



Think & Believe

A Publication of Alpha Omega Institute

Sept./Oct. 1984: Vol. 1 No. 3

Fact or Assumption

By Mary Jo Nutting

The ability to distinguish fact from assumption is an invaluable skill in our complex society, yet most schools do little to foster this ability. Schools in general deal with a mass of information that students are expected to memorize without question and then regurgitate on a test. Very seldom are students asked to critically analyze this information for accuracy or implications. Rarely are they encouraged to distinguish between actual observations and the interpretation of these observations.

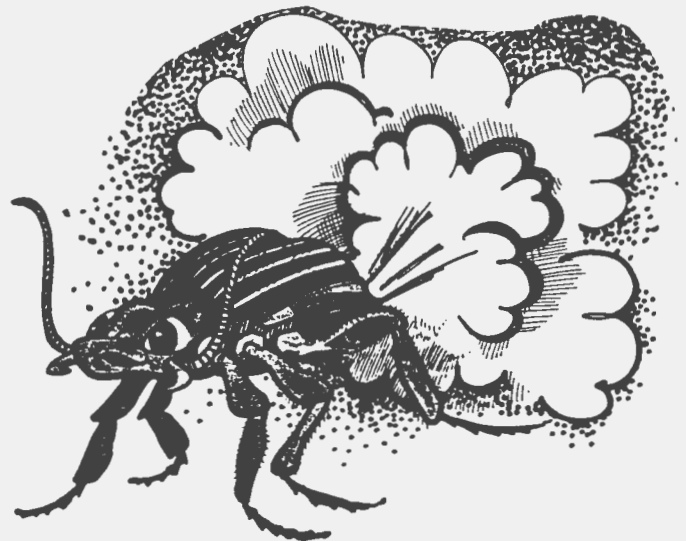
"Facts" or data are bits of information that can actually be observed or measured like size, color, temperature, chemical composition, time, date, etc. Interpretation of data, on the other hand, is more subjective. It deals with the relevance or meaning of the raw data, and may involve correlation of a variety of observations. Interpretation of data depends upon past experience, personal biases, assumptions, and intuition. These factors may actually influence what questions are asked, what type of data is collected, and even what type of research is funded.

Some assumptions are, of course, necessary to make scientific investigation meaningful. The problem arises when one accepts these assumptions as "laws of the universe" or when one adopts more specific assumptions that cause misinterpretation of the data. These misinterpretations, then, are often later printed as "fact." In the search for truth and understanding, it is important to examine our assumptions to see if they are reasonable. Do they fit with all relevant data? Are they consistent with known facts of science and history?

Distinguishing between "fact" and assumption, admittedly is not always easy as one reads the literature. That ability depends upon prior experience and knowledge. One must ask the right questions and critically examine each textbook

statement. The first section of "Notes & Quotes" this month gives several quotations out of common books. As you read each one, try to determine if it is fact or assumption. Ask yourself: How can I tell if it is true? Can it be measured? Can it be tested? Can it be observed in nature? Would others most likely make the same observations? Is there another way to view this information?

One of the most basic assumptions a person must make is whether to accept the Bible as the revealed Word of God. Acceptance or rejection significantly colors a person's scientific interpretation of the natural world. Each person must decide for himself on this important assumption, but such an important decision should surely be based on careful investigation and consideration and not on heresy. Many reject the Bible without ever reading it. That makes about as much sense as saying you don't like apple pie without ever trying it. We urge you to taste, then think... and believe.



*The Amazing Bombardier Beetle -
See Spotlight on Science*

NOTES & QUOTES

■ Fact or Assumption?

- "The Mesozoic Era began some 200 million years ago and ended some 60 million years ago. Although many other animals lived during that era, the dinosaurs were the dominant forms of animal life on land." (Good, White, and Stucker. *The Dinosaur Quarry*)
- "The millions of diverse living species we find around us in the modern world are all descended from a common ancestor that lived in the remote past." (Ayala, F. J. and J.W. Valentine. *Evolving: The Theory and Processes of Organic Evolution*)
- "The Earth's early atmosphere was very different from today's." (Lewin, R. *Thread of Life: The Smithsonian Looks at Evolution*)

■ Actually NONE of the above are "facts." They are all interpretations of data based upon many underlying evolutionary assumptions.

- "The story of creation, as told in the Bible...is seldom taken literally now. Its simple, sweeping concepts are interpreted by most modern Christians and Jews as being symbolic of the spirit and majesty of God. The world, in effect, was not created in six days even though the Bible says it was, and this discrepancy no longer troubles most devout people. Still, old ideas die hard..." (Howell, C.F. and the Editors of TIME-LIFE BOOKS, *Early Man*, 1965)
- "The first evolutionists had their work made doubly difficult for them. Despite their growing faith in the evolution of man, they had little fossil evidence to go on that their theories were of necessity largely speculative. Darwin, in fact, wrote his epochal *The Descent of Man* without a single sub-human fossil as evidence to support his theory." (Howell, C.F. and the Editors of TIME-LIFE BOOKS, *Early Man*, 1965)

■ It might be interesting to note that experts in the field today concede that we have even fewer examples of "evolutionary transition" today than in Darwin's time. See the May/June issue for some very good specific quotes. Yet, we read:

- "It is today hardly to be doubted that man is as much a product of the evolutionary process as any other living thing." (Pilbeam, D. *The Evolution of Man*, 1970)

■ Clear back in 1888, Haeckel recognized what many today do not -- that evolution is only an assumption:

- "The doctrine of derivation, or theory of descent, as a comprehensive theory of the natural origin of all organisms *assumes* that all compound organisms are derived from simple ones..."
- "The doctrine of elimination, or the selection theory, as the doctrine especially of 'choice of breed or selection,' *assumes* that almost all, or at any rate most, organic species have originated by a process of selection..." (Haeckel, Ernst, *Freedom In Science and Teaching*, 1888, emphasis added)

■ Imagine standing in the presence of God and telling Him, "But God, we assumed the Bible was false!"

BOOK REVIEW

The Spotlight on Science this month features the unique design of the Bombardier Beetle as evidence of creation. Read more about this fascinating creature in the book, *Bomby, The Bombardier Beetle*. Bomby learns from his father about his amazing defense system and about the wise Creator Who Made him. The book is written in story form for children in the elementary grades. (Available from Alpha Omega Institute, Box 4343, Grand Junction, CO 81502 for \$3.95 plus \$0.50 for shipping and handling.) In the last issue, we reviewed *Dinosaurs: Those Terrible Lizards*. It also contains an excellent description of the Bombardier Beetle's amazing defense system. (\$7.95 plus \$1.00 handling).

Think and Believe is published bi-monthly by Alpha Omega Institute, Box 4343, Grand Junction, CO 81502. Editors: Dave & Mary Jo Nutting. Single copies of this publication are sent free upon request. Please write for permission to reprint material in this publication.

The Speed of Light

In a college course in astronomy, the professor, who was blatantly anti-creationist, lambasted the view that the earth might be young. His main argument was the size of the universe. According to him, light, which travels at 186,000 miles per second, would take billions of years to reach the earth from distant parts of the universe. The professor concluded that we wouldn't even be able to see most of the universe if the earth was created only 10,000 years ago.

What assumptions has this professor made? He has made several. The first one is a theological assumption. First of all, if God had enough power to create the universe in the first place, he surely would have created it so that it could be seen -- otherwise it would have been of no earthly good. As we see from observing living creatures such as the woodpecker or the bombardier beetle, God creates things fully functional. Who would buy an automobile that was only partly functional with important features like a steering wheel and brakes left out? In the same way, our Creator in His wisdom would have created the universe complete and observable right from the very start.

The second assumption is a very common scientific assumption. Like most assumptions, it is rarely questioned. This assumption, that the speed of light has remained constant, is usually accepted as "fact." How do we know this? We don't. In fact, during the last few years, research by creationist, Barry Setterfield, has shown that this assumption just might not be true. His research has indicated that the speed of light has been decaying at an almost exponential rate. Based upon his findings, Mr. Setterfield concludes that the speed of light was about a trillion times faster 10,000 years ago than it is today. This means that light leaving the remotest parts of the universe would reach us in only a few moments. Many other phenomena in astronomy which have been used to support the concept of the expanding universe resulting from the assumed "Big Bang" can be explained very nicely by the concept that the speed of light is decaying.

It should be pointed out that it has not been fully "proven" that the speed of light is decreasing. It still remains to be confirmed through further research. However, if it proves to be true, then, much of modern physics and astrophysics would need to be totally discarded. The main point to remember is that all of modern science is built upon some very large assumptions. If these assumptions are not correct, then the resulting science is way off base. The astronomy professor's attack upon the creationists was not based on facts, but upon ideas based upon mere assumptions.

The Amazing Bombardier Beetle

The Bombardier beetle is an amazing little creature that challenges traditional evolutionary thinking. Its unique chemical defense system is powerful evidence of design by an intelligent Creator.

When frightened, the Bombardier Beetle fires poisonous gas at boiling water temperature with machine-gun rapidity. The explosion is accompanied by a flash of light, an audible noise, and a cloud of vapor. By revolving the tip of its abdomen, the beetle can aim accurately no matter how its enemy attacks. The irritating, odorous gas is effective against ants, preying mantids, other beetles, frogs, mice, and even people.

Scientists have studied these interesting little beetles to determine how this amazing system works. Their findings show a highly integrated, well-designed system. The Bombardier Beetle has special glands to produce two chemicals, hydrogen peroxide and hydroquinone. These are stored in special storage compartments with a chemical inhibitor which prevents a reaction that would kill the beetle. When the beetle is disturbed, muscles contract, forcing the chemicals through a reaction chamber where an anti-inhibitor is added to deactivate the inhibitor. The resulting explosion is enough to discourage most would-be predators!

The question arises as you study this highly integrated system, "How could it have evolved?" Remember, evolution supposedly occurs by random mutation and natural selection. Each step must be selectively advantageous (or at least not harmful) to be preserved. How, by accidental combinations of these chemicals, would it be possible to get anything but an exploded beetle? There is absolutely no selective advantage in being dead! Even if some "lucky" beetle gets all the right chemicals, it still needs the reaction chamber, the proper firing mechanism, and the many neurological developments to aim accurately and distinguish between friends and foes.

In this system, *all* the parts had to be complete and functioning at the same time before *any* of it makes sense. The chemicals don't make sense without the inhibitor, but the inhibitor is useless without the chemicals. The anti-inhibitor is useless without the inhibitor. The storage chambers and reaction chambers make no sense at all without all these chemicals, and the firing device is useless without all the rest. Evolution, based on random mutations and natural selection, would never produce this kind of highly integrated system. Either the entire system evolved by a lucky gigantic genetic leap (which contradicts known genetic processes and is absurd), or it was designed by an intelligent Designer who knew exactly what was needed from the start. Creation by an intelligent Designer is the only reasonable explanation.

 **Recent Events** 

You've probably noticed that this newsletter is a little late! That *is* a fact. Praise the Lord! We have been very busy. During our 6 weeks in San Diego, Mary Jo had the opportunity to take a class in embryology and Dave finished up his research on the deposition of salt. Since we were under a tight time deadline, Dave averaged what seemed to be 50 hours per day trying to finish his work before returning to Colorado. We're thankful that it's done!

Labor Day weekend was spent at the Camp Id-Ra-Ha-Je Family Camp where we held a creation seminar. The high interest shown by the participants was encouraging. That camp really showed us the need to do more family camps and student camps since the atmosphere was so conducive to our message. Unfortunately, Dave was attacked by ferocious ticks while camping a few days later and contracted tick fever which put him totally out of commission for two weeks.

Returning to Grand Junction, the project of "catching up" caught up with us. Have you ever been away for 3 months? Boy do things ever pile up! So if you haven't received some long overdue personal communications, please be patient just a little while longer. We have also been speaking in this area, including an all-day seminar at New Horizons Church, another one at Cornerstone Christian School, a 4 week Sunday School series at Redlands Community Church, and lectures at various churches, schools, and Bible Studies. We also participated in the Western Slope Church Ministries Convention where several contacted us for future presentations.

One of the areas that is crucial to develop is the science enrichment program for the private schools in this area. We've started this program with presentations to the schools and with field trips. Many other methods for reaching the students are planned but will soon demand additional workers.

As this publication goes to press, we are heading for Western State College in Gunnison to give a presentation. We hope to have many more similar opportunities.

 **Upcoming Events** 

- | | |
|---------------------|--|
| November 11 | Covenant Presbyterian Church, Clifton, CO Contact church staff |
| November 15 | First Assembly of God, Grand Junction, CO Ministerial Alliance luncheon. |
| November 16, 17, 18 | Weekend Seminar, Vernal, UT Contact Herb Stoneman, 801-789-7343. |
| December 4 | Valley Bible, Grand Junction, CO Ladies Brunch Contact Mary Ann Ryan 243-2297. |
| December 9 | Christian Life Center, Grand Junction, CO Contact Church staff. |
| December 26-29 | Jr-Sr High Snow camp, Camp Id-Ra-Ha-Je, Somerset CO. Contact Dale Smith, 303-929-5221. |
| January 19 | Weekend Seminar, Redlands Community Church, Grand Junction, CO Contact us 245-5906. |

**Alpha Omega
Institute**

P.O. Box 4343
Grand Junction, CO 81502
(303) 245-5906

Would you like additional information about any one of the condensed articles or on another subject that we haven't even touched upon as yet? Write to us and we will gladly send you some.

**Bulk Rate
U.S. Postage
Paid
Grand Jct. CO
Permit No. 393**