PANORAMA

Unnecessary Apologetic Baggage

It has been some time since we covered the heresy of Hugh Ross, the astronomer who reads evolution back into the Bible and calls it "apologetics." It was apologists like Ross who converted me to atheism as an undergraduate student at the University of Rochester. After all, Copernicus and Darwin proclaimed something "scientific" that was immediately opposed by Christianity. But thirty or so years later the Christian apologists would conform to the "scientific" argument and claim that the Bible knew it all along, that it was their interpretation that was at fault. Given such a history of behavior, what reasonable man would have any regard at all for such apologists?

Thus it is with Dr. Hugh Ross and his organization, Reason to Believe. Consider the contents of an article written by Ross associate Jeff Zweerink.[1]

> By carefully studying the words of the Bible and the record of nature, I was able to put away an unnecessary piece of apologetics baggage. Perhaps it is helpful to recall past examples of unneeded arguments that hindered the church's witness:
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> 1. The Bible says that the sun revolves around the Earth.
> 2. The Bible says that Earth is at the center of the universe.
> 3. The Bible says that the characteristics of species never change.
> 4. The Bible says that the Earth and the universe must be no more than 10,000 years old.
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> An apologist builds a body of evidence to support his position. However, any position is much easier to support if it carries no unnecessary weight.

So there you have it, carefully study the words of the Bible and the record of nature. The words of the Bible and record of nature are equal. And an apologist builds "evidence to support *his* position," not the Bible's position. Note that Zweerink does not say he studied the Bible, just the *words* of the Bible. That means he probably studied the latest dictionary definitions written by men who rely on other men for knowledge and that Zweerink probably did not take the time to search out how the Scripture uses the words he was studying. It probably never even crossed his mind. Furthermore, he is likely ignorant that all

[1] J. Zweerink, www.reasons.org/tnrtb/2008/12/24/unnecessary-apologetic-baggage-2/

Bible dictionaries were rewritten two hundred fifty years ago by Jesuit "scholars" devoted to the destruction of the word and words of God.

Finally, consider Zweerink's four hindrances to the "church's witness." Atheistic evolutionists clearly see that Scripture teaches Zeerink's four "unneeded arguments." Thus, no mater how clever Zweerink's apology, he will still look like a fool in their eyes. Furthermore, it seems not to occur to Mr. Zweerink that misrepresenting God's "words" to conform to the world's expectations is not doing God any favors. God knew what he wrote when he wrote it. God knows what he is doing. To second-guess him is a grave error. The ultimate in unnecessary apologetic baggage is an attempt to make the Bible acceptable to a world hell-bent on eradicating the Bible.

The More We Learn, the Less We Know About Gravity

Long-time readers know of the mysterious phenomenon that the two Pioneer spacecraft, as well as their Viking cousins, encountered heading out of the solar system at speeds too high to be explained by the standard theory of gravity. At last word, the phenomenon was attributed to a propellant leak that sped up the vehicles in their forward directions. Now there is a new fly in the ointment.

Analysis of five different spacecraft that flew past the earth several years ago shows that the vehicles gained more speed than can be accounted for by Einstein's theory of gravitation. The unaccountable speed is small, amounting to between one tenth and half an inch per second (1.8 and 13.5 mm/sec), about one part in a million of each craft's total speed; but with radar tracking sensitive enough to track changes in speed of the order of 0.1 mm/sec ($1/260^{th}$ of an inch/sec), that excess warrants further investigation.

The largest increase in speed was imparted to NASA's Near Earth Asteroid Rendezvous craft. The report appeared in the 7 March 2008 *Physical Review Letters*. The senior author was John D. Anderson, a member of NASA's Jet Propulsion Laboratory team in Pasadena, California. Anderson proposed that the relative rotation of the earth and the spacecraft are somehow imparting an extra kick to the craft. The kick might be similar to, but much larger than, effects predicted by relativity's contention that spinning bodies warp the surrounding space dragging objects with them.

Before we get too excited, we are warned, other errors such as errors in the tracking software need to be explored.

Galaxy Cluster Data Implies Dark Energy Is Constant[2]

Comparing X-ray observations of clusters of galaxies at different distances, astronomers are reaching the conclusion that dark energy, the repulsive force that is thought to accelerate the expansion of the universe, is constant over time. In other words, it is not increasing the rate of expansion.

Dark energy and dark matter can both be related to the firmament. The firmament is the most massive thing God created. It is so massive that 10^{39} universes would have to be packed into the volume of a small sugar cube to reach the density of the firmament.

The theory states that in the past, clusters would be packed closer together and their gravity would be stronger relative to more recent, more expanded galaxy clusters. The researchers expect that there would be more galaxy clusters further away from the earth than closer to it (yes, such considerations have geocentric significance). They did find more clusters further out. One commentator claims that clusters of galaxies are the most massive objects in the universe but that is an error. There are clusters of clusters of galaxies, called *superclusters* that are obviously more massive. We are located near the equator of such a supercluster called the Supercluster.

The bottom line for the theory of geocentricity is that the energy density of the firmament (dark energy) is constant. Energy is conserved, in other words.

Half-life Nightmare Begins[3]

Creationists have long argued that the half-life of radioactive materials used to date the age of the earth is based on a bad assumption, that today's half-lives have always been the same. Some, like Barry Setterfield, have proposed that the speed of light was much higher during the creation week and that radioactive material would have aged more rapidly. It has been argued that a higher speed of light would also age stars much more rapidly than the millions to billions of years assumed by modern theory. Heretofore the evidence for a higher speed of light in the past has been shouted down, but now new evidence may resurrect the question.

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[2] Cowen, Ron, 2009. "Data from Galaxy Clusters Suggest Dark Energy is Constant Over Time," *Science News*, 3 Jan., p. 9.

[3] Jenkins, J. H., et al., 2008. "Evidence for Correlations Between Nuclear Decay Rates and Earth-Sun Distance," arXiv:0808.3282v1, and J. H. Jenkins, & E. Fishbach, 2008. "Perturbation of Nuclear Decay Rtes During the Solar Flare of 13 December 2006," arXiv:0808.3156v1.

A group of physicists at Purdue University and Wabash College, both in Indiana, published two papers last year reporting that the distance to the sun appears to influence the half-lives of ^{32}Si, ^{226}Ra, and ^{54}Mn. The abstract of the first paper reads as follows:

> Unexplained periodic fluctuations in the decay rates of ^{32}Si and ^{226}Ra have been reported by groups at Brookhaven National Laboratory (^{32}Si), and at the Physikalisch-Technische-Bundesandstalt in Germany (^{226}Ra). We show from an analysis of the raw data in these experiments that the observed fluctuations are strongly correlated in time, not only with each other, but also with the distance between the Earth and the Sun. Some implications of these results are also discussed, including the suggestion that discrepancies in published half-life determinations for these and other nuclides may be attributable in part to differences in solar activity during the course of the various experiments, or to seasonal variations in fundamental constants.

The above paper reported on two multi-year experiments that detected a yearly rate of change in the half-lives of silicon and radon. The peak and valley of the phenomenon matches the closest and most distant approach of the sun to the earth. Thus the researchers concluded that the phenomenon was related to the earth-sun distance.

The abstract of the second paper needs a bit further explanation, but it says:

> Recently, Jenkins, et al. have reported the detection of correlations between fluctuations in nuclear decay rates and Earth-Sun distance, which suggest that nuclear decay rates can be affected by solar activity. In this paper, we report the detection of a significant decrease in the decay of ^{54}Mn during the solar flare of 13 December 2006, whose x-rays were first recorded at 02:37 UT (21:37 EST on 12 December). Our detector was a 1 μCi sample of ^{54}Mn, whose decay rate exhibited a dip coincident in time with spikes in both the x-ray and proton fluxes recorded by the GOES-10 and 11 satellites. A secondary peak in the x-ray and proton fluxes on 17 December at 12:40 EST was also accompanied by a coincident dip in the ^{54}Mn decay rate. These observations support the claim by Jenkins, et al. that nuclear decay rates vary with Earth-Sun distance.

From the second paper, one may conclude that solar flares may be sufficient to explain the phenomenon, but that is not true. The detector

was located at Purdue University in West Lafayette, Indiana, where the sun had set, so the X-rays were hitting the atmosphere on the other side of the earth. The solar wind, which disrupted electromagnetic devices worldwide, was still hours away from earth. So the obvious byproducts of the solar flare could not be the cause of the change in decay rate.

Neutrinos, the smallest nuclear particles known, can travel through the earth with little chance of hitting anything. It may be possible that neutrinos caused the change, albeit by an unknown mechanism, but evidence suggests that is not the case.

The Cassini spacecraft now orbiting Saturn passed close to the sun on its journey to the ringed planet. If neutrinos were the cause of the decay rate change then Cassini's plutonium-powered nuclear power plant should show evidence of such change. Peter Coper of the Fermi Lab in Batavia, Illinois, did just that and found no change in the decay rate. Likewise, Eric Norman of Lawrence Berkeley National Laboratory in California examined data from experiments on radioactive americium, silver, tin, titanium, and barium and found no seasonal changes.

Still, such negative results do not necessarily mean that the Purdue researchers are mistaken. Different radioactive nuclei require different energies to excite them. Thus the research continues.

So far, no one seems to have thought of high-frequency gravitational waves which would change the distance between the particles in the nucleus and thus cause a decay among those oriented properly to the direction of the wave. Your editor thinks this is the most likely explanation.

Does the Future Leak Back Into the Present?

God is omnipresent. We tend to think of omnipresence as God's presence throughout space, however, some recent results in physics can best be explained if God is omnipresent in time, too. God's omnipresence in time would also explain his foreknowledge without requiring God's "intervention" in the flow of time as we experience it.

There are some things about quantum mechanics that bother people, particularly Christians. Einstein phrased it as, "God does not play dice." But experiments keep reinforcing quantum ideas. Quantum theorists have to admit that a particle can be in two places at once. They have to admit that two particles can be so "entangled" that measuring one affects the other even if it is light years away. A couple of years ago, a conference at Oxford University examined the implications of the idea that every time a subatomic system reaches a decision point, such as whether or not a radioactive nucleus should decay or not, it

chooses both outcomes. In one universe the particle decays and in another universe it does not (yet) decay. That school of thought is called "the Copenhagen School." Some physicists prefer the "many universes" view because to them the alternative is "unthinkable." The alternative school has a "decider" that decides which outcome will happen and which will not. Most physicists of that school are most comfortable with the observer (or detector, if a machine) as the "decider." In that case, the observer or detector does not make a conscious decision, but the act of detection fixes the outcome by casting in stone, as it were, whichever part of the probability was dominant. (The probabilities are pictured as waves with peaks and troughs.) If the observation was made during the peak side's time, one outcome is observed, if on the trough side's time, the other outcome is observed. Both schools of thought refuse to consider that God may be the decider.

Newer studies now appear to indicate that it is possible to measure some things without affecting it. For instance, suppose you have a roast in the oven and want to measure its temperature. Of course, you stick a thermometer in the roast. But you do not know what the temperature "really" is (i.e., accurately), because heat is transferred from the roast to the sleeve of the thermometer. This notion is called the uncertainty principle.

To get around the uncertainty principle, Israeli physicist Yakir Aharonov came up with the idea of making "weak measurements." This is akin to waving the thermometer over the roast to take its temperature. It's not very impressive for taking the temperature of the roast, but it appears to work for quantum mechanics. The idea is that if you make enough weak measurements, the average comes very close to the actual value. "Weak measurements let you lift the veil of secrecy imposed by the uncertainty principle," said cosmologist Paul Davies of Arizona State University. Weak measurements thus seem to work because they are less obtrusive than blasting a particle with other particles or photons.

Consider Figure 1. In the figure, a laser emits light towards two slits. Some of the light passes through one slit, and some through the other slit. The slits spread the light on the other side of the screen with the two slits. Thus a band of alternating dark and bright bands fall on the detector screen beyond the one with the slits. The strip of alternating light and dark bands is called the interference pattern.

Figure 1 pictures what we observe when we take a laser pointer and shine it on two slits, but what do we see if we use weak measurements? What if the laser were to emit one photon at a time instead of a stream of photons, with each photon passing through one slit or the other? The answer is, we see two spots on the screen, with no interfer-

ence pattern. However, if each photon goes through both slits we get our original interference pattern. Likewise, if a device watches the slits, we get the spots, not the interference pattern. Somehow, the act of monitoring the slits inhibits the formation of the interference pattern. All this is standard knowledge.

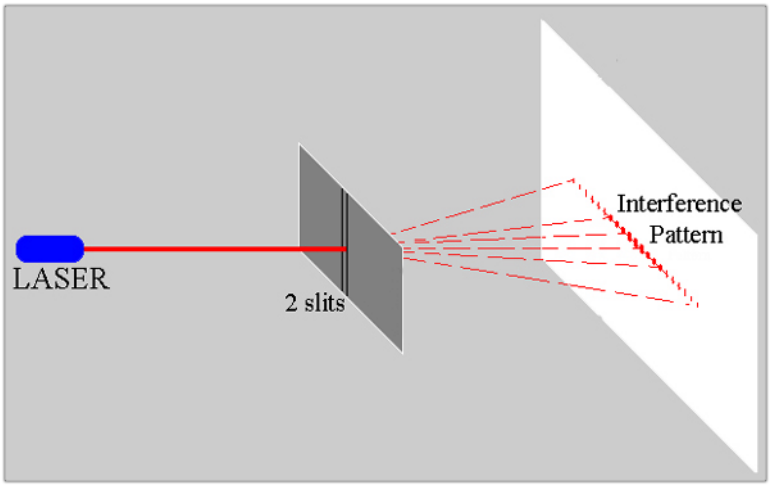

Figure 1: Two-slit Interference Pattern.

Now imagine that the white sheet in Figure 1 is a set of Venetian blinds and that behind the blinds there is a detector watching the slits. When the blinds are closed so that the detector cannot see the slits, the standard interference pattern forms on the blinds, which is to say that photons fly through both slits. If the blinds are open, the detector sees the two spots as if each photon went through one slit or the other. But here's the unexpected. If the blinds open *after* the photons have gone through the slits but before they reach the blinds, the interference pattern fails to form even though the photons have apparently done what was needed to form the interference pattern, namely to fly through the slits unobserved. The act of observing changes what the photons did earlier! All this has a certain Alice in Wonderland quality.

The weak measurements may show that "something that happens now is affected by something that happens in the future," to quote George Tollaksen of George Mason University. "Maybe physicists should replace Alice with a new muse: Trafalmadorians, who in Kurt Vonnegut's *Slaughterhouse Five* saw past, present, and future all at once like a landscape, each moment ever present." And that, my dear readers, is omnipresence; omnipresence in time. I prefer to think of it

as *foreknowledge*. It looks like God's omnipresence and omniscience are inescapable—not only in space but also in time—when it comes to the frontiers of cosmology, even the sustenance of his creation from start to finish (Hebrews 1:3[4]).

Cause for Concern!

A Washington, DC airport ticket agent offers some examples of why our country is in trouble!

- I got a call from a lawmaker's wife who asked, "Is it possible to see England from Canada?" I said, "No." She said, "But they look so close on the map."
- An aide for a cabinet member once called and asked if he could rent a car in Dallas. When I pulled up the reservation, I noticed he had only a 1-hour layover in Dallas. When I asked him why he wanted to rent a car, he said, "I heard Dallas was a big airport, and we will need a car to drive between gates to save time."
- An Illinois Congresswoman called last week. She needed to know how it was possible that her flight from Detroit left at 8:30 am and got to Chicago at 8:33 am. I explained that Michigan was an hour ahead of Illinois, but she couldn't understand the concept of time zones. Finally, I told her the plane went fast, and she bought that.
- A New York lawmaker called and asked, "Do airlines put your physical description on your bag so they know whose luggage belongs to whom?" I said, "No, why do you ask?" She replied, "Well, when I checked in with the airline, they put a tag on my luggage that said "FAT," and I'm overweight. I think that's very rude!" After putting her on hold for a minute while I "looked into it," (I was laughing) I came back and explained the airport code for Fresno, CA is (FAT), and the airline was just putting a destination tag on her luggage.
- A Senator's aide called to inquire about a trip package to Hawaii. After going over all the cost info, she asked, "Would it be cheaper to fly to California, and then take the train to Hawaii?"

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[4] [God's Son] being the brightness of his glory, and the express image of his person, and **upholding all things by the word of his power**, when he had by himself purged our sins, sat down on the right hand of the Majesty on high. [Emphasis added.]

BULLETIN BLOOPERS

The peacemaking meeting scheduled for today has been cancelled due to a conflict.

Remember in prayer the many who are sick of our community. Smile at someone who is hard to love. Say "Hell" to someone who doesn't care much about you.

Miss Charlene Mason sang "I will not pass this way again," giving obvious pleasure to the congregation.

The Rector will preach his farewell message after which the choir will sing: "Break Forth Into Joy."

Irving Benson and Jessie Carter were married on October 24 in the church. So ends a friendship that began in their school days.

At the evening service tonight, the sermon topic will be "What Is Hell?" Come early and listen to our choir practice.

Eight new choir robes are currently needed due to the addition of several new members and to the deterioration of some older ones.

Scouts are saving aluminum cans, bottles and other items to be recycled. Proceeds will be used to cripple children.

Please place your donation in the envelope along with the deceased person you want remembered.

The church will host an evening of fine dining, super entertainment, and gracious hostility.