INTRODUCTION

Ronald E. Osborn has recently written a book entitled *Death Before the Fall: Biblical Literalism and the Problem of Animal Suffering*. It is an interesting book, written with a view towards refuting the creationist (primarily the Young-Earth Creationist (YEC)) position, with a focus on theodicy and the problem of animal death. Osborn claimed that the problem of animal death ultimately disproves the creationist idea of there being no death before the Fall, a thesis which he attempts to prove in this book. It is my contention that Osborn fails in his case, particularly because he is rather ignorant of the YEC position he is critiquing.

I would be reviewing his book according to various themes in the book, and slowly pick apart his arguments.

CARNIVORY AND WILDLIFE: NORMALITY, CREATION AND THE FALL

The idea that the lions in Eden were docile vegetarians with dagger-sharp claws originally designed by God for tearing the bark off trees appeared downright silly.¹

One objection to the idea that animal death came before the Fall is the idea that the current world with the presence of carnivores and the eating of meat is good. Another like it is the idea that carnivores are ideally adapted to eat meat. As Osborn says, it appears downright silly to imagine lions tearing the bark off trees for food.

The major problem with such objections is that it often misrepresents what young earth creationists actually believe. For example, I absolutely agree with Osborn that lions tearing off bark for food is silly. But which scientifically informed creationist actually hold to such a ludicrous position? As I have often said, and will say again, there is a terrible ignorance of what creationists actually do hold to. So for those like Osborn who are trying to argue against the YEC position, who exactly are they trying to convince? How is it intellectually honest for someone, anyone, to claim to disprove the YEC position on this issue when they can't even represent the YEC position correctly? Disagree if you wish, but misrepresentation shows disrespect for one's opponents and converts no one.

With regards to the first objection, there is nothing wrong with saying that meat-eating now, i.e. after the Fall, is good. No creationist that I know of objects to this. Firstly, even

¹ Osborn, 16
before the Fall, death was not withheld to those which are not nephesh chayyah (נפש חיה).

In other words, strictly according to Scripture, biological death is not precluded of those which are described biblically as being "living." So whales for example can still eat krill, and zooplankton, phytoplankton. Secondly, since as we know God in Genesis 9:3 gave animals as food to Man, meat-eating at least since the Flood must be considered good before God. Furthermore, it is not necessary to read God's allowance of meat-eating in Genesis 9:3 as being the first instance where meat-eating is allowed. In the Fall, God killed animals to provide Adam and Eve with fur clothes to cover them. Abel tended flocks and sacrificed some of them to God. It is therefore not inconceivable for meat-eating to exist since the Fall, and Genesis 9:3 merely states what is already practiced while regulating it (i.e. with the prohibition of drinking the blood). So one wonders how the proof of the goodness of meat-eating after the Fall can have any relevance at all on the question of whether meat-eating is good before the Fall.

In response to the second objection, the first thing that must be said is there were no "lions" in Eden. There were only the first animal type of the various created kinds, or baramins. Since lions belong to the cat kind, there were probably some primordial cat that is the ancestor of all the cats we have today. This should immediately invalidate Osborn's example, since young earth creationists do not believe there were lions in Eden in the first place! In fact, I would venture to say that many of the animals we see today probably did not exist in the primordial world. Secondly, the whole idea that sharp claws must correlate with carnivory is false. Koalas have sharp claws, but they are not carnivores!

This apologetic for the idea of animal death before the Fall therefore falls flat. It betrays an ignorance of the creationist position on animal carnivory, an ignorance that shouldn’t be there.

HISTORICAL REVISIONISM CONCERNING CREATIONISM

As a result of their concern not only for the authority of Scripture but also for the theodicy problem posed by evolutionary biology, [Seventh-Day] Adventists have played an important role in the dubious project of "creation science," beginning with the tireless efforts of self-taught creationist George McGready Price (whose now thoroughly discredited ideas about geology were relied on by William Jennings Bryan in the infamous 1925 Scope "Monkey Trial," and who helped inspire modern American creationism via the work of John Whitcomb and Henry Morris in the 1960s).

It has been said that error repeated thousands of times become truth. Nowhere is this more apparent than in the supposed history of Young-Earth Creationism. To substantiate

---


3 Osborn, 18
this point on the dubious beginning of “creation science,” Osborn cites the the work of Mark Noll in the Scandal of the Evangelical Mind and Ron Numbers’ work The Creationists. The problem comes however when those two references are not exactly reliable.

The first major problem comes with the distortion of the acceptance of evolution and the development of science in the 19th century since the time of Darwin. It is a myth that evolution was embraced by scientists and rejected by the clergy, painting a portrayal of "progressive science" and backward "religion." It is also a myth that creation science was absent before Henry Morris came onto the scene. On this point, Numbers especially is to blame, and before him all the other historians that paint a picture of a "conflict" between "science" and "religion." Rather, as historian James R. Moore states, “The truth is nearer to the exact opposite: it was a few theologians and many scientists who dismissed Darwinism and evolution.” 4 As Terry Mortenson has showed, there were Scriptural Geologists in the 19th century, who had rejected even Charles Lyell’s new geology. 5 The conflict was never a conflict between "science" and "religion," but between the initially minority evolutionary scientists and their progressive clergy allies, against the 19th century creation scientists and [Old] Evangelicals.

The second major problem lies with the argumentation itself. Proving that Morris came chronologically after Price, or that Price was the last influential "creationist" before Morris, proves little. Even if one proves that Morris had read Price, to tar the modern creationist movement is to commit the genetic fallacy. This is not to mention that creationists such as Ken Ham and Jonathan Sarfati did not know of Price before becoming creationists. In fact, on a personal note, I did not even know of Ken Ham, Answers in Genesis and these organizations before I decided that creationism was the position taught by the Scriptures. The mention of Price is there just as a Guilt-by-association tactic, to tar all creationists as anti-intellectual idiots complete with dunce hats. The fact that Price is a Seventh-Day Adventist further serve their purpose, as it tars creationism with a suspicion of heterodoxy. Of course, the fact that the "other side" have Teilhard de Chardin as well as the process theologians on their side hardly counts as a plus for their position, but I digress.

Lastly, the Scopes trial is distorted and blown way out of proportion. 6 William Jenning Bryan hardly counts as a YEC. Rather, he is an Old-earth Creationist. So what does the Scopes Trial have to do with YEC at all? Secondly, the history of the Scopes Trial has also been distorted. The defendant John Scopes was planted to test the new law forbidding teaching human evolution, and the whole trial was basically a monkey court to make fun of Christianity. Scopes intentionally pleaded guilty before his own cross-examination, leaving people with the impression only of the cross-examination of Bryan, who was portrayed as being a fool since he as an OEC was incapable of answering them.

---

It is a wonder to behold why Noll and Numbers have been allowed to get away with murder so to speak in academic circles. Such historical revisionism is unworthy of true scholarship, and should be rejected as myths altogether.

CREATION AS “VERY GOOD,” AND CREATION AS “PERFECT”

In fact, Mark Whorton writes, nowhere else in Hebrew Scripture is tob or tob me’od interpreted by biblical scholars "as absolute perfection other than Genesis 1:31, and in that case it is for sentimental rather than exegetical reasons." There are other words in biblical Hebrew that are closer to the English sense of “perfect” than tob me’od and that might have been used instead.7

Another objection to YEC that has been made is the somewhat peculiar pointing out that the Garden of Eden is not perfect. Now I must confess that I am not so sure why that is supposed to be an objection to YEC, since after all YEC does not maintain that the Garden of Eden is heaven, or some Platonic ideal. If I were to guess, I would say the argument runs as follows:

P1: A place without death or suffering, where animals are vegetarians, is a perfect place.
P2: Heaven is a place without death or suffering, where animals are vegetarians.
C1: Therefore a place without death or suffering, where animals are vegetarians, is heaven.

P3: Eden is not heaven.
C2: Therefore Eden is not a place without death or suffering, where animals are vegetarians.

It is here that we must object immediately to premise 1. Is heaven just a place without death or suffering? Is any place without death or suffering "perfect"? Heaven is indeed a place without death or suffering, where pictorially animals are pictured as vegetarians. But that is not just what heaven is about. An absence of death or suffering is insufficient for perfection. Rather, life positively has to be there, life in its fullness and abundance.

Reformed theology speak about the Covenant of Works being made with Adam in the Garden. In the Covenant of Work, Adam was placed, as it were, on probation. Even though he was created without sin or defect, he was to perform positive obedience in order to merit eternal life. In other words, a blank slate, tabula rasa, is insufficient for heaven. Of course, we know that Adam would fall into sin. The key point I would like to make here however lies in the fact that creation, although it is very good, was not perfect. The absence of death and suffering itself is not perfect. Perfection is not just the absence of death and suffering, but also of the abundance of life. That is why the tree was sacramentally called the Tree of Life. If all that was necessary was not to sin, why then

7 Osborn, 29
should there be two trees instead of just one? In fact, why should God even put the Tree of the Knowledge of Good and Evil in the Garden in the first place, tempting, as it were, Adam and Eve to sin?

Creation according to YEC is very good, but not perfect. It is a paradise without death and suffering, yet that is not sufficient for perfection. This particular objection to the YEC scheme might apply to some versions of Fundamentalist YEC, but it does not apply at all to Reformed YEC.

CREATION, REDEMPTION AND PERFECTION

When we read Deuteronomy 32:4 in its full literary context, for example we find that God's *tanim* work of creation—his "fashioning" of the children of Israel—is revealed precisely in the long, perilous and conflictive process by which human civilizations evolved and the Israelites were brought out of "an empty howling waste" into a land of their own: ...

If the reading I have offered so far is at all correct and God recruits the creation at each stage to play an active, participatory role in what follows, with Adam being charged with an especially vital task of "subduing" other parts of the earth, then there is a very good theological reason why God declares the creation to be "very good" rather than "perfect." The creation cannot be perfect because, in an important sense, it is not entirely God's work. There are principles of freedom at work in the creation, and animals, humans and the earth itself have a God-given role to play as his coworkers.\(^8\)

With regards to the problem of the creation being described as "very good" but not "perfect," Osborn has put forward an alternative explanation. Creation itself is not perfect because "animals, humans and the earth itself" has to play their parts as God's "coworkers." I confess I do not know what that means, since humans don't actually create anything *ex nihilo* (assuming Osborn believes in *ex nihilo* creation), but let's continue on.

The major flaw in Osborn’s understanding is that it confuses between creation, and redemption. Creation and redemption are two separate works of God. The first work culminates in Genesis 2:1-3, where the first Sabbath is celebrated, a prefiguration of the last eternal Sabbath spoken of in Hebrew 4:1-9, which is the culmination of the second work of redemption. The first work end with a Sabbath which is *literally* without an end, and the second work ends with a Sabbath that is *literally* without an end. The first Sabbath is typological, the second actual. Both are the capstones of God's works.

In the Westminster Standards, the distinction between the two works of God is upheld. From the Westminster Shorter Catechism (WSC):

Q8. How does God executes his decrees?

\(^8\) *Ibid.*, 29-31
A. God executes his decrees in the works of creation and providence

Q20. Did God leave all mankind to perish in the estate of sin and misery?
A. God, having out of his mere good pleasure, from all eternity, elected some to everlasting life, did enter into a covenant of grace to deliver them out of the estate of sin and misery, and to bring them into an estate of salvation by a Redeemer.

God executes his decrees in the works of creation and providence (1st work), and then after the Fall, he initiates the work of redemption (2nd work), a work which is not mentioned in WSC Q8. There is a real difference between the two, a distinction and difference which Osborn fails to maintain. If we however maintain that distinction, then it should be clear why God is working now after creation. When God says that His work is complete on Day 7, it means that His work of creation is now complete. After the Fall, God’s work of redemption starts, but not His work of creation, which is complete. With regards to the creation of matter *ex nihilo*, God will not do any such work again, until the Eschaton in the creation of the new heavens and the new earth.

Osborn’s proposed solution therefore fails, because he fails to differentiate the two works of God. Does Adam have to “subdue” other parts of creation? Yes, he does, for not all the earth is the paradise of Eden, but that is not creation *ex nihilo* neither is it to make carnivores herbivores.

**ADAM AND SUBDUIDING CREATION**

This brings us to another common objection to the YEC interpretation of the creation accounts of Genesis 1-2, namely that Adam in his dominion mandate is to have dominion or subdue the creation, being based upon the somewhat forceful nature of the verb רדה (radah). From that verb, it is maintained that Adam had to violently subdue the creation, a picture far from the paradisaical YEC interpretation of Genesis 1-2.

The key to understanding the usage of this verb is to understand what Scripture actually says about the creation. In Genesis 1, we have a summary account of the creation of the universe, while in Genesis 2 starting with verse 4 we are treated to the creation of the Garden of Eden. The vegetation of Genesis 1 and 2 are set in contrast, between the vegetation in Genesis 1 and the vegetation “of the field” in Genesis 2, so we can see that the Garden of Eden is a cultivated garden. If the garden is cultivated, then anything outside the garden must be uncultivated. The difference between something cultivated and something uncultivated is merely in that the former is ordered while the latter is unordered. A herbivore in the wild is no less or no more a herbivore than a domesticated herbivore! In other words, besides the difference of orderliness, there is nothing inherently different between cultivation and the wild. There is nothing inherently sinful about the wilderness, and nothing inherently holy about cultivation and domestication.

Adam’s charge of subduing therefore should be interpreted as the charge of bringing order to disorder, not one of bringing sinlessness to something sinful. There is after all
nothing sinful in a messy room. Bringing order to disorder is tough, as it is a fight against entropy, which does exist before the Fall.

There is therefore nothing wrong with the reading of רדה. It is however wrong to think that the usage of the verb necessarily implies only a certain type of forcefulness. Disorder is not necessarily sin, but disorder is certainly not perfect.

**CREATION, DEATH AND THE CURSE**

The only creature that is altered or "cursed" by Adam's fall is the serpent that was directly responsible for it, though its curse is not becoming a predator but rather being forced to crawl on its belly and "eat" the dust of the ground (Gen. 3:14)—clearly metaphorical and symbolic language not to be taken literally. ... The serpent is singled out from among the animals. [Robert] Alter thus renders the passage, "And the Lord God said to the serpent, 'Because you have done this, cursed be you of all cattle and all beats of the field.'" To construe this simple statement to mean that God abruptly and supernaturally transformed docile creatures at every level of animal existence—not only in their instincts but also in their physical structures—into ferocious predators (or permitted a satanic being to do the same) is to take no small liberty with the text. Nor is there any mention in Genesis or any other book of the Hebrew Bible of mortality being imposed for the first time upon the non-human animal world as a result of human rebellion.⁹

And to Adam he said,

“Because you have listened to the voice of your wife and have eaten of the tree of which I commanded you, ‘You shall not eat of it,’ cursed is the ground because of you; in pain you shall eat of it all the days of your life; thorns and thistles it shall bring forth for you; and you shall eat the plants of the field. By the sweat of your face you shall eat bread, till you return to the ground, for out of it you were taken; for you are dust, and to dust you shall return.”

(Gen. 3:17-19)

Osborn questioned the whole idea of death being extrinsic to creation. As I have mentioned earlier, there is a difference between biological death and biblical death. The death that is extrinsic to creation is the death of nepheschayyah, not just any death in particular. It is also noted that the verse used by Osborn is not the verse that speaks of the curse on creation, which should be seen not in the curse upon the serpent in verses 14 to 15 but rather in the curse on the ground on verse 17 to 19.

---

⁹ *Ibid.*, 35
According to the Scriptures, the ground is cursed because of Adam, thus it produces thorns and thistles instead of crops. Farming would be a hard work. Yet it is reductionistic to see this as speaking merely of the ground. Rather the "ground" should be seen as a synecdoche for creation in general, such that the curse speaks of creation itself impeding Man's labor and well-being.

The passage that speaks to this can be seen in Romans 8: 20-22 where creation is pictured as groaning until the coming of the Eschaton. We note here that the larger context parallels the creation's groaning with our groaning to be set free from the bondage to sin. We desire to be set free from the body of sin, thus our spirits groan. Likewise therefore, creation is groaning to be free from the curse from sin. Creation itself does not sin, so it cannot be said to groan for deliverance from sin. Yet the parallel indicates that the groaning of creation has something to do with sin, and thus it must speak about the curse upon it due to sin. Genesis 3:17-19 speaks only about the ground being cursed, and therefore the "ground" must function as a synecdoche for all of creation and life in this present age.

Thus far, we have proven that creation itself is cursed as a result of Man's sin. But how is this curse manifested? Is animal death part of the curse? We notice at least that human death must be a consequence of the curse for the simple reason of the sanctions of God's command in Genesis 2:17. Romans 5:12-21 furthermore reinforces the link between human sin and human death. So human death should be seen as a consequence of the Fall. But what about animal death? While there is nothing to indicate that animals are immortal, the fact that they are called *nepphesh chayyah* seems to indicate a common sharing of life with Man. Death normally comes through predation, disease or old age, or sometimes freak accidents. Disease and freak accidents would be part of the curse on creation, and there wouldn't be predation. As for old age, while this is not definitive, since death is antithetical to life, for a "living creature" to die it must cease to be "living," so it is highly doubtful that old age applies. This is especially so since old age is not a necessity of nature.10

Lastly, canivory is not a curse. The idea that God or someone transformed "docile creatures" into "ferocious predators" is a caricature of the YEC position. There is nothing inherently wrong or sinful with ferocity, or even carnivory. Creation is cursed; creation is not guilty and not sinful. Sin adheres to moral agents, and ferocious predators are most definitely not moral agents. The transformation is not immoral and might even be a biological necessity in light of the environment with its scarcity of food. The problem with animal carnivory was never about the supposed immorality about meat-eating, but about the death of the animal eaten. So, if there is an hypothetical "meat" producing tree, or even an animal that once in a while "ejects" a bunch of fresh meat from its body, there wouldn't be any problems pre-Fall with eating that meat.

In conclusion, Osborn's rejection of animal death through his interpretation of Genesis 3:14-15 fails. Animal death is wrongly linked to the curse on the serpent, the development

---

10 There is no biological reason why cells cannot continually regenerate themselves with an always functioning telomerase, and thus there is no reason why any organisms cannot be immune to old age
of carnivory is misconstrued as sinful, and the wrong question was asked. The question was never about meat-eating, but about the cessation of the life of the living creature.

CONCORDISM AND THE NATURE OF SCIENCE

Biblical literalism and modern creationism—what would more accurately be called concordism—are approaches to Genesis that insist, among other things, on the scientific and historical harmony (or "concord") of the primeval stories (Genesis 1-11) as defined by contemporary notions of scientific and historical objectivity, regardless of the actual weight of scientific and historical evidence. Old Testament scholar Gerhard F. Hasel succinctly describes and defends this approach to the Bible as follows: "whenever biblical information impinges on matters of history, [the] age of the earth, origins, etc., the data observed must be interpreted and reconstructed in view of this superior divine revelation which is supremely embodied in the Bible."

The problems in origins caused by the Enlightenment continue in the discussion about "concordism." To the extent that historically scientia was considered holistically, I can sympathize with the problems Christians have when they faced the new scientific insights that, among those from new disciplines, came with the dawning of the Modern Age. This idea of a strict holism of knowledge lies behind the idea of reconciling different branches of knowledge, instead of trying to forge a different way of approaching data and hypotheses.

Concordism tries to reconcile diverse branches of knowledge into one holistic view. This idea as applied to the supposed conflict of science with religion however should be rejected as being based upon modernist assumptions. The debate over concordism assumes basically two options: Either one tries to correlate the "revelational" aspect with the "historical/scientific" aspect (concordism), or one rejects any such correlation (non-concordism). YEC is taken to be an *extreme* version of concordism, while views like the Framework Hypothesis are most decidedly non-concordist. Behind this dichotomy lies the idea that what is scientific is historical. Therefore, a commitment to a historical account of the Genesis events means that one must correlate the "science" with the "revelation." Conversely, in a non-concordist view like the Framework Hypothesis, the Genesis events are seen as "Upper register" reality, therefore no correlation is necessary, since the details of the events are non-historical even though the creation event(s) itself is historical. But why must I or anyone accept the view that what is historical must be scientific?

Almost since the beginnings of Science, the differences between historical and operational science have been obscured. Charles Lyell was probably the first to apply uniformitarian principles to come up with the concept of deep time. And from a certain point of view, the application of such principles seem sound. In a laboratory experiment for example, one assume that the processes going on in the experiment do not behave erratically. The problem lies not so much in the usage of the principle in normal

---

11 Osborn, 40
experimentation, but in its unwarranted extension into the unknown, what is called "historical science."

Science broadly speaking is the discovery of the working of things according to equations and universally applicable principles. In operational science, the working of things are described in such a way that knowledge of its activity can be accurately described and maybe even manipulated. In historical science however, science is used as a tool to reconstruct the past. The problem comes about because the past is not repeatable. Furthermore, all assumptions about the past are just that, assumptions. One-time events like a global flood can be hypothesized and tested, but apart from revelation there is nothing that says that one-time events did or did not happen.

The reason why this is the case is because "historical science" deals with history. In history, science is one tool among many, not the only tool. For example, science by itself cannot prove that a man called Napoleon existed, only eye-witness records can. Just a simple thought experiment would suffice. Let's say erosion of 10cm of rock takes a river flowing at a rate of 10km/hr for 100 years, or it could take a swollen flood river at a rate of 100km/hr in a day. How does one know which one actually happened, since the event of the swollen flood river is a catastrophe? According to science, we can't. Uniformitarianism therefore is untenable in all historical science research. Not only can we not discount events that are out of the ordinary, we have no idea what the initial conditions could be. The open system nature of any environment in the past is also a problem for anyone doing historical science research. Lastly, all historical science proceeds on the logical fallacy of affirming the consequent, and therefore it can only yield probable results. Therefore, by its very nature it cannot rule out any other hypotheses that predicts the same results as the data. For all these reasons, historical science research is untenable on its own. Unlike operational science where one can plan an experiment to test alternate theories and thus arrive closer to the truth, there is little one can do to test the past, which is not accessible to us.

The problem therefore with the concordism debate is that both options are wrong. The biblical account is not "scientific," but history; it is eye-witness account of what happened. It does not tell us scientifically what happened, as if science can do that. Science is a tool. It can tell us what possibly might have brought the events stated in the Bible to pass, but it is totally incapable of telling us what exactly happened in history. In other words, science can only tell us the "how," not the "what" of history. Christians therefore do not have to try to reconcile "science" with the Bible, because the evolutionary metanarrative is not science, but a non-scientific metanarrative propped up with plausible scientific theories and facts that supposedly validate it.

PROGRESSIVE AND DEGENERATIVE RESEARCH PROGRAMS

By bringing to light the paradigmatic nature of all scientific research, [Thomas S] Kuhn raised the specter of epistemological relativism in the sciences. His insights led to a seemingly insoluble dilemma: Given the theory-laden nature of all science and the persistence of anomalies in most if not all scientific paradigms, how can
we make value judgments between incommensurable but internally consistent research programs? And how can we clearly distinguish between science and pseudoscience, or between science and religion? Does it all in the end come down to a matter of faith—what one chooses to believe in—as many creationists claim?

It was in response to the Kuhnian dilemma of judging between incommensurable paradigms and establishing lines of demarcation to tell genuine science from pseudoscience that [Imre] Lakatos proposed the distinction between what he called progressive and degenerating research programs. His approach, which in certain ways synthesizes even as it critiques both Kuhn's and Popper's positions, was first published as a long chapter in Criticism and the Growth of Knowledge in 1970.\textsuperscript{12}

In chapter 4 of his book, Osborn attempts to deal somewhat with the nature and philosophy of science. I note with approval his interaction with Thomas Kuhn's groundbreaking theory of scientific paradigms, and not only does he cite Kuhn, but he actually deals fairly with Kuhn's theory both of scientific paradigms and incommensurability. He rightly sees Kuhn's philosophy of science as antirealist and postmodern, and notes the problems Kuhn's theory might have in relativizing all "science," or rather both science and pseudoscience (an error Paul Feyerabend fell into). He notes that that is not Kuhn's original intent, and indeed it isn't. Kuhn after all believed in evolution and did not particularly liked the way his work have been used by creationists. All in all, I must say I'm rather pleased with Osborn's portrayal of both Kuhn's theory and the problems it might cause to his position against creationism. Definitely much much better than how he has portrayed creationists.

To deal with this problem, Osborn brings up Imre Lakatos's theory regarding progressive and degenerating research programs. Progressive research programs led to steady increase in new knowledge and new predictions that can be corroborated, while degenerating research programs led to ad hoc solutions to save the main theory. Now, although Osborn states that it was introduced in the book Criticism and the Growth of Knowledge, his references are to essays written later published in later works. I am sure those would make interesting reading when I have the time. Now, Lakatos' distinction sounds like a good demarcation, but I am less sure about how it would actually work in practice. In the meantime, I would accept the distinction for the sake of argument.

The gist of Osborn's argument is that creationism is a degenerating research program, coming up with many ad hoc solutions to preserve their main theory, which doesn't really change much. In my interactions with the author so far, that has been one of his main points he has been pressing as well.

As we have seen, there is a difference between "operational science" and "historical science." And in the sense that creationism has a main theory that is largely held to regardless of the evidences (not in spite of them), it seems to fit Osborn's accusations of it being a degenerating research program. Now that is not really true, for scientific

\textsuperscript{12} \textit{Ibid.}, 62-3
hypotheses that support creationism do make predictions, like predictions from the theory of Cosmological General Relativity as held to and taught by John Harnett.\textsuperscript{13} Regardless, I will concede for the sake of argument that by and large creationism fits Osborn's accusations. But what does that actually prove? That the past is not repeatable for experimentation? The fact of the matter is that creationism, as with evolution, deals with history, and history being non-repeatable does not really result in new predictions, since after all we do not (or should not) believe in cyclical time.

What I would like to focus on here is that Osborn neglects to place evolution under the same spotlight. As I have used as an example many times, the debate between gradualism and punctuated equilibrium shows that evolution is ultimately unfalsifiable. Darwin predicted many transitional fossils. When that didn't materialize, the theory of punctuated equilibrium was conceived. When two organisms have similar phenotypes despite their perceived phylogenetic distance, we call that "convergent evolution." When two organisms have very different phenotypes despite their perceived evolutionary closeness, we call that "divergent evolution." In what way are the use of these terms (and the concepts behind those terms) not ad hoc? What exactly can falsify evolution? Fossils in wrong places? Nope.\textsuperscript{14} Human fossils in pre-Cambrian rocks? Even Creationism does not predict that. What evidence can be brought to support evolution while at the same time rejecting Creationism? We have, in a sense, a null hypothesis and an alternate hypothesis, so what evidences can the evolutionist come up with that will do both (i.e. prove evolution, and reject Creationism)? I honestly do not see any.

So even if for the sake of argument I accept Lakatos' distinction, evolution comes off badly. Judging from the ad hoc theories and concepts in evolutionary theory, it should be labeled under the category of "degenerating research program." Even if I were to concede Osborn's accusations against creationism, Osborn needs to apply his critique to evolution and reject it as well.

As I have said, history is not merely about science. In fact, going by the weight Scripture puts on eye-witness testimonies, testimonies trump "science" in the retelling of history. "Historical science" therefore must in some sense be "degenerative," since history in the final analysis cannot be proven just by science.

**LITERALISM AND FIDEISM**

...we should base our beliefs about natural history no less than human history on the weight of the evidence, remaining very open to where the evidence might lead. Many literalists, though, live with a visceral terror, thinly veiled behind their statements of dogmatic certainty and superior faith, that the entire religious edifice they have dedicated their lives to constructing could at any moment come crashing


down upon their heads. Theirs is a theology conceived as a high-stakes game of Jenga. Whatever you do, don't touch the bricks at the base of the tower.

The foundational importance of creationism for all Christian belief and practice is allegedly self-evident from the objective words of Scripture, so that strict literalism on Genesis cannot be subjectively denied by anyone who truly has faith in the Bible's authority and has read Scripture with intense inner devotion under the guidance of the Holy Spirit. All external sources of knowledge, including even one's direct observations of empirical reality, must be regarded with an attitude of skepticism and doubt until situated in the reconstructed tower of knowledge built upon those putatively incontrovertible biblical foundations. Literalism and young earth or young life creationism are therefore varieties (although some creationists may protest otherwise) of the theological and epistemological stance known as fideism. They rest upon the conviction that human reason left to its own ways is not merely inadequate to arrive at full theological knowledge but in some sense antithetical or hostile to faith.15

Osborn continues his attack on creationists as being narrow-minded fideists for quite some pages in his book, attributing this narrow, terror-filled mindset to all YECs. I must say it always amuses me when people think they know the mindset of all YECs. After all, I don't remember when was the last time YECs, at least the respectable ones, have ever psychoanalyzed their opponents.

So are there professed YECs who are fearful of the unknown, who refuse to read scientific literature and any others that oppose their mental "Jenga" tower edifice? Perhaps. But what does this have to do with the issue at all? Even if, let's say, all YECs fit that anti-intellectual Fundamentalist mold, that does not disprove young earth creationism one bit.

The problem comes when people accept uncritically the accusations of Liberals who mock those who hold to the faith during the Modernist-Fundamentalist controversy. Since the Liberals thought of themselves as progressives, those who oppose them must, by definition, be backwards, otherwise their cause is called into question. The Liberals controlled most of the Academy, and so their baseless accusations are repeated as fact. To tar conservatives (both Reformed and Fundamentalists) as anti-intellectual simpletons, they found or manufactured the most egregious examples of anti-intellectualism and trumpeted that as the beliefs and behaviors of a typical conservative. A lie repeated many times sometimes can even be believed by its opponents as true and thus it becomes a self-fulfilling prophecy, in a phenomenon very much like that of Stockholm syndrome.

We have already seen this in the revisionist history concerning creationism. The first thing to do in attacking YEC is to deny its legitimacy, its standing as a viable theory. The revisionist history makes it out to be a creation of a quack scientist, a Seventh-Day Adventist by the name of George McGreedy Price. After all, for those who believe in the Bible, who would actually want to be associated with quack science and a group that is outside the pale of orthodoxy? Who wants to be associated with quacks who predict the

15 Osborn, 44-5
second coming of Christ (and failed)? All of this revisionist history is meant to delegitimize creationism as something even worthy of being considered. After all, if a theory is not worth considering, one does not even have to deal with the actual arguments, or lack of them.

Osborn of course continues with his psychoanalysis of the "mindset" of YECs. It is all very easy to make general accusations, but proof is hard to come by. It is insufficient to claim creationism as being foundationalist, because Foundationalism in some forms is the majority view held throughout the centuries even before Descartes. Descartes' contribution was to bring the issues of first principles more clearly to the fore, and to transfer the axiom from revelation to reason. The attack against Foundationalism is ridiculous, for the simple reason that all beliefs are to some extent either foundationalist, or incoherent. Start questioning anything, and in the end there will be a body of truths, or one truth, that cannot be really questioned. Call them "basic beliefs" or whatever you like, but every system of thought have certain beliefs that its adherents take to be true because they just are. Ask an empiricist why they should trust their senses, and it is unlikely they can give you a real answer, at least not an answer from empiricism (which would make them a non-empiricist). Osborn makes a lot of grand claims, but where is the actual proof for all of them?

To pile on the manure, Osborn further claims that it is the belief of fundamentalists and creationists that "human reason left to its own ways is not merely inadequate to arrive at full theological knowledge but in some sense antithetical or hostile to faith." I must say this is really astonishing, because that is the historic Christian position. That is why Anselm said *Credo ut Intelligam*, and not the other way around. The Christian tradition down through the ages have always rejected appeals to pure reason apart from revelation. That is why Rationalism from Descartes onwards have been opposed by confessional Reformed theologians.

The main problem with Osborn's accusations is that it is a mirror image of Liberalism in all its forms. It assumes that all educated and knowledgeable scholars must agree with them, since their liberal conclusions is so plain those who reject them must be idiots. Nevermind that the best Reformed and Evangelical scholars have read the liberals, and yet we reject their conclusions. Those of us who are not part of the Fundamentalist anti-intellectual fringe actually DO read books we disagree about (after all, why would I otherwise want to read this book which disagrees with me), even heretical books. We are not afraid of being friends with those we disagree with, or inviting them to dinner and having conversations. And that is the problem Liberals have, since in their system, people like us are not supposed to exist. That is why they must demonize us and relegate us to the fringes, because otherwise it can be seen that theirs is not the only "scholarly" way.

Creationism is not fideism. Rather, we see the relation between facts and theories differently. We do not believe there are such things as "brute facts," but all facts are interpreted in some fashion. Also, with knowledge about the nature and limitations of science, we are unafraid of what the sciences can show.
Osborn continues to go at this for another ten or more pages, which is really sad. All these serve no real purpose except to provide more ammo for misrepresentation and character assassination, and is not much different from the heckling of members of Westboro Baptist, i.e. they both serve only to reinforce stereotypes and create antagonism.

**SOLA SCRIPTURA, AUTHORITY AND “TOLERANCE”**

There is one way that Christians might possibly prove ["Radical Orthodoxy" John Milbank] wrong [on his accusations of "Fundamentalism"]: they might come to see the meaning of Sola Scriptura not as they traditionally have in terms of the supreme trumping or silencing power of the text over all potentially rival sources of knowledge, but rather in terms of the noncoercive, nonviolent authority of a witness that continually evokes and invites open-ended conversations about its meanings. The unique or sole authority of Scripture would in this case lies not in the Bible's ability to provide once-and-for-all answers to all our most pressing questions, nor [sic] in its power to tidily dispatch with challenging new evidence from history, science and human experiences with a fideistic "Thus saith the Lord." It would instead lie in the way that reading Scripture in communion with others who are also committed to making its narrative central in the midst of new realities with the right kind of responsiveness to the Other with whom we may have unresolved—possibly unresolvable—disagreements.¹⁶

In chapter six, Osborn continues his strong critique of "Fundamentalism" and its "enclave mentality," pleading for "tolerance" of alternative positions and citing with approval Karl Barth's view of Scripture. This I might add seems to be the mainstream view within the liberal wing of Evangelicalism, or the conservative wing of mainline theology, whichever characterization one prefers.

The first problem here is that Osborn has a very shallow understanding of "Fundamentalism." From what he has written and what I have read, his background seems to be from the Seventh-Day Adventist camp. The problem is that Fundamentalism especially in America is an extremely complex social phenomenon. Just like New Evangelicalism, it is extremely simplistic to say that Fundamentalism is stereotype X. Fundamentalism has no real creed, it has no central authority, no disciplinary committees, and thus is not monolithic. Yes, there are certain tendencies in Fundamentalism, and one could in a sense take those tendencies as typical of the movement. However, I do not see anywhere that Osborn has actually dealt seriously with the movement. Merely citing a couple of books on Fundamentalism, and at least a book on Marxism, is not a real analysis of Fundamentalism, of which the Seventh-Day Adventist were a part but not the whole. As I have said, choosing people for example like those from Westboro Baptist and using them as representations of Fundamentalism is just plain ridiculous. And while one might disagree (and I do) with Fundamentalists, they do not usually have malicious intent.

¹⁶ Ibid., 83-4
and actually are trying to do what is right according to Scripture. This is the one thing most lacking in Osborn's analysis of Fundamentalism: actually trying to understand Fundamentalism according to its adherents instead of according to its hostile opponents, or former adherents like Mark Noll (in the *Scandal of the Evangelical Mind*) who is ashamed of his past.

Osborn spent more than 10 pages attacking creationism (which is linked with "Fundamentalism") as being essentially cultic. He speaks about respect and tolerance, but where is that attitude from him extended to those he is writing against? I mean, if you can dish it, then you are supposed to be able to take it in kind. To the degree that you critique others, you should be willing to take it as well. I think that is a very basic law. Furthermore, since he is pleading for tolerance of opposing viewpoints, shouldn't he be practicing what he is advocating? I must say that consistency is somewhat lacking in the way he rather intolerantly attacks creationists while at the same time calling for greater tolerance.

Along with this idea of "tolerance," I find it interesting that he is calling for open-ended conversations. I would question his call however for what kind of "open-ended conversations" he is seeking when he has already sent a preemptive strike against creationism by delegitimizing it? Conversations means dialogue, which means two sides speaking, not a monologue where the "enlightened" side tells us how "intolerant" and how much of a simpleton the other party is, and thus we must "converse" with a view towards embracing his position. So is Osborn really interested in having a conversation or not?

Osborn has also embraced the idea that a focus on words and propositions is a legacy of the Enlightenment. The problem is that this is just terrible history. Yes, there wasn't a huge focus on words in the early church and medieval and Reformation eras, but that is because ideas like words are words and propositions are the units of thought are basic concepts that were unquestioned. Which pre-modern or early modern would have countenanced the idea that error can be actually infallible (the Barthian non-inerrant infallible position)? Would that make sense to anyone at all in these earlier eras, that errors do communicate truth? No! Only in the modern and postmodern eras do we have such a concept, through an artificial division of form and content (i.e. the form of the words is errant, the [deeper] content is truth).

Osborn's appropriation of John Milbank is also interesting. I question however why what Milbank, being a modern day Anabaptist, has to say about "Fundamentalist" is important. How does his concept of "noncoercion" and "nonviolence" tally with the history of the church with its many councils proclaiming what is and what is not to be believed, even proclaiming anathema against those who disagree with the council's edicts? Has Osborn read the Athanasian Creed recently, especially its opening words? Osborn wants to read Scripture in communion with others, which I agree but not in the same way he does. If we are to talk about reading Scripture in community, then why are we discounting much of church history? The dogmaticism of the early, medieval and Reformation-era Church stands in direct contrast to Osborn's position and have much more in common with "Fundamentalism." It is the modern and postmodern church that stands in profound
discontinuity with the historic Christian faith, so one would think that reading Scripture in community means rejecting most of the novelties of the last two to three hundred years. *Ad fontes*!

Summing up this section, I do not find Osborn’s plea very convincing. Like mainline Liberals, all the pleas for tolerance and open-mindedness do not seem sincere. If Osborn really wants to be taken seriously, he needs to practice what he preaches, not say one thing and do another.

**CREATIONISM AND … GNOSTICISM (?)**

The gnostic solution to human unhappiness is *gnosis*: complete knowledge—descriptive and normative—of the origins of the fall, the scandal of evil and the pathway to redemption. ... Knowledge of the course that history must run from beginning to end if what transforms the gnostic from a person of "mere" faith into a revolutionary filled with the missionary zeal of fanatical certainty. Whether formally acknowledge of not, one is saved in gnostic soteriology not by *pistis* (faith) but by *gnosis* (knowledge) that serve as a "liberating science" or "diagnosis-therapy" of the human condition and counter-explanation of material realities.

... It [Gnosticism] is indeed a revolutionary "science" that frees the true believer from the "false consciousness" associated with ordinary science, fallen human senses and rationality. ...\(^{17}\)

A rather bizarre attack against creationism by Osborn comes in chapter 7 when he attempts to stick the odious charge of Gnosticism onto creationists. Osborn does acknowledge the fundamental difference between the two as systems of thought, viz, that creationists affirm the goodness of matter while Gnostics denigrate it (p. 88). Osborn attempts to make the charge stick by broadening it from particular doctrines of Gnosticism to a "gnostic" spirit of a "general orientation towards the problems of suffering and alienation" (p. 89). Now, since Gnosticism borrows from Christianity (and the mystery religions), some level of similarity of Gnosticism with orthodox Christianity is unavoidable. The question however to be asked is whether any of these supposed qualities of the "gnostic spirit" are unbiblical, not whether they are found in varieties of Gnosticism.

A key attack upon creationism with regards to the "gnostic spirit" is the idea that creationists deny science for some "deeper" science of esoteric knowledge. Creationists also tend towards salvation by *gnosis*. Both of these betray a very real ignorance of creationism on the part of the author, which, among other reasons, makes me wonder how much research into creationism he has actually done before writing this book.

First of all, creationists do not deny science for some "deeper" or esoteric science. We have always held that the science is there for anyone to see. The problem is that evolutionists obscure the evidences and postulate multiple ad hoc hypotheses to protect

\(^{17}\) *Ibid.*, 91-2
their main theory. Since Osborn does not deal at all with the sciences, his claim is just that, a mere claim without proof. Attacking evolution is not the same as attacking science, in the same way that questioning global warming (or any other controversial topic) is not a denial of climate science. Osborn has not shown any familiarity with the scientific arguments against evolution, so he has no evidence to back up his supposed claims about esoteric, "gnostic" science.

Secondly, Osborn has not shown any understanding of the relation between knowledge and faith. Faith in contemporary Reformed parlance is stated to be made up of the three elements *notita* (knowledge), *assensus* (assent), and *fiducia* (trust). Notice that faith includes at least some knowledge; one cannot have faith in someone or something without some knowledge of what the object of the faith is. So to state that one is saved by knowledge just because creationism emphasizes the importance of getting the truth of creation right is an error. Moreover, creationists in general do not believe that one has to hold to YEC in order to be saved. It is a matter of consistency, not a matter of salvation. So the second charge by Osborn does not stick at all.

Lastly, it amuses me to see Osborn trying to lump in the quality of "permanent revivalism" as being part of the "gnostic spirit": that the small group of elitists are out to "change the world" (p. 90-1). If there is anything about Gnosticism, it is that the spiritual, the *pneumaticchoi*, are not interested in helping the *psychikoi* (soulish) or the *sarkikoi* (fleshy). Rather they are occupied with their own personal ascension towards paradise. Here also, Osborn's ignorance of history shows. Revivalism is a post-millennial concept especially from the Second Great Awakening in America, and something supported by the "progressives" of the times (i.e. New Haven theology, Charles Finney and Oberlin theology), not just by so-called "Fundamentalists." The difference between the "Fundamentalists" and the "Liberals" is that the Fundamentalists kept the evangelistic part of revivalism, while the Liberals kept the social activist aspect of revivalism.

**ON CALVIN’S VIEW ON GENESIS**

Calvin believed that all matter was created by God on the first day of creation, but that the plants and animals were *not* created *ex nihilo*. They were formed by God from a welter of preexisting materials and so were organically and materially related both to each other and to the created universe as a whole. Readers who insisted in completely distinct creations out of nothing on each of the days within the creation week were engaged in intellectual sophistry, in Calvin’s view. The word *created*, ought not to be read in an overly literal way as far as questions of chronology are concerned; creatures were, in effect, "created" before they were *formed*:

Those who assert that the fishes were created from nothing because the waters were in no way sufficient or suitable for their production are nevertheless resorting to rationalization, for the fact would remain that the material of which they were made existed before which, strictly speaking the word "created" does not admit. I therefore do not restrict the creation here spoken of to the work of the fifth day but
rather suppose it to refer to that shapeless and confused mass that was in effect the fountain of the whole world.

Calvin's language is difficult, but he clearly rejected the idea that the creation in Genesis only describes events and not processes. He seems to have held a kind of hyperaccelerated emergent or even evolutionary view of what happened during the creation week:

[God] created the great creatures of the sea and other fishes—not that the beginning of their creation is to be reckoned from the moment in which they received their form but because of the universal matter that was made out of nothing. So with respects to species, form only was added to them; but creation is nevertheless a term truly used respecting both the whole and the parts.

... What might Calvin say, then, about highly literalistic interpretations of Genesis today in the light of scientific evidences for a very old earth and common ancestry across diverse species? The clearest evidence is given by Calvin in his interpretation of Genesis 1:16. Calvin's concern was to make clear that the language of "greater" and "lesser" lights in Genesis in no way conflicted with contemporary astronomy calculations that showed that seemingly small stars and planets such as Saturn were actually much greater in size than the "great" light of the moon ordained by God to "govern the night." While this might seem like a trivial matter to us today, it was an unsettling challenge to the biblically inspired and geocentric cosmological theories of medieval and early Reformation Europe. Calvin's approach to the problem is simple: the words of Genesis are not to be taken literally. 18

According to Osborn, while John Calvin held to a 6-day creation, he nevertheless did not believe that one should interpret Genesis literally in all aspects. However, is that really what Calvin believe? I would contend not.

For his sources, Osborn cites a republished edition of Calvin's commentary on Genesis edited by Alister McGrath and J.I. Packer. I have no idea whether that is supposed to be the best edition of Calvin's commentary on Genesis, or whether it looks nicer and have good notes by McGrath which should supposedly help the reader. Nevertheless, I will use the old commentary and there should be little difference in content.

The key indicator that something is off is when we look at the context and the verse of which Calvin was commenting. The verse was Genesis 1:21, and before that was Genesis 1:20, where God said, "Let the waters swarm with swarms of living creatures, and let birds fly above the earth across the expanse of the heavens." The form in Hebrew is the 3rd person jussive form "Let X be/do." In other words, it is not a direct command but rather a command or permission using the agency of a 3rd party. This is the context

18 Ibid., 100-2
for understanding why Calvin wrote what he did. In his commentary on verse 20, Calvin wrote, "should it not be lawful for him, who created the world out of nothing, to bring forth the birds out of water?" Calvin rightly saw the jussive form of the verb and therefore interpreted the text accordingly.

In verse 21, it is stated that God created the sea and flying animals, and it is in this context that Calvin "denigrated" the idea that this was a creation apart from means. Calvin rejected those who assert without proof that the waters were insufficient to produce life, because he had already seen in verse 20 the jussive form of the verb. In other words, Calvin rejected an immediate (i.e. without means) creation of the sea and flying animals purely because of the text, by sticking with the literal meaning of the text. Calvin clearly believed in creation ex nihilo, not for everything but for those in the text that are explicitly said to be created ex nihilo.

The divine mode of accommodation that Calvin advocated was that God intended to show it as from our point of view. In other words, the description of events was what an observer would see if he was on planet earth from its creation. It is not scientific language, and YEC has never claimed that Genesis 1 is a scientific text. Therefore, there is nothing wrong with God's description of the moon as the lesser light and the sun as the greater light, because that is how a person standing on the surface of the earth would have perceived it. Calvin was not engaging therefore in some kind of allegorical interpretation when he claimed that the language of "greater" and "lesser" had nothing to do with astronomy. He was clearly saying Genesis was descriptive language, not scientific language. As an aside, Osborn clearly should read more history and not parrot the false statement that geocentrism is a "biblically inspired claim."19

Calvin interpreted the creation account literally, even in his rejection of the immediate creation of the sea and flying creatures. Earlier in his commentary, Calvin affirmed the teaching that God created the light and darkness before the sun and moon were created, and it is clear that the "before" is one of temporal chronology. As Calvin wrote,

It [was] proper that the light, by means of which the world was to be adorned with such excellent beauty, should be first created; and this also was the commencement of the distinction, (among the creatures.) It did not, however, happen from inconsideration or by accident, that the light preceded the sun and the moon. To nothing are we more prone than to tie down the power of God to those instruments the agency of which he employs. The sun and moon supply us with light: And, according to our notions we so include this power to give light in them, that if they were taken away from the world, it would seem impossible for any light to remain. Therefore the Lord, by the very order of the creation, bears witness that he holds in his hand the light, which he is able to impart to us without the sun and moon. Further, it is certain from the context, that the light was so created as to be interchanged with darkness. But it may be asked, whether light and darkness succeeded each other in turn through the whole circuit of the world; or whether the darkness occupied one half of the circle, while light shone in the

other. There is, however, no doubt that the order of their succession was alternate, but whether it was everywhere day at the same time, and everywhere night also, I would rather leave undecided; nor is it very necessary to be known.\footnote{John Calvin, \textit{Commentary on Genesis}. As accessed on CCEL at \url{http://www.ccel.org/ccel/calvin/calcom01.vii.i.html}}

We see therefore that Calvin interpreted Genesis 1 plainly, paying attention even to the forms of the verbs. Osborn thus misrepresents Calvin's exegesis of Genesis 1, and fails in his attempt to make Calvin amenable to the compromising positions held to by modern Man.

**THE JEWISH INTERPRETATION OF GENESIS**

Although some ultra-orthodox Jewish sects have denied the reality of dinosaurs and torn the pages dealing with evolution out of their textbooks, Ira Robinson notes, in general "fundamentalism and creationism have been decried by Orthodox Jews as 'nonsense' and 'a grave error'; even if Genesis is read in a highly literal manner, the biblical texts in broad Jewish perspective \textit{literally} do not mean what Christian creationists say they mean.\footnote{Osborn, 107}

Osborn next claims that this belief in a literal creation is particularly and peculiarly a "Fundamentalist" belief, and not a historic belief held to by Jews and Christians. We have already seen how Osborn misrepresents John Calvin's position, and now he claims that the Jews also do not hold to this "fundamentalist" 6-24 position. If one thinks that this new claim is also a misrepresentation of the Jews, one is not too far off the mark.

Who speaks for the Jews? If we are to evaluate what the Jews believe, do we inquire into what ancient Jews believed, or what modern Jews believe? Most certainly, what modern Jews believe concerning the creation account is not unimportant, but is it that important for discovering the "Jewish" view, as if there was only one Jewish view concerning creation? If we are to look into what the Jews believe, certainly we should look at what the ancient Jews believed also, for one should not assume any form of historical continuity between ancient Judaism and modern Judaism.

For historical reasons, written works from the ancient world are generally few and not well preserved and transmitted. That said, we have a rather decent look into how the ancient Jews view the history of the world through the pen of the 1st century writer Flavius Josephus. As an educated Pharisee, surely Josephus would be knowledgeable about what the Jews of his time actually believed and well qualified to write on that topic.

In his book \textit{The Antiquities of the Jews}, Josephus began with the creation of the world, and he treated the Genesis account as actual history (not "Upper Register" history or anything of that nature). Here is an excerpt of what Josephus wrote:
1. (27)In the beginning God created the heaven and the earth; but when the earth did not come into sight, but was covered with thick darkness, and a wind moved upon its surface, God commanded that there should be light; (28) and when that was made, he considered the whole mass, and separated the light and the darkness; and the name he gave to one was Night, and the other he called Day; and he named the beginning of light and the time of rest, the Evening and the Morning; (29) and this was indeed the first day: but Moses said it was one day,—the cause of which I am able to give even now; but because I have promised to give such reasons for all things in a treatise by itself, I shall put off its exposition till that time. (30) After this, on the second day, he placed the heaven over the whole world, and separated it from the other parts; and he determined it should stand by itself. He also placed a crystalline [firmament] round it, and put it together in a manner agreeable to the earth, and fitted it for giving moisture and rain, and for affording the advantage of dews. (31) On the third day he appointed the dry land to appear, with the sea itself round about it; and on the very same day he made the plants and the seeds to spring out of the earth. On the fourth day he adorned the heaven with the sun, the moon, and the other stars; and appointed them their motions and courses, that the vicissitudes of the seasons might be clearly signified. (32) And on the fifth day he produced the living creatures, both those that swim and those that fly; the former in the sea, the latter in the air: he also sorted them as to society and mixture, for procreation, and that their kinds might increase and multiply. On the sixth day he created the four-footed beasts, and made them male and female: on the same day he also formed man. (33) Accordingly Moses says, That in just six days the world and all that is therein was made; and that the seventh day was a rest, and a release from the labor of such operations;—whence it is that we celebrate a rest from our labors on that day, and call it the Sabbath; which word denotes rest in the Hebrew tongue.

2. (34) Moreover, Moses, after the seventh day was over, begins to talk philosophically; and concerning the formation of man, says thus: That God took dust from the ground, and formed man, and inserted in him a spirit and a soul. This man was called Adam, which in the Hebrew tongue signifies one that is red, because he was formed out of red earth, compounded together; for of that kind is virgin and true earth. (35) God also presented the living creatures, when he had made them, according to their kinds, both male and female, to Adam, who gave them those names by which they are still called. But when he saw that Adam had no female companion, no society, for there was no such created, and that he wondered at the other animals which were male and female, he laid him asleep, and took away one of his ribs, and out of it formed the woman; (36) whereupon Adam knew her when she was brought to him, and acknowledged that she was made out of himself. Now a woman is called in the Hebrew tongue Issa; but the name of this woman was Eve, which signifies the mother of all living.²²

I think it should be plain without a shadow of a doubt that Josephus believed in a literal 6-24 creation. As an educated Jew of the elite class writing to the Greeks and Romans a history of his people, his views can be taken to be largely representative of what the Jews in the 1st century actually believed.

The first century Jews therefore believed the same view of creation as the Young-Earth Creationists. According to Osborn, who cites Ira Robinson, the modern Jews disavow Josephus' view of creation. This indicates a shift of views on creation during the last two millennia. Ancient Jews believed a 6-24 creation, while modern Jew mostly rejected it as "nonsense" and "a grave error." The question is which group of Jews Christians should perceive as being of greater consequence for their faith, and the answer should be rather obvious. Ad fontes! Modern Jews have largely fallen away from even the faith of the first century, and thus their rejection of 6-24 creation is irrelevant for Christians today.

CREATIONISM AND THE “ART” OF “LIVING SCHIZOPHRENICALLY”

We should be radically skeptical postmodern relativists and social constructivists when it comes to inconvenient scientific and historical truths, it seems ... but thorough-going modernists committed to a strictly foundationalist epistemology, a literalistic hermeneutic, a fundamentalist ecclesiology and a "scientific" apologetic the moment we open our Bibles. Is it any wonder that so many young adults who are told that dancing this awkward two-step is the only way to remain believers in the modern world decide to sit the dance out—or to abandon religious life entirely—when the cognitive dissonance becomes too great?23

One recurrent charge against creationism is that it results in young people leaving the faith. It results in people being functionally schizophrenic, believing one thing on Sunday and another thing the other 6 days of the week. Osborn certainly brings forward this argument as part of his overall polemic against Young Earth Creationism.

Firstly in response, the historic Reformed faith recognized its foundation without embracing Cartesianism, it has a hermeneutic that interprets Scripture according to itself (Scriptura scripturae interpres). It has a historic Reformed connectional ecclesiology, and an apologetic that grounds itself on God as the principium essendi and Scripture as the principium cognoscendi. In other words, Osborn's summary might just be true of certain versions of Fundamentalism, but not of Creationism in general.

More importantly, such a view, while commonly asserted, only makes sense only for a fragmented education coupled with a false view of science. Basically, it can only arise if we allow the secularists to inform our view of the nature of science. In other words, the problem comes about because Christians are not prepared to think critically about the nature of science. If one were to accept uncritically the presuppositions of naturalism, then of course one has to be "schizophrenic" in daily life. Why shouldn't one be?

23 Osborn, 117
Christianity would be relegated to one's subjective experience, as the Newsboys' song "God's not Dead" proclaims (it has absolute terrible theology and not even a good tune). Even the learning of Christian truth in more conservative circles would be a mere religious intellectual exercise disconnected from the real world. The real world then would be related to science and whatever else the person fancies (careers, entertainment, fame etc).

Here I speak from experience. I know what it is like to have that sort of experience somewhat analogous to Osborn's idea of "schizophrenia." Before I was regenerated and turned in faith to Christ, the learning of Bible truth seemed disconnected with ordinary life. I doubt it would have make any difference even if I were to heard solid Reformed teaching and preaching instead of the somewhat conservative broad Evangelicalism I was brought up in. Apart from the working of God's Spirit, nobody will find interest in the things of God. Living one way on Sunday with the learning of spiritual truth was disconnected from my life in the other 6 days of the week. My conversion led me towards the extremes of Charismatism, yet I was too intellectual to go all the way, thus I have not had the mystical experiences of speaking in tongues etc (since I could not just "let go"). It was the Reformed faith that brought me back from the brink. But more importantly, it was Creationism that helped me reconcile what I was learning in my science courses with what the Scriptures say. If evolution were true, I see no reason why I should believe in a faith that has no relation to me. Plus, a religion that sprouts lies is not a religion worth believing.

It took me quite some time for me to think through the issues of science and the nature of science, and it is my opinion that getting this issue right allows one to integrate science with faith. Hopefully, one day that wheel wouldn't be reinvented for every Christian wrestling with the issues.

The crux of my response is this: It is not Creationism that causes people to leave the faith. Unbelief causes people to leave the faith. And unbelief is strengthened when Christians and churches fail to give a reason for the faith. I can't speak for everyone, but how many people will accept a faith that has no relevance to real life? Trying to do all manner of literary gymnastics around Genesis wouldn't work, because all it does is to perpetuate the view that Christianity has little relations to the real world, being only for piety and the afterlife. Aside from literal creation, why should I consider Christianity since it is seen as a "western religion"?

Living "schizophrenically" is probably the lot of many children of professing believers. But it need not be this way. Osborn attributes that to creationism, I attribute it to a false view of the nature of science. Regardless of whether creationism is taught in the churches, having empirical evidences for creation is insufficient to address the real problem. So there might be children leaving the church because of "creationism" (or at least they claim that), but the problem is not creationism but that it is taught in a wrong manner, without dealing at the foundational level of the nature of the subjects studied.

CREATIONALISM AND ALTERNATE FOUNDATIONALISMS
Critical realism seeks to chart a third way between the epistemologies of both modernism and postmodernism. It is critical because it accepts the postmodern emphasis on the provisional and always contingent or mediated aspect of knowledge, yet realist because it insists upon the objectivity of the world we encounter and so the possibility of more or less truthful ways of talking about the properties of this world ... 

... Postfoundationalists agree with foundationalists that our worldviews can have greater or lesser correspondence with reality, including both scientific and theological truth. They agree with antifoundationalists (and nonfoundationalists), though, that the attempt to build a system of knowledge from a base of indubitable, infallible certitude that somehow stands on its own (whether this base is said to be the "plain" words of Scripture or human sensory experiences or something else) is an utterly failed epistemological project well past its sell-by date.

The postfoundationalist picture of knowledge has often been described as a "net" or "web" of truth. The strength and stability of a net does not depend upon any one of its nodes but upon the entire field as a unified whole.²⁴

A key point in debates concerning epistemology has been the sticking of foundationalism with modernist versions of foundationalisms, whether of the Cartesian project, the empirical project, or some fusion of the two. In these modernist epistemologies, the ground is to be some indubitable, transcendent timeless truths that form the foundation for building up the edifice of human knowledge. Needless to say, such foundationalisms even at the time of Descartes were not acceptable to the Christian faith. In this sense, Osborn is right to reject "foundationalism." The problem is whether such modernist foundationalism should be affixed to creationism at all. I would say not.

There are two main streams of creationism: the Fundamentalist and Evangelical stream, and the Reformed stream, and two interact with each other. Among Fundamentalists, the focus is on the reading of Scripture in a biblicistic manner, thus "God says it, it is true." There is always a tendency to read one's culture and assumptions into the text, yet to claim it as "foundationalist" in the modern sense is absurd, because the Fundamentalists are mostly not philosophers thinking about "indubitable transcendent timeless truth." Their biblicism is a distortion of Sola Scriptura, yet because they are just treating the text naively, they function basically like premoderns in their epistemology rather than modernist foundationalists. Premoderns do not think about "indubitable transcendent truths," so while Fundamentalists are influenced by culture, it is one thing to claim influence by modernity, and another to claim a modernist epistemology. Osborn's accusation of Fundamentalists as "foundationalist" (in the modernist sense) is therefore in error.

Among the Reformed camp, many YECs embrace creation like premoderns too, as a look at the case for YEC in the 2004 OPC Creation Report, and also in the book The Genesis Debate, shows. These essays were primarily appeals to the traditional teaching of the church that believes in 6-24 creation, and thus Osborn's accusation of "foundationalist"
also is in error. There is after all a difference between premodern naive realism and the much-maligned "common sense realism," because the latter consciously sticks to common sense readings and reasonings while the former does not.

I doubt there is therefore one epistemology for creationism. There are obviously many of the most vocal creationists who are empirical foundationalists. They are however others who are presuppositionalists, which is another version of Foundationalism. Presuppositionalism, both Vantilian and Clarkian, are different from the mainstream "modernist" foundationalisms. Vantilian foundationalism puts God as the foundation, while Clarkian foundationalism puts Scripture as the foundation. Both of them are "foundationalist" to the extent that the foundation are the basis for all of truth, and both of them are "critical" in the sense that they recognize the situatedness of all truth claims.

The problem with Osborn is that he does not recognize the difference between Reformed versions of foundationalism and the mainstream modern foundationalisms. Thus, he wrongly tars all creationists with the charge of modern Foundationalisms, while failing to recognize the alternate foundationalisms that some creationists hold to.

THREE LITERALISTS DILEMMAS—STASIS, DECEIVER AND DIVINE CURSE

But it is left to creationists who attribute all of the dysteleological and troubling realities of animal existence to God's "curse" upon the animal kingdom to explain why a fully just, fully loving and omnipotent Creator would not simply permit but positively demand such suffering among uncomprehending and morally innocent creatures who were previously unexposed to pain or death or any kind.25

The Creator God of Genesis clearly takes joy in untamed creaturely flourishing and procreation. All living creatures are commanded to be fruitful and multiply, and to spread out and fill the earth. In a spatially finite and deathless world, however there could not be endless procreation. At a certain point in time, all births would cease and there would be no new species or changes in the precise number of creatures in existence. Sexual differentiation would then become superfluous and all reproductive organs in the animal kingdom would become vestigial oddities like tonsils or appendices. A "perfect" world in the sense some believers demand would, it seems, be a world without any young or old (or perhaps with young creatures that never grew to adulthood). ... A flawless engineered world without growth, without new birth, without change and without death might be "perfect"—like a finely calibrated watch. But "perfect" in this sense might not be good at all for God's creative purposes.26

What should we make of a God who creates a universe, an earth, planets, animals and humans with the appearance but not the actuality of age? ... Existence at a very foundational level, in this way of thinking, cannot be believed or trusted. It is

25 Ibid., 127
26 Ibid., 128-9
at bottom an artificial stage production. Reality has the ontological properties of unreality or surrealism and did so from the very start.\[^{27}\]

Entirely apart from the scientific evidences for predation before the emergence of human beings, we are confronted all around us by the plain fact of animals killing in order to survive. The natural world is filled with creatures that are anatomically "designed"—in their internal organs, their instincts and practical every fiber of their physical structures—to exist by consuming other creatures.\[^{28}\]

Osborn poses three major dilemmas for the creationist position: the problems of stasis, deceiver, and divine curse. In the stasis dilemma, he states that a "perfect" creation according to the YEC scenario would result in an endgame situation of stasis throughout the world, which is contrary to the design of creation. The deceiver dilemma uses things like the appearance of age to claim that YEC makes God out to be a deceiver through creating things with a false appearance of age. The divine curse dilemma claims that it is strange to say that animals which are naturally suited for their habitats are a result of the curse, following which Osborn explores some supposed creationist explanations, none of which are mine.

The first objection by Osborn is a mere variation of the question "how can a good God decree evil." I have no idea how far towards Pelagianism Osborn is, but he certainly rejects the notion of predestination and embraces a concept of libertarian free will in some sense. For those who believe in the absolute sovereignty of God however, there is nothing untoward in claiming that God cursed the creation even though creation is not at fault. God does whatever He pleases, and being cursed is not the same as being guilty and punished. Furthermore, animals are not "morally innocent." They are amoral in the sense that morality does not apply to them at all. If Osborn claims that morality applies to animals, then I guess he should be standing up for prosecuting animals for moral crimes.

The stasis dilemma is based upon a faulty view of creation. According to Osborn, creationists hold that God created the world and that it is. God however created Adam and Eve under the Covenant of Works, therefore obedience to God's commandments would have ushered in the Eschaton. There would have been no possibility of stasis occurring therefore in the Reformed creationist scenario.

The deceiver dilemma might apply to some versions of Creationism, but by and large it is inapplicable. First of all, things do not come with an age tag. There are plausible creationist explanations for tree rings involving the creation of multiple tree rings per year based upon drastically different climates that were the fallout from the Flood and the subsequent Ice Age. Radiometric dating, a tool normally used to measure age, has lots of problems. When diamonds can have C-14 readings, you know that their traditional datings must be false.\[^{29}\] C-14 has a half-life of about 5,730 years, so about 573,000 years

\[^{27}\] Ibid., 133  
\[^{28}\] Ibid., 134  
(or 100 half-lives), there should be no discernable C-14 left in a sample. The most recent cosmology involving cosmological general relativity has a plausible solution for starlight without the need for millions and billions of years. In other words, the deceiver dilemma is based upon outdated creationist science at best. Yes, there is a sense in which the deceiver dilemma might apply, but not in the way Osborn conceives it. If God encodes false information in phenomena, then that would make God a deceiver. Light from a non-existing "supernova," that was created in transit for example, would be a legitimate candidate for such an accusation against God. It is not so much the appearance of age that matters, but the creation of false information that would result in the accusation of deception.

As it is said, created things do not come with an age tag. When God created Adam fully mature, there is no intention to deceive. Rather, it is those who accuse God of deception who have bought into a naturalistic paradigm. Was Jesus trying to deceive when he created wine de novo from water at the wedding of Cana? I would hope not. Osborn's usage of the appearance of age fails because the "age" is preconceived from naturalistic premises which do not always apply. As such, Osborn's deceiver dilemma fails.

The last divine curse dilemma fails because it fails to distinguish between curse, and punishment. I have written before on the design features of animals, but here I would expound on the issue further. There is a sense in which Osborn thinks that the development of carnivory etc must be a bad thing for the YEC. However, that is far from the case. The issue is not carnivory as much as death. The curse of God is not meat-eating, but human and animal (the nephesh chayyah) death. It is God's good pleasure that animals would adapt to their habitats throughout the world. God is God, and although suffering and death is evil and a result of the Fall, God does decree them for His purposes. Thus even in parasites, God uses them to fill up the ecological niches in the earth's ecosystems, the ecosystems of a fallen earth.

Osborn explores some possibilities that the creationist might take. Possibility one states that God gave the animal world over to such cruelty. This however is false. Creation is cursed, but cursed does not imply abandonment. Possibility two is God's curse transforms peaceful animals into ferocious predators, but again this is false. The ecosystems of a fallen earth is different from the ecosystem of Eden and the pre-Fall world, and the development of carnivory is natural and good in this post-Fall world. Possibility three claimed that the cause was demonic, a possibility that does not even warrant a discussion.

Osborn's three "literalist dilemmas" thus are anything but problems for the YEC. The second and third dilemmas especially show an ignorance of contemporary YEC literature, an ignorance that could be remedied if Osborn had actually talked with intellectual YECs instead of anti-creationist scholars and the rank-and-file creationists.

**CONCLUSION**

Osborn in his book attempts to disprove the YEC denial of death before the Fall, attacking creationism as anti-intellectual and unscientific. Through looking at various themes, we
can see that Osborn’s arguments are based upon ignorance and misrepresentation of mainstream YEC, an errant view of the nature and philosophy of science, and misrepresentation of historical sources. Moreover, Osborn focuses on philosophical theological problems he perceived, with little interaction with the actual text of Scripture, which is a real pity.

It is hoped that it can be seen that Osborn’s thesis has been far from proven. While the book genuinely attempts to deal with the issue, yet its many flaws rendered it a failure. While Osborn’s failure does not prove YEC, it should give creationists confidence that they have nothing to fear from mainstream academia, if these are the best arguments that can be made against Young-earth creationism.