What They Don't Know

from The Day and the Hour: Friday

Jim-

Yesterday in our discussion you asked why any "thinking person" would take the Bible seriously since it doesn't have a "scientific basis." This morning I ran across a fund-raising article by the president of M.I.T. in which she asserted that scientific knowledge about our world and the cosmos is so far from being complete that what is yet unknown or uncertain far exceeds what is known (therefore keep the contributions coming).

That gave me an idea: I would love to sit down with some top scientists who are the real experts in their fields and ask them how sure they are about their theories so far—because I believe that God is lurking in what they call nature and any ultimate answers will have to recognize that. Things are never quite what they seem to be. (A runof-the-mill atheistic scientist would assure me that he has proof that there is no God in nature because scientific experiments are repeatable. That type never asks the hard questions until forced to do so. I would tell him that God likes things a certain way; his divine word that upholds the so-called natural universe might be roughly translated, "Encore! Do it again!"—to quote Chesterton.)

So I thought it would be a good idea to make some appointments to visit and talk with real scientists, to see how well they know what they know and to see whether there's any room for God in what they've found out. Not having the funds to finance such a project—or

the time, of course—I simulated the interviews by gathering information and quotations via the Uninet. Harrietta was busy with her painting, and I was envying her chance to be creative, so I attempted to exercise a little creativity too, and I wrote up the results of my "interviews" as a travelogue (making it sound like I had made the trip when actually I never left the house).

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First I went to England to visit a famous physicist at Cambridge. He told me that science does indeed understand how the universe originated. When I pressed him further, he admitted that there is one major problem: measurements are revealing that the temperature in space in every direction is the same—which doesn't fit the theory. They could make the theory work by assuming that there was an instantaneous creation that happened much, much faster than they can give a reason for. They call this revision of the theory "inflation," which I find intriguing. But he doesn't like it, and he's looking for another explanation. He said, "Inflation would be an explanation if it occurred. The trouble is no one knows what could have made it occur." [I had an answer for him, but being only a one-way "interview" I could not tell him that God might have implemented all of the early phases of his design very quickly.]

While I was in the area I went to see a researcher who had published a paper reporting positive results from studies using homeopathic medications. Fortunately she was willing to talk to me. Of course I realize that anyone who has ever been to a physician or spent time in a hospital or listened to the stories told by others who have been there knows that medical science is not really science in the same sense that physics is. The number of variables in biology is staggering. But since I was in London, I thought I might as well check this out. She informed me that medical researchers are now seriously giving their attention to solving the mystery of homeopathy—which involves traces of substances so dilute that they don't even have measurable existence, yet they still seem to have effects. "We can't explain our findings," she said. "The implications are profound: we may have to rewrite physics and chemistry."

After that interview, I was anxious to get back to physics, where I could rely on things being a little more stable. The next stop was in Switzerland to interview a physicist who is trying to solve the mystery of so-called "dark matter." The effects of dark matter can be observed, but what dark matter is actually comprised of is still a mystery. She told me: "It's an embarrassment. Astronomical observations indicate that ninety percent of the mass in the universe is dark matter, yet we're ignorant of what that ninety percent is."

From there I went down to Israel to see another theoretical physicist who's trying to understand gravity. We all know that Isaac Newton didn't get it quite right, and it's no secret that Einstein's theory of gravity doesn't tell the whole story either. But since many solutions to this problem have been proposed over the years, I wanted to get the latest and greatest answer from a real expert on the subject. He explained: "Gravity is completely different from the other forces. When you do calculations about small

gravitational interactions, you get stupid answers. The math simply doesn't work." Maybe he was just having a bad day.

Next I traveled east to India and looked up the cosmologist whom I wanted to interview about the famous "dark energy" problem. In 1998 astronomers discovered that the universe is expanding at ever-faster speeds. Until then everyone had thought the universe's expansion was slowing down after the big bang. She summed it up: "Theorists are still floundering, flailing about, looking for a sensible explanation."

My next stop was Japan where I wanted to talk with experimenters who have discovered cosmic ray particles coming from outer space that have more energy than they could possibly have unless they're coming from a source that's relatively close. The problem here is that there is no known source that could account for such high-energy particles, so it's possible that the underlying theory of the universe is inadequate. "Until we get more information," one of the researchers told me, "there's no telling how exotic the true explanation could be."

As I headed across the Pacific, I was feeling sorry for these brave scientists who have to face the unknown alone with no knowledge of God. I would have liked to have given them a little hint: they were looking only at God's camouflage. But that would not have helped them get next year's funding.

I was almost finished with the physicists and astronomers before getting into more biology. The last stop was at Pasadena. I sat down with an astronomer and asked him bluntly: "Does the universe really match any of the theories you have devised to explain it?" His reply took me by surprise: "I'd like to hope that the effort we have been making is getting us closer to fundamental truths. We have spent an awful lot of the public's money. But I'm terrified of finding out that everything I know is wrong."

I had arranged to meet with an evolutionary biologist on the same campus. When I got to his lab I discovered that he was grappling with sex. It turns out that evolution cannot explain the existence of sex. He was awfully frustrated, and blurted out about his problem: "All the arguments explaining how sexual reproduction originated are countered by stronger arguments for self-cloning—asexual reproduction, where an organism copies itself. It's a much more efficient way to pass genes on to the next generation." He was not in a good mood, and apparently he wanted to get rid of me, for he suggested that I go next door and check out the genetic research lab.

The receptionist thought for awhile then contacted the senior fellow most likely to entertain a visitor. She led me to his office and introduced me to the gentleman. He looked to be in his 90's at least, and he told me that he had wasted most of his career trying to answer relatively unimportant questions. But now, finally, he was working on the big one, which he said was the effort to extend the lifespans of living organisms. "We have spent billions on this research," he told me. "But so far we've been unable to explain what limits life spans. There are genetic death switches that seem to operate outside of our models."

It had been a wearing trip. I was glad to have completed it and was looking forward to getting back to reality and normal life. On the way out of the building I noticed a sign on a door saying "Yawn lab." I was intrigued by that, having been yawning myself

during the past interview. Surely such a simple thing was well understood. I clearly remember learning the reason for yawning in high-school biology class. So I stepped in to see whether this was a joke or for real. Inside the room there were pictures of yawning mouths all over the walls, both of humans and animals. A young man in a white coat was connecting a robotic yawner to some instruments. He wasn't acknowledging my presence, but I decided to hazard a question anyway: "Excuse me, sir. Can you give me a quick summary of the state of knowledge on yawns?" He turned around and looked at me as if I had been there for the tenth time; and after muffling a yawn he said, "That's easy. We don't know."

Well, that finishes my report, Jim. I hope it didn't cause you too many yawns. Personally I suspect there is so much yawning in the world for the same reason there is so much groaning. As the Bible says in Romans 8:23, all creation is groaning inwardly, waiting for the redemption of our bodies as the days and hours roll by. But I didn't tell the yawn specialist what I thought as I didn't want to undermine his livelihood either. Of course I couldn't have told him if I had wanted to.