issues.³⁷ The public needs to be given the option of making their own decision on this controversy and also not to be brainwashed or indoctrinated to believe one side or the other. When scientists decide to launch *ad hominem* attacks at their opponents or misrepresent (unknowingly or not) what they say, the audience is left without best arguments in the decision process; when scientists are not honest and do not acknowledge what they don't know, or profess their opinions as scientific certainty, most people would not have the knowledge as to tell if what scientists say is right or wrong, and because they perceive scientists as "professionals that possess expertise on which others need to rely"³⁸, they would believe them automatically. But if what scientists say is wrong, then the perspectives are ominous for making a decision on what to believe over origins, since, as Scott B. Rae says, "it is unlikely that any sort of civilized society could continue

³⁶ Which is in fact, the original theory of origins, but was forsaken by the academic community starting with the 19th century

³⁷ As aptly noted by Andrew Altman when he talks about the secularized academia's reaction to religious thought: "liberal views ... have led to an unfortunate 'silencing of religion in the public square' and fail to treat religious citizens as equals" - Andrew Altman, "Freedom of Speech and Religion" in Hugh LaFollette (Ed.). *The Oxford Handbook of Practical Ethics* (New York, NY: Oxford University Press 2003), p. 380.

³⁸ Michael S. Pritchard. *Professional Integrity. Thinking Ethically*. (Lawrence, KS: University Press of Kansas, 2006), p. 35.

unless it had concern for key moral values, such as fairness, justice, [and] truthfulness.”³⁹

There are, though, positive examples of the controversy. Even in the case of Jonathan Wells’ book, *Icons of Evolution*, we can see the controversy transformed into a dialogue. Wells talks, in the introduction to his book, about scientists that have reviewed his ideas and have provided precious insight in spite of the fact that they still believed in evolution. Wells has words of respect about these scientists because they did not allow their philosophical conviction to influence their quest for truth. “Listing these people here does not imply that they indorse my views [that evolution is not true]. On the contrary, many of them will disagree with my conclusions and recommendations. But for these fine people, science is the search for truth, and I am indebted to them for helping me get the facts straight.”⁴⁰

Here we have scientists that believe in evolution, but that do not want to allow falsehood to represent their convictions, and this might be a case of scientific and academic integrity at its best. The “icons” would seem to represent their case very well, but because they are not the best representation of the *truth*, and, in some cases, they are downright false, these scientists chose to reject them.

This is the attitude that one would expect to see in people who are involved in this controversy no matter what side they situate themselves on. Whether they believe in evolution or they believe in creation, all scientists should always look for the truth and not let their philosophical bias⁴¹ influence the results of their research in anyway. Fortunately,

³⁹ Scott B. Rae. *Moral Choices. An Introduction to Ethics* (Grand Rapids, MI: Zondervan, 2009), p. 12.

⁴⁰ Wells, *Icons of Evolution*, p. xiii.

⁴¹ Which all have, no matter what they believe.

there is a number of books published lately in which people respect each other's opinion (even if they disagree) and contribute to the advancement of knowledge⁴², and the number seems to be growing. My wish is that all people involved understand how important it is that they treat each other and their respective ideas with consideration, especially since people would found their belief over origins on what “the experts” say.

⁴² See, for example, James B. Miller (Ed.). *An Evolving Dialogue. Theological and Scientific Perspectives on Evolution* (Harrisburg, PA: Trinity Press International, 2001). “*An Evolving Dialogue* demonstrates that there can and must be constructive engagement between evolutionary science and religious and ethical reflection” - back cover.