

## ISSUES IN PERSPECTIVE

Dr. James P. Eckman, President  
Grace University, Omaha, Nebraska  
7-8 January 2012

### PERSPECTIVE NUMBER ONE

#### *Thinking about the “God Particle”*

Basic to any understanding of physics is the concept of mass. Why do particles of nature have mass? This is obviously a fundamental question of physics but one that is inscrutably difficult to answer. For four decades now, physics has worked from what is known as the Standard Model of physics—an explanation that relies on 17 fundamental particles of matter and three physical forces. But this model requires the existence of a force that, so to speak, keeps everything together. That is the importance of the “God particle,” the so-called Higgs Boson, named after an Edinburgh University physicist of 50 years ago—Peter Higgs. Scientists now believe that they have confirmed the existence of the Higgs Boson from experiments done at CERN, using its Large Hadron Collider (LHC), a 17-mile round particle accelerator in Switzerland. Physicists have gotten essentially identical results from two experiments attached to the LHC. Why is this so important? Among other things, the existence of the Higgs Boson, if indeed it does exist, confirms the incredible structure, order and predictability of the universe. Indeed, *The Economist* argues that “one of the most extraordinary things about the universe is this predictability—that it is possible to write down equations which describe what is seen, and extrapolate from them to the unseen. Newton was able to go from the behavior of bodies falling to Earth to the mechanism that holds planets in orbit. James Clerk Maxwell’s equations on electromagnetism, derived in the mid-19<sup>th</sup> century, predicted the existence of radio waves. The atom bomb began with Einstein’s famous equation,  $E=mc^2$ , which was a result derived by asking how objects would behave when traveling near the speed of light.” Because of the symmetry and order of the universe, some are calling the Higgs Boson the “God particle.” The physical universe is indeed a wonder. Columnist Michael Gerson writes that “Not only does the universe unexpectedly correspond to mathematical theories, it is self-organizing—from biology to astrophysics—in unlikely ways. The physical constants of the universe seem finely tuned for the emergence of complexity and life. Slightly modify the strength of gravity, or the chemistry of carbon, or the ratio of the mass of protons and electrons, and biological systems become impossible.” For this reason, I would argue that theism explains a universe finely tuned for life and accessible to human reason. And, as Gerson stipulates, “It accounts for the cosmic coincidences. And a theistic universe, unlike the alternatives, also makes sense of free will and moral responsibility.” The potential of the Higgs Boson discovery is that it confirms this order and predictability of the universe, which should in turn lead us to a sense of awe and wonder. Of course, the typical scientist would disagree, but it does seem to me that the study of God’s world should lead to a greater sense of wonder and worship.

Therefore, permit me three comments about the connection between studying God’s world and worship from God’s written Word:

1. Psalm 19 is a majestic psalm of worship written by King David. As he looks into the heavens, he proclaims that “the heavens declare the glory of God; the skies proclaim the work of His hands. Day after day they pour forth speech; night after night they display knowledge. There is no speech or language where their voice is not heard. Their voice goes out into all the earth, their words to the ends of the world.” The study of God’s physical world reveals wonders that lead to worship. Often, however, modern science is numb to wonder. The study of physics need not stand in opposition to faith and theology. In fact, the two are inextricably linked in a matrix of worship and awe of God’s creative power and grace. He made a universe that is “just right” for us, His image bearers.
2. Romans 1:18-32 details in a convicting manner what humanity has done with God’s revelation of Himself in His physical world: [Humanity] has “suppressed the truth in unrighteousness, since what is known about God is plain to them, because God has made it plain to them. For since the creation of the world God’s invisible attributes—His eternal power and divine nature—have been clearly seen, being understood from what has been made, so that men are without excuse. For although they knew God, they neither glorified Him as God nor gave thanks to Him, but their thinking became futile and their foolish hearts were darkened. Although they claimed to be wise, they became fools, and exchanged the glory of the immortal God for images made to look like mortal man and birds, and animals and reptiles.” In short, the case for theism from creation is compelling and complete. God’s physical world is evidence that He exists. But humanity has suppressed that obvious truth and sought other explanations. If the Higgs Boson does indeed exist and is proven so, this is another piece of evidence for the order, design and predictability of God’s world and therefore of His existence.
3. Finally, in Colossians 1:15-20 is found one of the most powerful paragraphs proving the deity of Jesus Christ in Scripture. The Apostle Paul is writing to a small church seemingly overwhelmed by a heretical threat from false teachers who were teaching some incipient form of Gnosticism, namely that Jesus was some form of angel or other created being. Paul meets the challenge of this error by declaring that Jesus is “the image of the invisible God, the firstborn over all creation.” As Jesus declared in John 14:6-9, to see Him is to see God: “He that has seen me has seen the Father.” The term “firstborn” is *prototokos* in Greek, which has everything to do with Christ’s position in God’s created order and nothing to do with His origin. In other words, Jesus has a rank of authority and sovereignty over the physical world for three reasons: (1) Because He created everything (1:16), there is nothing that exists that He did not create; (2) “He is before all things” (1:17a). How do you speak of Jesus in relation to time? You cannot use the past tense, nor the future tense, because Jesus “is!” As He states many times in the Gospel of John, when speaking of Himself—“I am.” In other words, Jesus is the self-existent, self-sufficient One of the universe; He is eternal; (3) “And in Him all things hold together.” In other words, Jesus is the cosmic glue of the universe. He ultimately holds all the planets, galaxies and stars of this universe together in majestic harmony and order. He also holds all the subparticles of matter together, including the Higgs Boson.

In short, the study of modern physics is awesome and truly mind-boggling. But, it should lead to worship, awe and recognition of the majestic glory of God revealed in His physical universe. In

one of his last books, *God and the Astronomers*, Robert Jastrow wrote in the book's last chapter of a group of scientists climbing this enormous mountain (of truth?) and when they reach the peak and peer over, they see a group of theologians. In other words, modern science and theology are seeking the same thing—truth about the physical world. The Higgs Boson, the “God particle,” is just another confirmation of the fact that science and theology are asking the same questions. Theology concludes that this is another proof for God's existence; science rejects that conclusion and, therefore, has no reason for wonder, awe or worship—and that is profoundly sad!

See Michael Gerson in the *Washington Post* (16 December 2011) and *The Economist* (17 December 2011), p. 18.

## PERSPECTIVE NUMBER TWO

### *The Ongoing Decline of Marriage in America*

Over this past year, I have done several programs on the sociological phenomenon called emerging adulthood—that stage of human development from 18-30 years of age. One of the most significant aspects of this age-group is the absence of a commitment to institutions. One of those institutions is of course marriage. A recent analysis of census statistics by the Pew Research Center confirms this lack of commitment to the institution of marriage. What follows is a summary of this analysis:

- Just 51% of all adults who are 18 and older are married in the United States. That represents a steep drop from 57% in 2000.
- Maryland is just below the national average at 50%, while Virginia is a bit higher at 54%. In the District of Columbia, only 1 in 4 adults is married, while more than half have never wed.
- The median age when people first marry is increasing, now at an all-time high of older than 26 for women and almost 29 for men. This is in stark contrast to 1960 when most baby boomers were children, and when 72% of all adults were married. Then, the median age for women was barely 20 and for men about 22.
- An earlier Pew survey found that more than 4 in 10 Americans younger than 30 consider marriage passé. Apparently this institution, so basic to society, is now perceived as obsolete.
- Nearly two in three college graduates are married now, compared with less than half who have a high school education.
- There is some evidence that the high divorce rate among baby boomers has had a negative effect on their children. Therefore, the generation born during a time of rising divorce rates in the 1970s and 1980s “say that watching their parents split convinced them not to rush.” What parents do can have a profound impact on the values, choices and commitments of their children!

No matter how one views these statistics, it is difficult to see them as positive. I believe that God created the institution of marriage—in fact it was the first one He created (see Genesis 2:18-25). It is the bedrock institution for procreation, for training and equipping children and for modeling and teaching the things of God. As this Postmodern generation is reaching maturity, these emerging adults have seen how flippantly their parents have regarded marriage and are therefore

avoiding it. Cohabitation is seen as a viable alternative to marriage, but with no commitment, no responsibility and no covenant. In short, emerging adults are choosing to live out what they saw in their parents but with a greater degree of consistency. Parents who treated the covenant of marriage in a superficial and shallow manner by ending it in a divorce are regarded as hypocrites by emerging adults. Emerging adults are thereby seeking to be more consistent and honest and rationally, in their view, experimenting with cohabitation before they marry. Cohabitation is an experimental stage, a first step, to see if a lifelong commitment is possible. The result, apparently, is that some never marry, or if they do, marry much later in life. Thus, marriage is no longer a defining institution for the culture. Experimentation, cohabitation and delayed marriage now define the new norm.

See Carol Morella's article on the Pew Study in the *Washington Post* (14 December 2011).

## **PERSPECTIVE NUMBER THREE**

### *America's New Energy Security*

Oil consumption in America remains an important issue for our economy and for our national security. Daniel Yergin, Chairman of IHS Cambridge Energy Research Associates, has recently shown that US oil consumption reached its peak demand in 2005 and has since declined. The nation has become more efficient in its use of petroleum and has secured new energy sources. How did this startling development occur? Yergin summarizes several remarkable developments:

- US crude output has risen by 18% since 2008. Both deep-water and onshore oil output has increased. What is called "tight oil," which is extracted from dense rocks, has increased dramatically. Today, tight oil production is about 1 million barrels per day. By the end of the decade, it could be at 3 million barrels per day.
- The same technology that has produced "tight oil" (hydraulic fracturing and horizontal drilling) has also created the explosive growth in natural gas production from shale rock.
- Oil extracted from dense rock and shale means lower imports, lower bills for these imports and substantial job creation within the US. For that reason, North Dakota has become the nation's 4<sup>th</sup> largest oil-producing state, after Texas, Alaska and California.
- Persian Gulf oil represents only 16% of our imported oil per year and politically hostile Venezuela now only 9% per year. Our greatest sources of imported oil are Canada (25%) and Mexico (11%). This is, therefore, the importance of the Keystone XL pipeline controversy. If we do not permit this pipeline, this oil will go to China. It is in our national interest to make this pipeline work. It makes no sense to permit Canada's oil to go to Asia!
- Yergin concludes: ". . . the shift in oil sources means the global supply system will become more resilient, our energy supplies will become more secure, and the nation will have more flexibility in dealing with crises. It would also mean that economic benefits—in terms of jobs, manufacturing and services—would register on the ground in North America." Rising tensions with Iran and the volatile Middle East can be offset by the growing supply of oil and natural gas from within North America itself.

Yergin's study and summary of the energy situation in the US is one of the most encouraging developments for America in quite some time. May our political leaders understand this and not thwart what is one of the most liberating energy developments in recent history. The Keystone XL pipeline is just one example. If we are serious about energy independence, the Keystone pipeline is one clear path toward that goal.

See Yergin's essay in the *Wall Street Journal* (12 December 2011).