# INSTITUTE FOR THEOLOGICAL ENCOUNTER WITH SCIENCE AND TECHNOLOGY

(ITEST)

### **NEWSLETTER**

Volume 15, Number 4

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Announcements:

## For Your Calendar:

- 1) The March 15–17, 1985 Workshop will treat the topic: Science, Technology, and Economic Systems." Details of the final program will be included in the January Newsletter. As in all the March meetings, the workshop format will be followed. The papers will be sent to the participants before the workshop.
- 2) The present schedule calls for a Conference in October, 1985 on the topic of "Space Exploration and Colonization." This, in our opinion, will be a significant national issue before 1990. We are planning to revisit the topic of "Brain Research and Human Consciousness in March, 1986. We dealt with this topic in October, 1975. Much has happened in brain research in eleven years and much of it is significant to ITEST concerns.

If there is a group of ITEST members who would like to host one of these meetings or others of these meetings in their region, please contact the Director (Robert Brungs, S.J., ITEST, 221 N. Grand Blvd., St. Louis, Mo. 63103. The invitation would be forwarded to the Board of Directors for approval. ITEST is most willing to hold its semi-annual meetings outside the St. Louis area, if we receive a viable invitation from another region.

#### Notes:

The film, "Lights Breaking" is entering into the final editing process. The anticipated deadline for the completion of the film is the end of 1984. Further details will be contained in the January, 1985 Newsletter.

We are considering a new layout and a new name for the ITEST Newsletter. So, don't be surprised if we send you something different next time around.

The Guild of St. Luke and Saints Cosmos and Damian, consisting of Catholic physicians of New Zealand, held its sixth combined conference of the Auckland-Wellington branches in Masterton, New Zealand from November 1-4, 1984.

The theme of the conference, "Horizons of Medicine-Manipulation of Man," set the stage for lectures and discussion on topics such as, in vitro fertilization and embryo transfer; genetics; contemporary aspects of human sexuality and implications for the person in the use and abuse of the new advances in the biomedical and bio-technological fields. Father Brungs delivered two major papers at the conference as well as serving on several panels. More than 200 physicians, nurses and students attended the conference held every other year in New Zealand. The next newsletter will highlight the sessions of the conference of particular interest to ITEST members.

# An Encounter Between Science and Religion

by:

Gerhard J. Plenert 3988 Orval Way Carmichael, Calif. 95608

Scientists find themselves at odds with the religious. Science and religion are continuously fighting battles over the origin of humanity. Neither side wins or loses primarily because neither side has convincing evidence. Nor does either side permit the "facts" of the other to be valued as evidence.

This paper will explore the war between religion and science. It will show that both sides have blind "faith" in their own beliefs, and suggest that there would be value in collaboration. It also shows that this contention is good because it keeps both sides carefully analyzing all the options. This paper will review the history of the conflict and then discuss some of the major conflict areas, indicating also the opposing views. At this point a compromise is suggested followed by an exploration of areas that science and religion cannot explain demonstrating that the total, blind acceptance of either conflicting "theory" is treated as "fact" only by those that truly "believe". The conclusion of this paper will elaborate the "missing link" between science and religion. It will show that religion is also a science, and that science is also a religion. Both are striving for answers and in many ways, and, in many cases, they are using the same tools. Neither has yet been able to define "truth" to the satisfaction of both sides, but both are making great strides forward.

It seems as if since the beginning of known history until as recently as the 19th Century, divine revelation has been intolerant of contradiction. Even today, in many parts of the world, divine proclamation cannot be questioned. This is strikingly evident in Fascist and Communist regimes. The irony is that both of these regimes outlaw religion. This is because they themselves involve a "devout belief" in their leaders, as have most countries throughout history. Intolerance to contradiction has caused much of the progressive intellectual development of humanity to be viewed with disdain. Divine revelation has been the overriding truth. This is the root of the contention that now exists. Both sides seek information toward their own truth, but religious dogmas have alienated the scientific community.

Throughout modern history, we find science attempting to expand the base of knowledge, and religion attempting to compress it, based on humanistic reasons and traditional faith. Faith is by nature unchangeable, and stationary, whereas science is progressive. This has caused a divergence between them. The initial answer offered by the religious community was to ignore the "problem", but it did not go away.

The strength of the churches has often put them in the position of civil power. Civil power in the hands of anyone, including the religious, can tend to become corrupted. The Roman Catholic Church with its two-thousand year history is a prime example for abuses of power. Protestantism and the other religions of the world are not exempt. This civil power was used towards the suppression of scientific study. This caused science to go underground, and in many ways, to fear religion. Galileo, who destroyed the belief that the earth was the center of the universe, opened the first big gap between science and religion. The next big gap occurred when the age of the earth was determined to exceed by far the six thousand year estimate of early Christianity. The religious community thought of the scientific community as heretical, and the scientific community used these examples to "prove" that the religious community was wrong.

Mistaken interpretations repeat themselves for both science and religion. This has continually widened the gap between the two. Today, these two are as far apart as ever. Science, religion, and philosophy each offer its own perspective. Science pushes to explain philosophical existence with rules of matter and theories of occurrences. Philosophy sees science as missing the purpose and meaning of existence. The uniqueness of the individual and his relation to the rest of existence cannot be explained away with formulas. The interactions between humans, and their ability to think and to distinguish "right" from "wrong" is something uniquely human and not a chance happening. Religion, on the other hand, believes it has the answers to both sets of questions, and many more. Religion, however, is a blend of both worlds. They use a basis of fact (scriptures or experiences) to develop speculative theories (interpretations). Much the same as in the scientific community, religion is filled with opposing views. They stand common on one belief: to deny God is to deny the ability to love, to have personality, and simply to be someone special. Science pushes ahead with hard questions about the "how" of existence. Religion asks the "why" of existence. Philosophy feels we should dedicate our days to the good of the race so that in the fading light of life's evening, on looking back, we are not forced to acknowledge how unsubstantial and useless are the objects that we have pursued.

It is necessary, at this point, to define theory and fact. Theory is "a system of assumptions... speculation" while fact is "something actually happening...truth; reality." The significance is that theories change, as new facts cause them to be changed, but facts do not change. Therefore, when theories are discussed, it must be realized that the "theory" may be modified daily, and one day may even be proven false.

This paper will deal with the following "theories" (as defined by the scientific and religious communities):

- 1) Evolution
- 2) Big Bang
- 3) Creation (defined as fact by the religious community based on ancient documents)

This paper will also deal with several unexplainable "facts":

- 1) The Shroud of Turin
- 2) The Power of Pyramids
- 3) The Construction of the Egyptian Pyramids

A contrast between the scientific theory of the "Big Bang" and the religious theory of "Creation" should be made. Both theories show signs of having inconsistencies and similarities.

In the Judeo/Christian era, creation occurred twice. The first time, all was created in an "instant of creation" by the "word" of God.<sup>6</sup> This creation was done by "word" alone. This is very different from the second creation that required specific acts. In the second creation God had to come down and do the work himself.<sup>7</sup> Here we have a book, Genesis, accepted by the Christians, Protestants, Jews, and many other religious traditions, that seems to contradict itself; or does it? Maybe there were two Gods, one working for the other.

Science is just as inconsistent about the origins of the universe. Some scientists believe in "steady state" origins and others believe in a "big bang" beginning of all things. No sooner has the majority of the scientific community begun to believe in the one big bang, when black holes started appearing, which seemed to suck everything back together. Now we have the doctrine of a repeating cycle of sucking together and big banging apart. Only one thing is sure, and that is that clerics and scientists disagree among themselves and with each other; or do they? The "big bang" does sound a little like the "instant of creation". A religious person might believe that science has finally proven at least one biblical "myth", that of creation. Science insists on a cause and effect relation in all that occurs. But what about the first "big bang"? Religion believes it has "the answer". When scientists were questioned in court about this uncaused cause they said, "We cannot explain the cause of the primordial explosion." According to the Big Bang theory, all of matter existed in a super atom billions of times smaller than an electron. Then it exploded to create all that now exists. Believing this theory requires as much "faith" as belief in a creator. Neither science nor religion has anything stronger than circumstantial evidence. Neither can stand on its own with "all" the answers. Perhaps they are both partially right.

The religious believe in creation. This encompasses both the theory of evolution and the big bang. It is for this reason that the religious do not have a special counter theory for evolution. A comparative analysis between evolution and creationism brings out another interesting area of conflict. The scientific community does not accept the biblical accounts as "evidence". The scientific community will only accept its own evidences. This leaves the religious in the awkward position of attacking evolution rather than proving creationism. Nevertheless, both concepts are "theories" and have undergone many changes and variations. It is of interest to compare some of the counter arguments that the two sides present.

The religious community sees the second law of thermodynamics as evidence that the scientific community themselves do not believe in evolution. This law states that within an isolated system, order and complexity can only decrease and never increase with time. This means that the universe is constantly becoming more disordered. 11 Evolutionists, however, claim that humanity has progressed from a chaotic state to a highly ordered state. Which "theory" is correct, thermodynamics or evolution? A piece of evidence that the religious use against the scientific community is the scientific calculation of the probability of matter arranging itself as bacterium. This probability is 1 in 10-1011 (one chance out of one followed by 100 billion zeros). Expanding this probability to humanity makes evolution very difficult to explain in the short 5 billion years of earth's history. 12' If calculations are made on the number of mutations of creatures that have existed on this earth, and if this is divided by the number of years that creatures have existed on this earth, we come up with 50 to 100 new, naturally created mutations every 1000 years. Why have there been no new mutations over the last 3000 years of history? In fact, the number of species has decreased, rather than increased as evolution would dictate. In Darwin's own words, the human eye, with its ability to focus, handle light variation, and depth perception, could not have evolved naturally. Speciation, according to fossil records, has occurred dramatically and suddenly, not progressed slowly. This disagrees with the slow adaption and development theories of evolution. If evolution truly believes in adaption (doing things the easiest way) why do we have sexuality? Would it not be easier to simply divide ourselves as we did when we were lesser creatures? These are six of the dozens of arguments that creationists have against the evolutionists. All these appear to be good points. Science responds by telling the creationists to "prove" its own theory, which the creationists cannot do. The scientists see evolution as an imperfect theory that is still under development. They claim that in time they can work out the flaws. 13

Evolution is not a new concept; it is simply an extension of the theories of the opponents of Aristotle. It builds on the "accidental combinations of organisms." 14 Evolutionists argue that if a "Creator" did the work here on this earth, then why do all the living beings fall into classifiable categories? They claim that all creatures can be placed on a "tree" of development that links back to the simplest forms. 

"Why should God have thus conditioned man as an elaborate copy of the ape, when we know from the rest of creation how endless are his resources in the invention of types?" 16 Scientists see the changes that have occurred in the evolutionary concept since Darwin's death as "enhancements" to the theory. They see natural selection in action in the breeding process of domestic animals. They claim that the 4.6 billion years of the earth's existence is sufficient for the evolutionary process to have occurred. They feel so strongly about evolution that they claim that "evolution is a fact and which it cannot be upset without discarding all of modern biology, biochemistry, geology, astronomy – in short, without discarding all of science." Scientists see religion as an escape from reality. Religionists are on a desperate quest for a "quick and all-inclusive faith that will save us from the trouble of thinking about difficult problems." Religion presents a false knowledge to its believers. Out of this can only come disillusion. 18

Religionists see evolution as a doctrine that species have evolved by "ordinary natural laws (for the most part unknown) controlled by the subordinate action" (natural selection). This theory holds nothing to disallow Divine concurrence. The religious see the cosmos as being in obedience to a creative fiat. 19 Religion sees evolution as a satanic step towards a great apostasy. 20 Scientists see creationists as blind fools. Why does there need to be such an enormous dispute. Perhaps there is a middle ground. Humanity has, afterall, progressed to the ability of reason and both sides should agree to that. Is it possible that the Bible describes how man evolved from primitive life forms starting in the oceans of the world? The Bible refers to God when it says "at your command dumb lifeless water brought forth living creatures."21 It also says that "there were heavens and earth long ago, created by God's word out of the water and with water". 22 From what source did the Bible authors develop this concept thousands of years ago? Is it also possible that humanity did evolve to their current level of development, and after having evolved to a level acceptable to a Creator, they were given a soul? This soul gives them identity, uniqueness, and a purpose. Could these first souls have been Adam and Eve? Or is this type of solution too simple? What is right, and what is wrong? Both sides claim they are right. But the real question is, what does it mean to be right? Where does the concept of "right vs. wrong" evolve from? Have we evolved to do "right" or does it really matter? Of course it matters! Scientists are faced with moral questions about atomic and chemical weapons and genetic engineering. The answers to the questions of right and wrong will not be found in science; they can only be found in the conscience. But how did the conscience evolve? Science needs a little religion to answer some of these questions for themselves.

What are our historical origins? The finding of the Dead Sea Scrolls, the Asyrian and Babylonian archives, and the Egyptian archives have brought to light manuscripts that are thousands of years old. What are these documents; where did they come from and how old are they? Science can and does help answer these questions. Science needs a conscience and religion needs research. Can one really exist without the other? I think not.

Religion destroys scientific thought with scientific evidences. That is because science has put itself inside a rigid box which requires firm foundations. Religion's foundations, compared to those of science, are almost nonexistent. Religion, however, claims a higher foundation, that of "faith". Faith is something the believer cannot readily explain to a nonbeliever. Faith is an easy feeling, a satisfaction, a clear

conscience, an assurance. But what is faith to the scientist? The scientist has faith too, but in a slightly different form. He has faith in his abilities and in the eventual solution of problems. He has faith that his theories will become facts. Science feels compelled to see all, know all, and explain all. But the more scientists know, the more they find out they do not know. For every step forward, they take two steps backward into the unexplainable. In contrast, however, science has advanced humanity more in the last 200 years than in all the remainder of existence combined.

There are many areas where science and religion have worked on the same project, though not necessarily together. These areas are interesting because neither science, nor religion has found the answer. Perhaps it is because the answer lies somewhere in between. Perhaps it will take both areas working side-by-side to find the answer. Examples of these areas are the Shroud of Turin and the pyramids.

The Shroud of Turin is claimed by some to be the burial cloth of Jesus Christ. Until recently scientists felt this cloth to be a hoax. Elaborate tests have been run on the cloth. These tests include:

- 1) Computer simulations of what type of imprint would occur if a body was to emit a sudden burning burst of light. The image is precisely correct and the 3-dimensional imprint is not forgeable.
- 2) Attempts to identify the technique used to create the imprint have been investigated. No possible way to duplicate the imprint has been found.
- 3) Identification of the cloth type fits the time period of Jesus. 23
- 4) Identification of herb seeds found in the material locates the cloth in the Palestinian area.
- 5) Infrared mapping was used to test the imprint.
- 6) Ultraviolet photography was used to analyze the method of imprint.

A team of twenty-five U.S. scientists including those of Catholic, Protestant, Jews, agnostic, and atheist persuasions did the examination. They came away saying that the cloth was "awesome". It contained the markings of the five wounds of Christ, as well as First Century Roman flagrum markings on the back. It contained Roman coins in the eyes (a common practice of the time when burying the dead). 24 The carbon-14 dating test could not be run on the cloth because it is a destructive test and the church would not allow it. This leaves science with one point of controversy. However, recently, this test has been discredited many times as giving false results. This would indicate that the test would probably be considered by critics as meaningless anyway. The ultimate question is: "Is the Shroud of Turin Christ's burial cloth?" This will always remain outside of proof. 25 Science cannot discredit it, nor can the clerics prove it. Acceptance of the cloth becomes a matter of faith. "But one cannot help feeling that it has its role to play."26

Another area where scientists and the religious have worked together is that of the pyramids. The amazing number of Egyptian pyramids has always been a fascination to modern humanity. The first point of interest

has to be their existence. How were they built? The theory of slaves cutting and hauling these big blocks of stone does not fit. To build the number of pyramids that exist over the time required would have demanded the entire human population of that time period. Add to this the fact that the pyramid blocks had to be transported across water. Not only would the rushing Nile have made this risky, but where did the enormous amounts of wood come from that would have been required for rafts? Why were none of these large blocks lost in the Nile on the way across, and if they were lost, where are they? The method of construction remains a mystery. The next issue of concern is: Why were these pyramids built at all? What power were they believed to possess that would support an afterlife for the Pharoh? Pyramid power is a strange unexplainable fact. In Mexico stands a pyramid that is open to the outside air at its base. This opening is large and on many sides. Yet, regardless of the temperature outside, the temperature inside is always constant. Pyramid power is claimed to preserve food stuffs, amplify thought forms, and even increase sexual vitality. 27 Scientists consider pyramid power to be nonsense, yet the believers cite specific examples of "miracles" such as the preservation of food. Who is right? Again, science cannot disprove or explain this event. This is another example of where both science and faith are necessary.

Examples such as pyramid power and the Shroud of Turin defy scientific explanation. Similarities between man and ape defy religious explanations. Neither science nor religion has all the answers. Both are trying to get a little closer. As of yet, science has not even begun to discredit the possibility of a Creator, nor has religion proved his existence to the satisfaction of the scientific community. At best, all that can be done is to continue the search.

As the numinous is continually being redefined, perhaps a new perspective would be valuable. The Bible talks about a great flood. Science has found evidence of a great flood about 5000 years ago in the Persian area. The Bible talks about ancient Israel. Archaeological findings and translations of documents such as the Dead Sea Scrolls, confirm many of the events described in the Bible. Many books have been written explaining the coincidences between science and religion. An excellent example is Postle's book which ties high-energy physics to Eastern philosophies. In many ways, science is simply confirming what the religions already know.

Science believes that control of evolution may provide partial solutions to our troubles. This would be true only if we knew what we wanted to become. Who will play the role of "judge" or "creator" for humankind in the future? Perhaps the religious perspective should become involved, before genetic engineering gets out of hand the way "atomic energy" studies did. Before we become too involved with modifying ourselves to fit a deteriorating environment, perhaps a philosophy towards the conservation of the present environment would be sounder. 29

Berger emphasizes that theology must confront the question of truth. If theology is a seeker of truth, then scientific "truths" must be adapted and integrated into theology. However, as we discussed earlier, is it a truth (fact) or a theory that is involved in the scientific concepts of the big bang and evolution? By science's own definition, these concepts are theories, and therefore it is illogical to accept them as "truths".

Who has benefited humankind the most, science or religion? If we compare the intellectual and material advance of Europe during the last 2000 years of Christianity, against the last 500 years of science, we find a stark contrast. In many ways, religion has stagnated, rather than advanced intellect. 31 But if we

consider values and morals as indicators of advancement, we find that science has done little enhancement. Their preoccupation with the advancement of knowledge has left them blind to many of the moral repercussions of their knowledge. But, in spite of this, science holds to the maxim that "Ignorance is the mother of Devotion", and "Knowledge is Power".<sup>32</sup> The question that must be asked is whether knowledge without direction is positive power or negative power. Oman says it beautifully in his book when he says that in denying scientific finds, the clerical are not trying to deny the courageous use of science but are simply trying not to allow science to possess humanity.<sup>33</sup>

In a slightly different perspective, Morrow says:

There are many forms of knowing: science, experience, intuition, faith. Science proceeds on the theory that there is method in all mysteries, and that it is discoverable. It obeys, reasonably, what is called the 'first law of wingwalking': 'Never leave hold of what you've got until you've got hold of something else.' Faith by definition is a leap. It must await verification in another world.<sup>34</sup>

He contrasts the difference between religion and science well; however, he misses the fact that what science has "hold of" often requires a considerable amount of faith as well. Has science found any better explanations to existence than religion? Not really, since both have theories which require "faith". The prime difference between the two theories is their basis of "facts".

We need more clerical scientists to instill moral principles into science. We are getting more scientific clerics doing research on religious subjects. The two perspectives need each other. Together, they will foster newly distinguished disciplines of religious and scientific practice. But science and religion will never get too comfortable with one another. They have an innate mandate to keep each other on their guard.

"Religion without science is crippled," was Albert Einstein's view. Archaeology and linguistics are vital tools to the cleric. Science without a moral perspective is dangerous, as can be seen in pollution and military build-ups. As Morrow stated:

People capable of genetic engineering and nuclear fission obviously require all the spiritual and ethical guidance they can get. 36

Science and religion need to work together. They do, after all, have a common objective ... the betterment of humankind.

John A. Hutchison. Paths of Faith. (New York: McGraw-Hill, 1981), p. 6.

<sup>&</sup>lt;sup>2</sup>John W. Draper. History of the Conflict Between Science and Religion. (New York: D. Appleton and Company, 1899), p. vi.

<sup>&</sup>lt;sup>3</sup> Ian G. Barbour. <u>Issues In Science And Religion</u>. (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1966), p. 364.

- Houghton Mifflin Company. The Pocket Dictionary, (Boston: Houghton Mifflin Co., 1978), p. 225.
- <sup>5</sup> Ibid., p. 78.
- <sup>6</sup> Genesis 1:1 to 2:3.
- 7 Genesis 2:4 to 2:25.
- <sup>8</sup> Lance Morrow. "In The Beginning: God and Science," Time, (5 Feb. 1979), p. 150.
- <sup>9</sup> John Penter. <u>Circumstantial Evidence</u>, (San Francisco: Faraday Press, 1981), p. 61.
- Sidney M. Hegvold. "And They Call It Science!," The Good News, (Oct-Nov 1982), p. 21.
- Duane Gish and Isaac Asimov. "The Genesis War," Science Digest, (Vol. 89, #9), p. 82.
- <sup>12</sup> Ibid. p. 83.
- Sherwood L. Washburn. "Fifty Years of Studies on Human Evolution," The Bulletin of the Atomic Scientists, (Vol. 38, #5), p. 43.
- 14 Gail Kennedy. Evolution and Religion. (Boston: D.C. Heath and Company, 1957), p. 306.
- Duane Gish and Isaac Asimov. "The Genesis War," Science Digest, (Vol. 89, #9), p. 85.
- George Romanes. The Scientific Evidences of Organic Evolution. (London: MacMillian and Co., 1882), p. 87.
- Duane Gish and Isaac Asimov. "The Genesis War," Science Digest, (Vol. 89, #9), p. 87.
- Gail Kennedy. Evolution and Religion. (Boston: D.C. Heath and Company, 1957), p. 110.
- St. George Mivart. Genesis of Species. (New York: D. Appleton and Company, 1871), p. 306 & 307.
- Henry M. Morris. The Twilight of Evolution. (Ann Arbor, Michigan: The Craig Press, 1963) p. 96.
- The New English Bible with Apocrypha Oxford Study Edition. (New York: Oxford University Press, 1976), 2 Esdras 6:48.
- <sup>22</sup> Ibid., 2 Peter 3:5 to 3:6.
- Bill Laberis. "Shroud of Turin Dates to Time of Crucifixion," Computerworld, (Vo. 15, #28), p. 4.
- Carrie La Briola. "Matter of Faith: Scientist-Priest Calls Shroud of Turin 'Awesome'," <u>Journal Herald</u>, (Jan. 13, 1979), p. 32.
- Kenneth F. Weaver. "The Mystery of the Shroud," National Geographic, (Vol. 157, #6), p. 752.
- lan Wilson. The Shroud of Turin The Burial Cloth of Jesus Christ? (Garden City, New York: Image Books, 1979), p. 252.
- Max Toth and Greg Nielsen. Pyramid Power. (New York: Warner Books, 1976), p. 220.
- Denis Postle. Fabric of the Universe. (New York: Crown Publishers Inc., 1976), p. 7.
- Nicholas Hotton III. The Evidence of Evolution. (New York: American Heritage Publishing Co., Inc., 1968), p. 114.

- Peter L. Berger. A Rumor of Angels. (Garden City, New York: Doubleday & Co., Inc., 1969), p. 123.
- John W. Draper. History of the Conflict Between Science and Religion. (New York: D. Appleton and Company, 1899), p. 321.
- <sup>32</sup> Ibid. p. 326.
- John Oman. The Natural and the Supernatural. (Cambridge, Mass.: Cambridge University Press, 1950), p. 471.
- Lance Morrow. "In the Beginning: God and Science," <u>Time</u> (5 Feb. 1979), p. 150.
- Eugene M. Klaaren. Religious Origins of Modern Science. (Grand Rapids, Michigan: William B. Eerdmans Publishing Company, 1977), p. 191.
- Lance Morrow. "In the Beginning: God and Science," Time, (5 Feb. 1979), p. 150.

## **BIBLIOGRAPHY**

- 1. Barbour, Ian G. <u>Issues in Science and Religion</u>. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1966.
- 2. Berger, Peter L. A Rumor of Angels. Garden City, New York: Doubleday & Co., Inc., 1969.
- 3. Draper, John W. <u>History of the Conflict Between Science and Religion.</u> New York: D. Appleton and Company, 1899.
- 4. Gish, Duane and Asimov, Isaac. "The Genesis War," Science Digest, Vol. 89, #9, pp. 82-87.
- 5. Hegvold, Sidney M. "And They Call It Science," The Good News, Oct.-Nov. 1982, pp. 14, 15, 21.
- 6. Hotton III, Nicholas. The Evidence of Evolution. New York: American Heritage Publishing Co., Inc., 1968.
- 7. Houghton Mifflin Company. The Pocket Dictionary. Boston: Houghton Mifflin Co., 1978.
- 8. Hutchison, John A. Paths of Faith. New York: McGraw-Hill, 1981.
- 9. Kennedy, Gail. Evolution and Religion. Boston: D.C. Heath and Company, 1957.
- 10. Klaaren, Eugene M. Religious Origins of Modern Science. Grand Rapids, Michigan: William B. Eerdmans Publishing Company, 1977.
- 11. Laberis, Bill. "Shroud of Turin Dated to Time of Crucifixion," Computerworld, Vol. 15, #28, pp. 1, 4.
- 12. LaBriola, Carrie. "Matter of Faith: Scientist-Priest Calls Shroud of Turin 'Awesome',"

  Journal Herald, Jan. 13, 1979, p. 32.
- 13. Mivart, St. George. Genesis of Species. New York: D. Appleton and Company, 1871.
- 14. Morris, Henry M. The Twilight of Evolution. Ann Arbor, Michigan: The Craig Press, 1963.
- 15. Morrow, Lance. "In the Beginning: God and Science," Time, 5 Feb. 1979, pp. 149–150.

- 16. Oman, John. The Natural and the Supernatural. Cambridge, Mass.: Cambridge University Press, 1950.
- 17. Penter, John. Circumstantial Evidence. San Francisco: Faraday Press, 1981.
- 18. Postle, Denis. Fabric of the Universe. New York: Crown Publishers, Inc., 1976.
- 19. Romanes, George J. <u>The Scientific Evidences of Organic Evolution</u>. London: MacMillian and Co., 1882.
- 20. Russell, Bertrand. Religion and Science. New York: Oxford University Press, 1970.
- 21. The New English Bible with Apocrypha Oxford Study Edition. New York: Oxford University Press, 1976.
- 22. Toth, Max and Nielsen, Greg. Pyramid Power. New York: Warner Books, 1976.
- 23. Washburn, Sherwood L. "Fifty Years of Studies on Human Evolution," The Bulletin of the Atomic Scientists, Vol. 38, #5, pp. 37-43.
- 24. Weaver, Kenneth F. "The Mystery of the Shroud," National Geographic, Vol. 157, #6, pp. 730-753.
- 25. Wilson, Ian. The Shroud of Turin The Burial Cloth of Jesus Christ? Garden City, New York: Image Books, 1979.

We would welcome any reaction to this article that any of you would like to send us. This topic is complex enough that there is surely still more to be said on it.

Send the reactions to Sister Marianne Postiglione, RSM; ITEST; 221 North Grand Blvd.; St. Louis, Mo., 63103.

- 16. Oman, John. The Natural and the Supernatural. Cambridge, Mass.: Cambridge University Press, 1950.
- 17. Penter, John. Circumstantial Evidence. San Francisco: Faraday Press, 1981.
- 18. Postle, Denis. Fabric of the Universe. New York: Crown Publishers, Inc., 1976.
- 19. Romanes, George J. The Scientific Evidences of Organic Evolution. London: MacMillian and Co., 1882.
- 20. Russell, Bertrand. Religion and Science. New York: Oxford University Press, 1970.
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- 24. Weaver, Kenneth F. "The Mystery of the Shroud," National Geographic, Vol. 157, #6, pp. 730-753.
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