

Rats in the Cosmic Laboratory: Is God A Scientist?

By
Dr. Anthony G. Payne

In one especially poignant scene in the movie "Shadowlands",* famed English writer and Oxford University professor, C. S. Lewis (played by Sir Anthony Hopkins) has gone to a pub with his brother, Wally (Major Lewis). Having just lost his wife, Joy Gresham Lewis, to cancer, Mr. Lewis is met with expressions of sympathy offered up by friends and colleagues who are attempting to console him. An interesting exchange ensues between an Anglican vicar and Mr. Lewis:

Vicar: Only God knows why these things have to happen, Jack.

C. S. Lewis: God knows, but does He really care?

Vicar: Of course. We see so little here. We're not the Creator.

C. S. Lewis: No, no. We're the creatures, aren't we? We're the rats in the cosmic laboratory. I have no doubt that the experiment is for our own good, but that still makes God the vivisectionist, doesn't it?

"Rats in the cosmic laboratory." An apt analogy if the universe is an experiment in process. But is this the case? If God were running an experiment or cluster of experiments (some embedded in others), it would indicate that something is being tested -- an hypothesis or many hypotheses -- whose outcome is unknown. While some religious traditions might accept a God who is not all knowing, and hence might need to perform such experiments, this is conjecture. (Actually, God is conjecture, insofar as His/Her/It's existence lies beyond the purview of science; which is to say, belief in God is not based on provable fact, but on faith) Bearing this in mind, what follows is pontification built on conjecture, albeit hopefully both informed and thought-provoking.

What we do know of the cosmic cauldron and the processes that gave rise to us can be succinctly summed up thusly: The universe we can measure and probe appears to be the expression of physical laws in operation. The Big Bang happened, stars and galaxies formed, planets formed, and on at least one world, this one, life arose and evolved to that state which we call "consciousness."

For we who believe in God, the laws that set all this in motion and govern it are the handiwork or signature of the divine. This is not something scientifically provable, but like the concept of Providence, is based on faith.

And while some people might still cling to the idea that humankind is the center of the universe, the scale and grandeur of our universe would suggest otherwise. We are rather insignificant, at least in terms of our impact on the cosmos. We are, at best, perhaps big fish in a very, very small pond. And least we get puffed up about this exalted position, the dinosaurs held a similar

role for about 170 million years before going belly up. Mass extinction, in fact, have occurred no less than five times during geologic history. We are but a massive comet or asteroid strike, nuclear war, or the like away from joining the dinosaurs. (A compelling enough reason to take out some "species insurance", as in set up a human presence elsewhere in our solar system. Mars seems a likely prospect.)

We are the tentative king of a very, very small hill. And what natural processes produced and govern, God seeks to relate to. At least this is the basic message of most extant (as well as extinct) religious traditions. And within the constraints posed by our individual limitations, i.e., our genetic-based propensities as amplified by environmental and other situational factors, the ancient brain wiring or paleocircuits in our brains, etc., we go through life making choices and exercising that which we know as "free will".

Is the universe thus an experiment and we it's aim? While the universe may well an experiment, it seems doubtful that it designed specifically to produce conscious life forms like us. Which is to say, life forms capable to distinguishing "I" from "other", and of contemplating its own mortality (It is unlikely that God can relate to a life form lacking these 2 cognitive features. Only a self-conscious creature that knows it will someday die would be capable of responding to anything God shared concerning an existence beyond the grave). Even if we accept the Weak Anthropic Principle, which asserts that the laws that govern our world would tend to give rise to life and something like us, it still seems unlikely that the "local phase" of the grand cosmic experiment was designed to produce us. Indeed, as the late paleontologist Stephen Jay Gould was fond of pointing out, if we were to go back and rerun the history of life, it is doubtful anything like us would emerge at all.

The experiment,..the universe,...did obviously tool us into existence. And God, it would seem, set about to interact with and relate to our bipedal twig on the primate branch of the evolutionary bush. Assuming that what we know and identify as "free will" is more real than illusion, the question naturally arises, "If God knows everything and is absolutely sovereign, how can humankind truly have and exercise free will?" And if God does not know in advance precisely what we will do or say, then He is less than omniscient and sovereign. If omniscient and absolutely sovereign, then while the universe may be a grand experiment in progress, we have been removed from it by God's exercise of sovereignty. But if God is not omniscient and/or sovereign, or somehow attenuates or submerges either or both, then the give-and-take twixt God and humankind, the tests posed and our responses and God's, do constitute a social experiment (of sorts) in progress. Logic and an abundance of scriptural support tend to argue for a divinity who works within and in response to contingency; who experiments and then blends our responses into the fabric of His grand design. And this, I argue, makes God a scientist.

God as scientist: Support from ancient writings

Support for this view can be readily found in the Tanakh (Hebrew Scriptures), which contains numerous stories and accounts that suggest that God is posing a test or permitting same, watching for the results, and responding accordingly. Consider the account of Abraham and his son, Isaac. In chapter 22 of Genesis, God has instructed Abraham to take his son to the land of Moriah and "offer him as a burnt offering on one of the heights that I will point out to you"

(verse 2). Abraham, a man who trusts God implicitly, is facing perhaps the severest test of faith imaginable. But for whose benefit is this test for? Abraham, Isaac, or God? Maybe all three? In verse 12 we see that for sure God has benefited by way of gained insight: "And he said, 'Do not raise your hand against the boy, or do anything to him. For now I know that you fear God, since you have not withheld your son, your favored one, from me' "(Gen. 22:12). "...now I know...". Now. Before the test? The clear implication is that prior to the test,...this particular experiment,.....God did not absolutely know the outcome (albeit He probably had a good idea extrapolating from Abraham's past acts of faith and obedience).

In the book of Ezekiel, we again see God conducting a test. In this instance, He goes looking for someone to divert judgment being executed:

"The people have practiced fraud and committed robbery; they have wronged the poor and needy, have defrauded the stranger without redress. And I sought for a man among them to repair the wall or to stand in the breach before me in behalf of this land, that I might not destroy it; but I found none. I have therefore poured out my indignation upon them;...(22: 29-31)

See also Exodus 15:25

If the future were closed, known and thus settled from God's vantage point, He would learn nothing from these tests. But we are told repeatedly that God uncovers something unknown; that free will is being exercised and as such outcomes cannot be known until the person making a decision has made it.

The contingency element in human affairs is underscored by numerous biblical entries that imply conditionals such as "if/then". One example is to be found in the account of God's declaration to King Zedekiah in Jeremiah chapter 38 (Part of which is quoted herein):

"If you surrender to the officers of the king of Babylon, your life will be spared and this city will not be burned down. You and your household will live. But if you do not surrender to the officers of the king of Babylon, this city will be delivered into the hands of the Chaldeans, who will burn it down and you will not escape from them." (verses 17-18. Emphasis mine)

We can also find supporting evidence of the (at least partial) tentativeness of history in the various accounts of God having changed his mind:

In the 32nd chapter of Exodus, God has told Moses of his intent to destroy Israel. Moses prays and we read "And the Lord renounced the punishment He had planned to bring upon His people" (verse 14).

Among contemporary Christian theologians, the religious and philosophic notion that human-divine interaction is unfolding and not predetermined, is treated and perhaps best characterized in the writings of proponents of "open theism". One very highly acclaimed introduction to this is a book by Dr. Gregory A. Boyd titled "God of the Possible: A Biblical Introduction to the Open View of God" (ISBN: 080106290X) Content description of this book, as well as many others that delve into various aspects of Open Theism, along with pro & con

articles and posted point/counterpoint exchanges can be found on the "Open Theism Information Site" (www.opentheism.org/) . It is well worth the proverbial 'look, see'.

Within Judaism, an "open view" type of perspective can be found among many rabbis and scholars. Many aspects of this line of thinking can no doubt be traced back to the Pharisees. According to the Jewish historian, Josephus, the Pharisees, mindful of the fact that predestination precludes free will, essentially concluded that humankind is predestined to a certain station in terms of the material aspects of life, but has absolute free will in areas that impact spiritual life.

The Islamic faith also boasts a school of thought that leans towards contingency, and free will as a supreme player in human affairs and in God's dealings with humankind. This perspective is supported by many passages in the Qu'ran, such as "Surely the Almighty changes not the condition of a people unless they change that which is in themselves." (13:11), and "Whoever goes aright, for his own soul he goes aright; and whoever goes astray, to his own detriment he goes astray." (39:41)

God as Scientist: Methodology

The actual nature and extend of the experimental work God engages in is, of course, unknown. Judging from accounts recorded by ancient biblical writers such as that of Abraham and Isaac (above), many tests seem geared to gauge such human qualities and attributes as faith/trust, capacity for obedience, the mechanics of decision making, and various aspects of judgment and reasoning. Some appear to involve only a within subject, single variable design. Others reflect a between subjects design, some being single variable experiments and others multiple variable.

While we cannot ascertain the exact mechanics of the divine research program, it would seem from the glimmers of methodology we see reflected in the ancient record that God would use approaches that are not entirely removed from those we ourselves have found reliable in terms of generating meaningful approximations of reality. One logical possibility is Bayesian inference, a powerful method of analysis that involves comparing hypotheses. The Bayes theorem, worked out by Rev. Thomas Bayes (1702-1761), assigns probabilities to all the possible outcomes of an experiment, combines this with relevant knowledge obtained or known prior to performing the actual experiment, and then calculates the probability of each hypothesis being true given the actual observation. In a nutshell, the Bayesian approach readily facilitates the modification of existing beliefs or views in the light of new evidence.

According to the Bible, on more than one occasion God expected Israel to change course (repent), but they did not do so (Isa. 5:2; Jer. 3:6-7, 19-20). God apparently modified certain aspects of the divine agenda accordingly, though undoubtedly without compromising crucial long-term objectives. This process could reflect His use of Bayesian reasoning.

To learn more: A very concise lay level introduction to Bayesian inference is "In praise of Bayes", The Economist, Sept. 30th, 2000:

<http://www.cs.berkeley.edu/~murphyk/Bayes/economist.html>

God As Scientist: Adoption of an Alien Nature

Experiments often reflect to some degree the nature of the scientist or scientists involved. If God is a scientist, should we not be able to see glimmers of His nature? Of course, various religious figures down through history have cautioned that mere mortal beings such as we cannot truly apprehend or understand the deeper nature or purposes of the Almighty. However, most allow that we can infer, deduce and attribute qualities and faculties to the Almighty based on the laws and mechanics of Nature, both grand and subtle. But this will only carry us so far. Be that as it may, it is what we have to work with and nonetheless can help us come to some appreciation, however small, of the divine being; of the scientist behind the experiment we are all a part of.

For traditional believers – primarily the orthodox Jew and Christian and such—the whole idea of embracing a supreme being who is not omniscient and who thus would need to engage in experimentation, is tantamount to bringing Him down to level of men. But isn't this pretty much the reality when it comes to mainstream Christianity; specifically, the Christian dogma that Jesus Christ was God incarnate ("God made flesh"), a part of a divine trinity? And what are we to make of the often harsh pronouncements, edicts and acts of HaShem in the Hebrew Scriptures? I speak of decrees and acts so cruel, so repugnant that they strain even the most convoluted sense of fairness we mere mortals could concoct (See links to articles concerning this below, following the conclusion of this essay). If we allow that these accounts and beliefs reflect the limited worldview and language of the writers, a reasonable thesis, reconciling all the disparate pieces so as to render a portrait of God free of contradictions and the elements of fallibility would require Herculean feats of mental gymnastics. This leaves one with a choice (Atheism or agnosticism, aside):

One can believe that the Almighty is omniscient but that one's scriptures (whatever their religious stripe) offer a flawed, generally unreliable portrait of the Almighty. Or believe instead that the Almighty is not omniscient and that the scriptures one adheres to offer a flawed portrait of the divine, but one that also bears his signature, which is to say elements consistent with His actual nature. Or...accept that scriptures of whatever tradition are flawed, yes, but nonetheless reflect God's nature – *just not all of it*. In-a-word, the Almighty we humans interact with is not the whole, but a part or aspect (if you will) of the divine; an entity that is not omniscient and does carry out experiments! (This self-contained yet intertwined "personality" or emanation of the Godhead might, some Jewish Kabbalists would argue, be one or more of the 10 sopherot <http://en.wikipedia.org/wiki/Sephirot> that make up the divine being – working in concert as a semi-separate being or entity).

If one accepts the spin on the divine, many things become explicable with respect to the "volatile nature" of the God captured in the writings of the early Hebrews. And we can use logic, reason and even science to shed some light on the divine scientist.

Consider this: The God depicted in just about every scriptural tradition has emotions. Yet God would have had no use for emotion prior to the advent of humankind or anything else (in the universe) that might have evolved to rely on such a faculty for survival. We know that emotions evolved to help speed up decision making and reinforce bonds among various animal species including our own. It helped insure survival. God, being an incorporeal entity, one who

presumably did not evolve in any sense of the word we would recognize, would have no need for emotions (Keep in mind that emotions were selected for because they enhanced our ancestor's chances of survival. Survival is not an issue for the Almighty). But in order to interact with humans, the Almighty *needed* emotion. Without emotion, it would be near impossible for the divine to understand human needs or desires or such fully, and thus to communicate and otherwise interface with our species. So what did He do? God subsumed or integrated emotions into his being! Or integrated emotions solely into that part or entity within Himself that interacts with humankind.

Emotions and language, of course, pose limitations on those who evolve or adopt them. This would undoubtedly include the Almighty. These limitations may have helped in actually bringing into being or fashioning the "face" of God that dealt with humankind; that is to say, it might have helped give rise to that "personality" (if you will) or self-contained entity within the whole which was more limited and "human-like" than the other component parts or entities. This was – and is (I would argue) – God the scientist. A scientist who designs and executes experiments that appear (in part) geared to test human mettle; to determine where our loyalties or affections lie in life; that is, how well we conform to those behaviors and codes of conduct that either were instituted by the divine or were borrowed from predecessor cultures & religions and received divine approval after-the-fact. But to what end?

The experiments conducted by the Almighty have as their outcome more than the production of knowledge unknown to Him. There is, both stated and inferred in various scriptural traditions, a purpose for the insights and knowledge revealed by the testing or experimentation: Namely, they constitute a mechanism for revealing missteps in adhering to God's standards and with this an opportunity to recognize fault or failure, and then bring one's conduct into conformity with these. Christian's refer to this in their scriptures as a "winnowing process" – of "separating wheat from chaff". This presumably determines where individuals spend their postmortem existence – as with God or separated from Him (Albeit many Christian and Jewish scholars contend that this process continues on after death, such that those whose lives were not awash in evil deeds and pursuits – but yet were not "pure" enough to gain entry to God's world – go through a purification process and then enter in. Evil men and women – those too alienated from God to even see their need for purification – are separated from Him and his world. Some contend this separation is an eternal form of torture, while others assert that evil suffers for a time and is then obliterated).

Presumably those who do complete their particular, individual course of experiments and are deemed worthy of a place in *olam ha-ba* (World to come), join throngs of others gathered about God the scientist. Then, after all the individual experiments are done – when the Grand Experiment itself – human history and possibly even the universe itself – has run its course – God the scientist will be reintegrated into the whole. And in that moment all who occupy God's world will behold the "many" become one.

Concluding remarks

The many and varied tests and conditional promissory statements found in ancient accounts of God-human interaction support the notion of free will as ascendant over predestination, and

bespeak a future that is at least partially undetermined. They speak eloquently of God being an experimentalist who, after obtaining a result, weaves the new thread into the immense fabric that is His grand design.

It has been said that Albert Einstein had a plaque on his mantle that read, "God is a scientist, not a magician." Whether or not this in any way reflected the great scientist's sentiments, one can't but marvel at how appropriate it was -- and is.

"The most important thing is not to stop questioning. Curiosity has its own reason for existing. One cannot help but be in awe when he contemplates the mysteries of eternity, of life, of the marvelous structure of reality."

Albert Einstein

<http://www.angelfire.com/pa/greywlf/biblegod.html>

<http://www.infidels.org/library/magazines/tsr/2000/4/004anti.html>

<http://www.nobeliefs.com/DarkBible/darkbible3.htm>

http://freethoughtfirefighters.org/a_wager_on_old_testament_atrocit.htm

<http://www.ebonmusings.org/atheism/atrocities.html>

<http://www.geocities.com/paulntobin/godbible.html>

<http://www.biblicalnonsense.com/chapter10.html>

© 1993 Savoy Pictures, Inc. (distributed by HBO Home Video)

Scripture quotations from the Tanakh, 1985, Jewish Publication Society.

"Rats in the Cosmic Laboratory: Is God A Scientist?" Original © 2002 by Dr. Anthony G. Payne.

This revised & expanded version © 2007 by Dr. Anthony G. Payne. All rights reserved.