MAN’S LONGING FOR IMMORTALITY SHALL ACHIEVE ITS REALIZATION.

Mr. BYRD. Mr. President, I ask unanimous consent that an article from the July 20, 1998, edition of U.S. News & World Report and an article from the July 20, 1998, edition of Newsweek be printed in the Record. The two articles are relevant to the speech that I delivered on Tuesday this week entitled “Man’s Longing for Immortality Shall Achieve Its Realization.”

I understand the Government Printing Office will cost approximately $1,283 to have these articles printed in the Record.

There being no objection, the articles were ordered to be printed in the Record, as follows:

[From U.S. News & World Report, July 20, 1998]

SCIENTISTS AND THEOLOGIANS DISCOVER A COMMON GROUND

Darwin, Freud, relativity, the mechanics of the cosmos—each is for their wrongness have been taken as supporting the modernist conception of a change-based world in which forces devoid of meaning account for all outcomes. For over a century we have maintained that the big-bang theory shows that no god was necessary at the creation. Intellectuals have wrung their hands in angst about how bang-caused cosmic expansion will result in an inscrutable running down of the stars, proving existence to be pointless. A depressing ininviable death of the universe figures prominently in new books of post-modern novelists Thomas Pynchon; while in the movie Annie Hall, Woody Allen’s character is psychologically paralyzed by his dread of the galaxies expanding until they die.

By contrast new developments in big-bang science are almost supernaturally upbeat: The universe wants us, and the stars will shine forever!

This remarkable change in perspectives is helping inspire a warming trend between scientific and spiritual disciplines. A conference at the University of Texas sounded a famous heretics, and the polite way to reconcile science and theology was to simply agree that each would keep to its own realm: science would ask, and answer, empirical questions like “what is the big bang?” theology would confront the spiritual, wondering “why.” But as science grew in authority and power beginning with the Enlightenment, theologians were left to doubt God’s existence until a new generation of scientists dismissed God as an unnecessary hypothesis, one they didn’t need to explain how galaxies came to shine or how life grew complex. Since the universe could now be explained by the laws of physics alone, the late astronomer and atheist Carl Sagan concluded that “there are no reasons to suppose that there is a God.”

But now “theology and science are entering into a new relationship,” says physicist turned theologian Robert John Russell, who in 1981 founded the Center for Theology and the Natural Sciences at the Graduate Theological Union in Berkeley. Rather than undercutting faith and a sense of the spiritual, science is discovering a support for them, at least in the minds of people of faith.

Big-bang cosmology, for instance, once read as leaving no room for a Creator, now implies to some scientists that there is a design and purpose behind the universe. Evolution, say some scientist-theologians, provides clues to the very nature of God. And chaos theory, which describes such mundane processes as the patterns of weather and the dripping of faucets, is being interpreted as opening a door for God to act in the world.

But how does one reconcile science and religion? To this question, the Center for Theology and the Natural Sciences, by explaining Creation as a hiccup in space-time, science seems to undermine belief, render existence meaningless and rob the world of spiritual significance.

For instance, some theologians who embrace science, and scientists who cannot abide the spiritual emptiness of empiricism, are establishing institutes integrating the two. Books like “Science and Theology: The New Consonance” and “Belief in God in an Age of Science” are streaming off the presses. A June symposium on “Science and the Spiritual Quest,” organized by Russell’s CTNS, drew more than 320 paying attendees and 33 speakers, and a PBS documentary on science and faith will air this fall.

In 1977 Nobel physicist Steven Weinberg of the University of Texas sounded a famous note of despair: the more the universe has been comprehensively understood, the more he wrote, the more it seems pointless. But now the very science that “killed” God is, in one sense, helping to restore God’s existence. Some clergy are no more tolerant of science than ever, not for long. Books like “Science and Theology: The New Consonance” and “Belief in God in an Age of Science” are streaming off the presses. A June symposium on “Science and the Spiritual Quest,” organized by Russell’s CTNS, drew more than 320 paying attendees and 33 speakers, and a PBS documentary on science and faith will air this fall.

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idea that the universe did not just happen, but that there must be a purpose behind it.” Charles Townes, who shared the 1964 Nobel Prize in Physics for discovering the principles of the laser, went further: “One of the feelings that somehow intelligence must have been involved in the law of the universe.”

Although the very rationality of science often feels like an enemy of the spiritual, here, too, a new reading can sustain rather than challenge. Ever since Einstein, science has blurred a clear message: the world follows rules, rules that are fundamentally mathematical, rules that humans can only approximately or imperfectly abstract, basically making it up out of their imaginations, yet math magically turns out to describe the world. Greek mathematicians divided the circumference of a circle by its diameter, for example, and got the number pi, 3.14159 . . . . Pi turns up in equations that describe subatomic particles, light and other quantities that have no obvious connections to circles. This points, says Polkinghorne, “to a very deep fact about the nature of the universe,” namely, that our minds, which invent mathematics to describe the cosmos, can make itself.

To most worshipers, a sense of the divine as an unseen presence behind the visible world is all well and good, but what they really yearn for is a God who acts in the world. Some scientists see an opening for this sort of god at the level of quantum or subatomic physics. The spooky quantum behavior of particles is unpredictable. In perhaps the most famous example, a radioactive element might have a half-life of, say, one hour. Half-life means that half of the atoms in a sample will decay in that time; half will not. But what if you have only a single atom? Then, in an hour, it has a 50-50 chance of decaying. And what if the experiment is arranged so that if the atom does decay, it re-leases poison gas? If you have a cat in the lab, will the cat be alive or dead after the hour? Heisenberg says that there is no way to determine, even in principle, what the atom would do. Some theologians say that this means that there are no miracles. Science has already taught them.

Most scientists still look for a God that acts, if only indirectly. Physicist Mehdi Golshani of Sharif University of Technology in Tehran, drawing from the Koran, believes that natural phenomena are “God’s signs in the universe,” and that studying them is almost a religious obligation. The Koran asks humans to “travel in the earth” to see what God has made. This invites religious meaning that sometimes has little to do with the natural world. Such a “God of the universe” seems to be more compatible with science than a God who acts.

To Joel Primack, an astrophysicist at the University of California, Santa Cruz, “pre-cosmic events” are “God’s signs in the universe,” and that “God can act without violating the law of physics.” Even better, since few scientists abide miracles, God can act without violating the law of physics.

An even newer science, chaos theory, describes phenomena like the weather that are caused by some chemical reactions whose exact outcomes cannot be predicted. It could be, says Polkinghorne, that God selects which possibility is most likely. Or it could be that God’s action would have no effect at all.”

Some scientists see an opening for a deity to whom they can pray. For other believers, an appreciation of evolution is crucial to a religious person because it turns us to a privileged place? Primack doesn’t know, but he describes this as a “soul-satisfying cosmology.”

Although skeptical scientists grumble that science has no need of religion, forward-looking theologians think religion needs science. Religion “is incapable of making its moral claims persuasive or its spiritual comfort effective [unless] its cognitive claims are credible, argues physicist-theologist Rus-sell. Although upwards of 90 percent of the universe is made up of dark energy, fewer than 1 percent of people believe in a God who parts seas, or creates species one by one. To make religions for-geen belief. And although it cannot prove God’s existence, science might whisper to believers where to seek the divine.
French Enlightenment in the 18th century, did the votaries of science and religion drift into separate ideological camps. And only in the 19th century, after Darwin, was the supposed divide between “God” and “science” elevated to the status of cultural myth. History tells a different, more complicated story.

In the seventeenth century, religious myth invested nature and the cosmos with divine emanations and powers. But this celestial pantheon supported sober criticism of the heavens and sophisticated mathematical calculations. By 1400 B.C. the Chinese had established a solar year of 365 days. Ancients maintained the descent of system. Ancient Greece bequeathed Euclidean geometry, Ptolemy’s map of the solar system and Aristotle’s classification of living organisms, which served biologists until Darwin.

But none of these advances seriously disrupted religion’s more comprehensive worldviews. Buddhists, for example, showed no interest in investigating nature since it was both impermanent and, at bottom, an illusion. Islam made great advances in algebra, geometry, and as well as philosophy. But Muslim scholars left the mysteries of physics—motion, causality, etc.—to the power of Allah and to the aphorisms of Aristotle, whose works they recovered and transmitted to the Christian West.

The Bible, of course, has its own creation myth. Every story that natural-

ally led scientists to realize that nature had to be discovered empirically and so fostered the development of science in the Christian West. The universe created by a rational God had to be rational and consistent—that much the Greeks already knew. But a universe created out of nothing, as Genesis described it, could not in words, it could have turned out other than it did. It was only one of an infinite number of possibilities open to a wholly transcendent deity. Gradually, scientists realized that the universe created out of nothing, as Genesis described it, could not have turned out other than it did. It was only one of an infinite number of possibilities open to a wholly transcendent deity. Gradually, scientists realized that the possibilities open to a wholly transcendent deity. Gradually, scientists realized that the world was friable, and that there was no God’s existence that was deduced from pure thought—as Aristotle supposed—but instead needed to be discovered through experiment. Thus was experimental science nurtured by religious doctrine.

When the scientific revolution did occur, in Europe early in the 17th century, and researchers for the first time began to regard the world as a mechanism whose workings they could probe through the scientific method, it wasn’t God’s existence that was thrown in doubt. Rather, it was Aristotle’s “sacred geography,” in which Earth and the heavenly bodies were fixed and eternal. Relying on Aristotle, medieval Christianity had imagined a tidy geocentric universe in which nature served man and mankind served God. “In a certain sense, religion got burned for locking itself too deeply into a particular scientific view which was then discarded,” says Owen Gingerich, a professor of astronomy and science at Harvard.

First Copernicus, then Galileo (aided by one of the first telescopes) and Kepler demonstrated with ever greater precision that the earth went round in circles around the sun. Humankind, it seemed, was peripheral to God and the universe. All three scientists, however, were devout Christians who defended their new worldview as most worthy of God. He thought contradicted the bible, and powered the “mechanical theories” of Isaac Newton produced a god who designed a world machine and somehow sustained it in motion. Theologists readily accepted whatever proofs for God’s existence the new science chose to give. The result was a diminished “god of the gaps” inhabiting whatever dark corners remained to rational light. In this way, says Jesuit theologian Michael Buckley of Boston College, theologians themselves cooperated in the advent or modern atheism by relying on science to explain God and ignoring “the traditional sources of religious insight and experience that make belief in God intelligible.” By the 18th century, astronomer Pierre Laplace could explain nature as a self-sufficient mechanism. As for God, he told Emperor Napoleon, “I have no need of that hypothesis.” Did Darwin, did Darwin, did Darwin, did Darwin, did Darwin, did Darwin, did Darwin, did Darwin, did Darwin.

Now, at the end of the millennium, religion and science start to talk, though neither answers to the other’s authority. John Paul II consults with his Pontifical Academy of Science—most of whom are not Catholics. But, the Pope, can examine the often-hidden assumptions on which scientific theories rest. Confronted by dimensions of the world no scripture has encoded, theologians are forced to reconsider the problems of domestication into any single theory of how the world works. At the center—still—are flawed and fragile human beings trying to understand a universe that has the uncomfortable face of a home away from home.

AUGUSTUS ENGLEKEN STEVENS

Mr. BYRD. Mr. President, August is from the Latin Augustus, the eighth month of our calendar year, a time of harvest and of plenty, named after Augustus Caesar. Augustus Caesar, or, more correctly, Octavianus. He was the grandnephew of Julius Caesar, and he was the first emperor of Rome, from 27 B.C. through 14 A.D. Augustus is also an adjective, derived from the Latin verb meaning to increase, and in English meaning to inspire awe and reverence, impose, something that is imposing and magnificent, or dignified and majestic. The adjective augustan refers also to the age of Augustus Caesar and his reign and his writings, and so described is classical and elegant. The term Augustan age specifically refers also to the period of Latin literature during the reign of Augustus Caesar, when elegance and correctness were highly valued. Oh, that we might return to that time, when elegance and correctness—political correctness—were highly valued.

Augustine, a diminutive form of Augustus, was the name of two saints, Saint Augustine of Hippo (354-430 A.D.), a Latin church father and bishop of Hippo, in northern Africa, known for his “Confessions” and his work “The City of God.” The second Saint Augustine—the dates we are not sure of but we can believe that he lived until about 604 A.D. He was a Roman monk who went to spread Christianity among the English and who was the first Archbishop of Canterbury. See from this that the name Augustus is fraught with significance and with portent. It is a name to be lived up to with great deeds and great learning. It is also the name conferred upon the newest member of Senator Ted Stevens’ growing family, Augustus Engeleen Stevens. My guess would be the middle name is Anglo-Saxon. And this is the third child of Senator STEVENS’ third, Ben. It is also the tenth grandchild to join the impressive Stevens clan. This new-est Caesar to rule with his chubby and imperious fist, and to issue edicts in a piercing voice, was born on Monday, July 27, at 3:20 p.m., weighing in at a healthy 7 pounds, 10 ounces.

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And what feelings of immortality, to be a grandfather. Holding this youngest member of his family, born in the waning days of this second millennium, the namesake of one whose life spanned the opening days of the first millennium, and poised to come into his own birthright in the third millennium, Senator STEVENS can witness history unfold into the coming ages. Through children and grandchildren, one has a glimpse of the glorious future, the immortality of the human spirit. And, I am engaged with the bittersweet sorrow of time passing too swiftly and of children who grow up much too quickly.