Robotic Hummingbird Defies Evolution

Population Statistics and a Young Earth
Unnatural Causes

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The most fundamental axiom of science is causality: the belief that every material effect observed must have a sufficient cause preceding or simultaneous with it (Miller, 2011). The observed motion of a cart is difficult to explain, for example, unless we assume the existence of an appropriately placed horse (figuratively speaking, of course). Scientific philosopher Sir Karl Popper wrote that the “rule” of causality “guides the scientific investigator in his work” (1968, p. 61). Actually, Popper refused to accept causality as a scientific “principle,” but instead stated as a “methodological rule” that we should never “give up our attempts to explain causally any kind of event we can describe” (p. 61). I will not be so picky, as I believe that causality has been so thoroughly and consistently demonstrated by observation to be readily considered axiomatic, i.e., accepted without proof. Popper clearly indicates by his comments his belief that causality is heavily embedded in scientific thought and method. Nobel Laureate Erwin Schrödinger, upon defining causality, commented:

“This postulate is sometimes called the “principle of causality.” Our belief in it has been steadily confirmed again and again by the progressive discovery of causes that specially condition each event (1957, p. 135).

The thoughts expressed by Popper and Schrödinger certainly support the idea that without an assumed “cause,” the scientific search would be quite aimless, if, indeed, possible at all.

The scientific importance of causality can be further illustrated with an amusing story related by noted theoretical physicist Stephen Hawking:

A well-known scientist (some say it was Bertrand Russell) once gave a public lecture on astronomy. He described how the earth orbits around the sun and how the sun, in turn, orbits around the center of a vast collection of stars called our galaxy. At the end of the lecture, a little old lady at the back of the room got up and said: “What you have told us is rubbish. The world is really a flat plate supported on the back of a giant tortoise.” The scientist gave a superior smile before replying, “What is the tortoise standing on?” “You’re very clever, young man, very clever,” said the old lady. “But it’s turtles all the way down!” (1988, p. 1).

Hawking’s anecdote invites several immediate observations regarding causality:

1. Causality is fundamental to scientific reasoning. Note the scientist’s question in response to the lady’s statement. Why assume the tortoise is standing on anything, if not for the sake of causality?

2. The principle requires effects to be natural or material (thus, observable to us). This is a somewhat trivial inference, for should an effect be unobservable in nature, then we would certainly not be concerned with knowing its cause. The observation implied in the story is nothing less than the existence of the Earth and its perceived place in the Universe.

3. The statement of causality does not of necessity require a natural or material cause. Causes need only be sufficient and antecedent to/simultaneous with the effect to satisfy causality. For example, as a direct consequence of causality, the lady’s hypothesis in the story (a giant tortoise holding up the Earth) resulted, according to her explanation, in an infinite tower of turtles. While this conclusion is not natural by any means (and, arguably, not logical), it is admissible from the standpoint of causality. (For further interesting discussion of the “tower of turtles” analogy, see Davies, 1992, pp. 223-226).

The third statement, while last, is certainly not least important. Note that even miraculous events recorded in the Bible produced effects that were observable or measurable (e.g., water becoming grape juice, the Red Sea visibly parting, people who were observably dead becoming alive again, etc.). Otherwise, miraculous causes would probably be of little interest to us.

It turns out, though, that the admissibility of non-natural causes is the only way to avoid a serious dilemma in the causality assumption. Consider the following: if a cause is, or is assumed to be, material (observable) then, like its effect, it is also contingent—the cause itself must be the effect of yet another cause according to the scientific axiom of Causality. Consequently, a predetermination to assume only material causes will, necessarily, lead to an infinite sequence of them. For example, strict material causality dictates that the existence of life at its present state of complexity may only be explained by some form of evolution (special creation, while an admissible cause, is not material). In order for life to evolve to its present state of complexity, life had to develop from non-living mat-
non-living matter had to somehow organize in a very specific way to provide the necessary constituents for life to generate (assuming, of course, this is even possible); in order to so organize, this matter had to have existed under certain special conditions; and so on.

The dilemma in this reasoning is clearly illustrated by the turtle analogy. If one assumes that the Earth rests on the back of a giant turtle, then the turtle needs to be supported by something. And, since the lady in the story was inclined to make the turtle assumption to begin with, why not just assume that it is standing on the back of another turtle, which is exactly what she did. But, what is the second turtle standing on? As long as one has predetermined to accept the turtle hypothesis, like material causality, the turtles will continue to pile up, like material causes, until we have an infinite number of them. To avoid this dilemma, an assumption must be made at some point in the chain that does not involve a turtle, or by analogy, does not conform to strict materialism.

A related principle has been demonstrated within the most logically consistent subject of study known to mankind—mathematics. In 1931, Kurt Gödel, an Austrian mathematician, proved a theorem holding that “for any consistent mathematical system there exists within the system a well formed statement that is not provable under the rules of the system” (Overman, 1997, p. 27). Commonly known as Gödel’s Incompleteness Theorem, this result simply implies that to make progress within a mathematical system, certain facts need to be accepted axiomatically (that is, they cannot be proven from other facts in the system).

This principal also holds in other fields of reasoning. In fact, Paul Davies makes use of this idea when he proclaims:

I would rather not believe in supernatural events personally. Although I obviously can’t prove that they never happen, I see no reason to suppose that they do. My inclination is to assume that the laws of nature are obeyed at all times (1992, p. 15).

Here Davies assumes something to be true that, he admits, cannot be proven within his system of reasoning: the assumption that supernatural events do not occur. A tacit assumption in Davies’ statement, however, is the existence of time. While the natural laws may hold “at all times” (and supernatural events may not occur), we have already seen that assuming this to be true back to the beginning of time will lead to the equivalent of an infinite tower of turtles (an infinite causal sequence).

Speaking of the beginning of time, the most widely accepted theory for this event is the so-called “Big Bang.” This was hypothesized subsequent to the discovery that the Universe is expanding (Hawking, 1988, p. 38). Specifically, what astronomers discovered was that the light spectra of most of the stars in other galaxies were “red-shifted” (reducing in frequency), by which they assumed this indicates that those stars were moving away from us with increasing velocity. If the assumed expansion is extrapolated backwards in time, then one might suppose that there is a point in time at which all of the matter in the Universe existed at the...
same point). This, of course, requires the highly non-trivial assumption that time actually extrapolates back to that point. Note that the expansion assumption does not necessarily follow since one might hypothesize other possible causes for the red-shift of the stars, such as nonlinear changes in the “elasticity” of space-time itself, perhaps as if the Universe was “stretched out” at its beginning (cf. “stretched out” [Isaiah 42:5; Isaiah 45:12; Jeremiah 10:12], or “spread out” [Job 9:8; Isaiah 40:22]).

For now, though, consider what science thinks it knows about this assumed beginning point, called the Big Bang singularity. The term singularity in this context denotes a point at which some fundamental property ceases to exist or certain processes are undefined. For example, in mathematics dividing by zero creates a singularity because division by zero is undefined. To state this more precisely mathematically, the mathematical operation of division is undefined at zero, so the origin (zero) is called a singularity point with respect to the operation of division. In the case of the Big Bang singularity, the assumed reverse time extrapolation creates a point at which all of the matter in the Universe is collocated, or has “zero size” (Hawking, p. 117). This would necessarily imply infinite mass density which, according to general relativity, implies infinite curvature of space-time (Einstein, 1920). Physicists Stephen Hawking and Roger Penrose have studied the properties of singularities predicted by general relativity quite extensively. Hawking observed that at such a point, “the laws of science and our ability to predict the future would break down” (p. 88). Since the laws of science as we understand them are undefined at this point, the point is called a singularity or, in this case, the Big Bang singularity.

So it seems, perhaps not unsurprisingly, that if the chain of causality could be followed back to a beginning of time as defined by the Big Bang, it would take us to a point in which natural laws do not apply. Hawking goes on to say: “[T]his means that one might as well cut the big bang, and any events before it, out of the theory, because they can have no effect on what we observe” (p. 122). However, cutting the singularity out of the theory just serves to bog the theory down once again in the dilemma of material causality. When the ultimate conclusion of causality turns out to be an unnatural cause, and we cut it out of our theory simply because we desire to stick with material causality, then our reasoning can only lead us, again, to an infinite tower of turtles. Note that Davies points out that it doesn’t make sense to talk about “before” with reference to the Big Bang singularity since time presumably had its beginning there (p. 50).

All of our imagination and reasoning, as well as our experience and observation, point to a necessary break-down in strict material causality. Theories of an infinite Universe, mathematical incompleteness, and space-time singularities testify to a physical reality that cannot be completely deduced by the rules of the system. The logical conclusion is a cosmological model that admits unnatural cause. Furthermore, if we are forced to assume an unnatural cause for the beginning of time, as the evidence suggests that, indeed, we are, then why should we necessarily presume, specifically, that in order to pinpoint the beginning of time, we should extrapolate back to a point in which all the mass in the Universe is collocated? As we have seen, Hawking suggested discarding the Big Bang singularity because its effects cannot be predicted by science. However, Hawking also points out that the singularity theory implies that space-time had a beginning and a boundary, prompting him to ask “What were the ‘boundary conditions’ at the beginning of time?” He then comments: “One possible answer is that God chose the initial configuration of the universe” (p. 122).

Such boundary conditions as these could specify any of an infinite number of initial configurations and states for space-time and the matter that it contains. Indeed, boundary conditions are, by definition, these types of specifications. I see no particular reason to assume that these boundary conditions start with a point of infinite mass density and equally infinite space-time curvature, other than a predetermined desire to push material causality to its unnatural limit. These boundary conditions may, with equal probability, specify a Universe at the beginning of time that is not much different than what we now observe, thus implying that time has not progressed as far as some have conjectured. Perhaps that is why Hawking, using a mathematical contrivance he calls “imaginary time,” has more recently endeavored to create a consistent model of space-time that is finite but does not have a boundary, therefore would presumably not require any boundary conditions. Hawking, however, points out that this idea is “just a proposal: it cannot be deduced from some other principle” (p. 136).

The biblical Old Testament records that God said to Job: “Where were you when I laid the foundations of the Earth? Tell me, if you have understanding” (Job 38:4). Job understood well the rhetorical nature of God’s question, for he had already proclaimed to his companions:

But where can wisdom be found? And where is the place of understanding? Man does not know its value, nor is it found in the land of the living. The deep says, “It is not in me”; and the sea says, “It is not with me.” It cannot be purchased for gold, nor can silver be weighed for its price (Job 28:12-15).

Clearly, Job observed that complete understanding does not lie in materialism or nature and, if he did not know it before, God pointed out to him that neither does the knowledge of how “the foundations of the Earth” were established. Even what understanding we do have contains immutable evidence of its own hard-coded limitations in explaining the observable Universe.

Our observations and reasoning tell us that the foundations of the Universe could not possibly have been laid through strictly material or natural causality.
Theories of cosmology, physics, and even mathematics point to the necessity of a Cause that operates independent of the rules of the system. These theories, however, while they can point to the necessity of unnatural causes, are important when it comes to explaining those causes. The Bible closes this gap in our theories by telling us of an omnipotent and omniscient Creator who is capable of operating outside of nature to make everything we observe out of what we cannot observe. The divinely guided Hebrews writer articulated this very concept in his striking statement against strict material causality: “By faith we understand that the worlds were framed by the word of God, so that the things which are seen were not made of things which are visible” (11:3).

If we pay attention to what all of our observation and reasoning are telling us, then our mind’s eye will “see” the foundations of the Universe being laid, not by material or natural causality, but by the omnipotent Creator, God, working outside of nature to set the boundary conditions, bringing natural laws on-line to shape and direct His creation. And our reasoning will, in turn, no longer require an infinite tower of turtles.

REFERENCES


Overman, Dean (1997), A Case Against Accident and Self-Organization (Lanham, MD: Rowman & Littlefield).


Schrödinger, Ernst (1957), Science, the Theory, and Man (New York: Dover Publications).
Weekend Seminars by Kyle Butt & Eric Lyons

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- Dinosaurs: The Poster Children of Evolution (Parts 1 & 2)
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- Evolution vs. the Laws of Science
  Do the laws of science support the evolutionary model or the creation model?
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Founded in 1979, Apologetics Press is a non-profit organization that exists for the purpose of defending New Testament Christianity. We specialize in waging spiritual warfare (Ephesians 6:12; 1 Timothy 1:18) against the forces of unbelief, skepticism, atheism, and false religion. Additionally, we exist to serve the church by strengthening the faith of Christians and their children. Seminars are typically conducted on weekends (Friday to Sunday). Our offices are located in Montgomery, Alabama. Visit our Web site for more speaker information, as well as access to free materials: www.ApologeticsPress.org.
Imagine looking out your window one morning as the birds come to the feeder and seeing a hummingbird. As you look closer, however, you realize this is no ordinary hummingbird. It hovers, moves forward and backward, and is about the same size as other hummingbirds that you have seen, but this one has some striking differences. It is made out of lightweight, synthetic material and has a camera in its stomach, which is pointing right at you, filming everything you are doing! Anyone staring at a camera-laden hummingbird droid would immediately wonder who designed the machine and why it was sent. No one would entertain the idea that the perfectly functioning robot somehow evolved from natural processes that were at work in a junkyard down the street.

While this hummingbird robot sounds more like science fiction than science, it happens to be the latest gismo produced by the California-based company AeroVironment (Watson, 2011). Watson reported that the “Pentagon has poured millions of dollars into the development of tiny drones inspired by biology” (2011, emp. added). The product of this research is a robotic hummingbird “with a 6.5-inch wing span” that weighs “less than a AA battery and can fly at speeds up to 11 mph” (2011). The device has taken AeroVironment five years to produce and cost about four million dollars.

When compared to a “real,” living hummingbird, this contraption looks clumsy. Real hummingbirds can fly 25 miles per hour, and reach diving speeds of 60 miles per hour. They normally flap their wings about 50 times per second, but can flap them up to 200 times per second. If the amazing mechanical hummingbird took millions of dollars, several years, and a host of brilliant engineers to design, what are we forced to conclude about the real thing? Whoever designed it must have been more intelligent than the combined intelligence of the entire human engineering populace, since this latest hummingbird robot represents the very best humans can do. The supposed naturalistic process of evolution could never account for a creature like the hummingbird, nor for a mechanical imitation of it. When God asked the patriarch Job, “Does the hawk fly by your wisdom?” (Job 39:26), He was stressing the fact that flying creatures like hawks and hummingbirds provide outstanding evidence that God exists, and He knows infinitely more about everything than man does.

REFERENCE
win and Mendel, which have illuminated so many mysteries, have so far failed to shed more than a dim and wavering light on the central mystery of sexuality, emphasizing its obscurity by its very isolation (1982, p. 19).

Evolutionist Philip Kitcher admitted, “Despite some ingenious suggestions by orthodox Darwinians, there is no convincing Darwinian history for the emergence of sexual reproduction” (1982, p. 54). Evolutionist Mark Ridley noted that “[s]ex is a puzzle that has not yet been solved; no one knows why it exists” (2001, p. 111). Julie Schecter said that “sex remains a mystery to researchers, to say nothing of the rest of the population. Why sex?” (1984, 34:680). [See Thompson and Harrub, 2002 for an in depth discussion on the origin of genders and sexuality.]

Besides the problem raised for evolutionists by the origin of sexual reproduction, more problems exist that evolutionists appear to be quite reticent about. For instance, the patriarch and matriarch of the human race, having miraculously emerged in the same time period of history with each other, also had to be able to find each other on planet Earth without first starving, without being eaten by the ferocious animals that evolutionary images of early man portray, and without getting too old to replicate. And still further, just because there is another human being near you, does that mean you will be attracted to him/her? The male and female had to decide that they liked each other and do something about it before dying. And even further, the baby and mother had to survive the ordeal of child birth in those allegedly primitive circumstances. If the emergence of one human being from a non-human being seems ludicrous due to its contradiction of the Law of Biogenesis, surely this realization makes the evolutionary proposition beyond preposterous.

### POPULATION STATISTICS AND THE EVOLUTIONARY MODEL

However, for the sake of argument, let us grant the atheistic evolutionist several miraculous feats—two living, opposite-sex human beings, with the necessary sexual components to propagate the species, in the same region on Earth, safe guarded from their primitive environment, with a desire for each other, and young enough to replicate. Even granting all of these significant but unrealistic assumptions, the evolutionist is left with statistical obstacles. Consider the mathematics for this argument.

Let us suppose that couples throughout history have had an average of \((2c)\) children (i.e., \(c\) boys plus \(c\) girls). Starting with two humans, this would make the population after the first generation, \(P_1 = 2 + 2c\). Then, the children, marrying each other, had another \(2c\) children per couple. As illustrated in Scientific Studies in Special Creation (Lam- merts, 1971), continuing this progression results in the following equation, where \(n\) is the number of generations for which the calculation is done.

\[
P_n = 2 + 2c + 2c^2 + 2c^3 + \cdots + 2c^n
\]

After multiplying both sides of Equation (1) by \(c\), subtracting the resulting equation from Equation (1), grouping, and dividing both sides by \((c - 1)\), the following equation results:

\[
P_n = \frac{2(c^{n+1} - 1)}{(c - 1)}
\]

This gives the total population after \(n\) generations, without any deaths. Assuming each person lives an average of \(d\) generations, the number of deceased people by the final generation (i.e., the \((n - d)\)th generation) can be calculated using Equation (3):

\[
P_{n-d} = \frac{2(c^{n-d} - 1)}{(c - 1)}
\]

Therefore, the total population after \(n\) generations, accounting for death, can be calculated by subtracting the population of the \((n - d)\)th generation from the population calculated in Equation (2), resulting in the following:

\[
P_n = \frac{2}{(c - 1)}(c^n - 1)(c - 1)
\]

If each couple has only two children (i.e., \(c = 1\)), the population will remain constant, and if each couple has fewer than two children on average (i.e., \(c < 1\)), the population will decrease (Lammerts, pp. 198-205). [See also Morris and Morris, 1996 and Wysong, 1976 for more information on the derivation of the above equations.]

The actual value of the constants \((c, d, \text{and } n)\) are unknown, since the world’s population has not been known with any certainty until the last few hundred years. They also would almost certainly have fluctuated at different times in history based on the state of technology, lifespans (especially considering the long lifespans in the generations immediately following the Flood and the shorter lifespans preceding the current state of medical knowledge), and fluctuating offspring production rates. However, this approach allows for the use of long-term averages to get a rough estimate of what the world’s population should look like over time.

Being very conservative, accounting for periods of famine, disease, war, natural calamity, etc., let us assume that \(c = 1.2\). Thus, each couple throughout history has had, on average, at least two children, and many times three or more children were born. Also, let us assume that each person has lived, on average, one and a third generations (i.e., \(d = 1.3\)). This means that each person died having seen some, though not all, of their grandchildren. Again,
this estimate is likely very conservative, especially since effective birth control methods are a relatively recent innovation. However, these conservative estimates certainly take into account the long periods of time in history when people lived shorter lives and had fewer children. Let us further assign a reasonable estimate of a “generation” to be 38 years. This means that each couple has had all of their children by age 38. All of these numbers could easily and fairly be increased, but doing so would do even further damage to the evolutionist’s case.

Using these conservative estimates, if human beings have been on the planet producing offspring for one million years, over 26,000 generations have passed. There are currently about seven billion people on earth—6.9x10^9 (“U.S. & World Population...,” 2011). However, according to Equation (4), there should be over 10^{1,000} people on the Earth today if propagation commenced one million years ago. That is a one, followed by 2,000 zeros. In order to try to fathom that number, consider the following analogy. The known Universe is thought to be 28 billion light years in diameter (Powell, 2006; Tully, 2000). That is the equivalent of over 10^{70} cubic miles of volume. If tiny, three foot humans, modeled as cylinders with five inch radii (i.e., very narrow shoulders), were crammed into the Universe like sardines, 10^{82} people might fit (if they have not eaten in awhile). That leaves enough people to fill up 10^{918} (minus one) additional Universes that are the size of this one! And what’s worse, if r, d, or n are increased, as they legitimately could be, the problem is further amplified. Consider also that these numbers are based on a starting point of one million years ago. Evolutionists claim that humans have been on the Earth for two to three million years. To make their plight even worse, the evolutionary community digs its own grave significantly deeper by speculating that the original Adam and Eve were actually Adam, Eve, and about 10,000 other people (Hawks, et al., 2000). Even if 10,000 such miracles were accomplished in the same period of time in human history, one can easily imagine how many more people would result in a given period of time if 5,000 couples initially began bearing children instead of one couple. Where, pray tell, are all of the imaginary people that should be in existence if evolution is the true history of humanity?

The evolutionary community certainly has trouble adjusting the numbers to allow for this preposterous scenario. However, they must be able to come up with a reasonable explanation in order to maintain their position. If evolution is true, it must be assumed that there were times when the human population remained constant for very long periods of time or decreased to the point of extinction at different times in history (cf. Weiss, 1984; Hawks, et al., 2000). Such speculation is a leap into the dark without sufficient, verifiable evidence. History grants us no world population estimates based on censuses until the last 200 years. Before that, according to population statisticians’ estimates, the average annual population growth was estimated to be relatively constant, ranging between 0.03-0.15% from 1750 A.D. to 10,000 B.C. (“Historical Estimates of World Population,” 2010) [NOTE: World populations are estimated at this later date based on the assumption that the theory of evolution is true. Such a timeframe would be pre-Creation, accord-
ing to the Bible, and is rejected by the author. Likely due to medical breakthroughs and technological advancement, the annual population growth has since jumped to about 2%. Note that even the irreligious community recognizes the likelihood of significant population growth on average over time throughout history and makes its estimates accordingly. The evolutionary position, in order to exist at all, must stand in contradiction to this fact. The evidence, as well as common sense, cannot be denied. If growth is the norm as the evidence indicates, evolution is impossible. The evidence conveyed by population statistics simply does not support the evolutionary model.

**POPULATION STATISTICS AND THE CREATION MODEL**

What about the creation model? Is it supported by the evidence from population statistics? The biblical position asserts that after the Flood, repopulation of the Earth commenced, starting with six people (i.e., Shem, Ham, Japheth, and their wives), instead of two (or 10,000). Using the aforementioned procedure, the following equation can be derived for calculation of the projected population for any given time, starting with six people:

\[
p_{nB} = \frac{6}{(o - 1)}(e^{t d + 1})(e^t - 1)
\]

the projected population for any given time, starting with six people:

If we assume, based on biblical genealogies, that the Flood took place roughly 4,300 years ago (cf. Bass, 2003), using the same \(e\) and \(d\) as above, as well as a generation of 38 years, then 113 generations have passed since the global Flood of Noah's day. Based on these numbers, the approximate projected population for today can be calculated. According to the calculations, there should be approximately seven billion people on Earth—6.7x10^9. This is strikingly close to the current population as recorded by the U.S. Census Bureau—6.9x10^9.

**CONCLUSION**

What does the evidence indicate? Is the evolutionary model a plausible explanation for man's existence? The evidence from the field of population statistics says, "Certainly not." Even granting very conservative numbers in the calculation of projected populations, it is the biblical model that is in keeping with the numerical evidence provided by the world's population. The evidence supports a young age for the Earth and mankind. One would have to be dishonest to examine such concrete evidence and dismiss it out of hand. Yet, this attitude pervades much of the scientific community today. The same people who proclaim that they, unlike theists, are the ones who examine the evidence without bias, only drawing those conclusions that are warranted by the evidence, are the very ones who turn against the evidence when it does not suit their purpose and agenda. Philosopher David Hume once said that no man turns against reason until reason turns against him (as quoted in Warren, 1982, p. 4). That certainly sums up the mentality of many in the scientific community. Why not choose to go with the reasonable conclusion that can be drawn from the evidence? The Earth is young. Evolution cannot explain human existence. The biblical model can...and does.

**REFERENCES**


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Apologetics Press has developed a multi-pronged approach to evangelism and the defense of the Faith. This outreach includes the publication of printed materials (books, tracts, correspondence courses, pamphlets, etc.), the production of multimedia (DVDs, MP3s, etc.), and harnessing the Internet by means of our state of the art Web site. All of these avenues of evangelism are designed to achieve the same objective: save souls. Apologetics Press does not exist to make money. Rather, we earnestly, sincerely, and passionately seek only to assist men, women, and children in preparing their souls for eternity. We only want to provide them with helpful, effective means by which they can know the truth about the critical issues they are facing in current culture.

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The center spread of this month’s issue of R&R provides a listing of these speakers and the subjects they address in their seminars. Remember that Apologetics Press exists to serve. If any of these men may be of service, do not hesitate to call A.P. and schedule a seminar.

Dave Miller

See the Center Spread for More Details