now that fact is generally conceded. It is true that often the result is to make things appear older, not younger.

Variation of the Earth's magnetic field may be very important here. Barnes, especially, has shown that the field is decreasing. 5 It is known also that the field partly at least shields the Earth from cosmic rays, and that the cosmic rays cause the formation of carbon 14. So formerly, when the field was considerably stronger, there was less carbon 14. Organic remains from those times, then, contain little carbon 14; and that, in uniformitarian terms, in interpreted as a very great age of the samples.

The conclusion, then, seems to be that Creationists need to look at the results of tests with Carbon 14 very carefully; and that errors are not necessarily always in the direction of too great ages.

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CERTAINTIES, LESS THAN CERTAINTIES, AND EVOLUTION

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Received 2 September 1977, revised from 11 July 1977

It is suggested that Creationists may work most efficiently by noting that there are some doctrines about which they are certain, others which admit some uncertainty. Those which are firmly based on Scripture, and are matters of faith, are certain, there is no need of research to establish them, although corroboration may be satisfying.

About other points, which may for instance be mentioned only incidentally in Scripture, one feels less than certain. About these, sincere believers can and do reach different conclusions. Experimental research may throw light onto these matters; and, of course, so may further Bible study.

At the opposite pole from certainly—or, rather, it is certainly false—is the dogma of evolution.

As God's creatures we can derive knowledge of the world from Scripture revelation, from our own or other's experience, from specially contrived experience which we call research, and in some measure from logical reasoning.

All Scripture is given by inspiration of God and what it reveals are certainties. Much of what is revealed is of sufficient definitiveness that the Christian with study and often with help from others can arrive at a correct certainty, even on various matters relating to the world and origins. We do not need research to tell us about these matters, although research may corroborate.

Regarding other portions of Scripture, due to their brevity, for instance, or often the imperceptiveness of the reader, a person may arrive at less than certainty as to their meaning and scope. In considering the world and origins, we must identify our certainties and less than certainties, so as to rest in the former and try to resolve the latter.

Areas of Certainty

Most Creationists, I suggest, would hold the following to be Scriptural certainties:

1. The only eternal and unchangeable God in His wisdom and almightiness and by His will and act created all things, and continues to uphold and govern all things. In all areas and consistent with His nature God has been and is absolute sovereign and nothing is impossible with Him. God reveals to man only what He chooses to reveal. No man can expostulate with God and nothing can say Him nay.

- 2. The Genesis account of origins is to be taken as literal history. Adam (Eve formed from his rib and given to him) was appointed federal head of the human race and the race morally stood or fell in him. He descended from no creature and there were no men before him and there are no men but that are descended from him.
- 3. Adam transgressed and the human race fell into sin as literally described. The curse of vanity, misery, decay and death fell on Adam and on all men. Had Adam not sinned there would have been no death for the human race. Adam's transgression brought a curse upon the earth.
- 4. The total creation was not instant. There was an instantaneous beginning of creation and sequential creation and steps. There was growth and development and structuring from existing created material. For instance, matter created at the beginning was used on the sixth day in the making of the animals, and of man. There were created distinct kinds of flora and fauna, with no indication of branching among the kinds. Vegetation and fruit were given as food. Heavenly bodies

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were appointed for lights, signs, seasons, days and years. God created during six sequential days (meaning considered later) and rested on and blessed the seventh day. God pronounced His works good.

5. The earth is by God subject to vanity, corruption, decay and groaning. The earth will perish, wear out like a garment, be rolled up and be changed. The change

will occur at the return of Christ.1

6. God judged and destroyed mankind with a massive global flood, all as revealed in Genesis. The flood was a unique catastrophe, the worst yet upon the earth, and is a type of the climactic universal judgment at Christ's return.

Less Than Certainties

On these points everyone must speak for himself. For my part, I am not able from Scripture to arrive at the certainty embodied in the previous propositions. On some matters I have strong or lesser conviction; on some

I am unsure or questioning.

1. My strong conviction—almost certainty—is that creation occurred in six literal days. A natural reading of the Bible and concentrated application of best principles of interpretation lead to that conviction. The gap theory is an aberration. Davis A. Young argues that the seventh day extends until Christ returns and therefore the six days also can be indeterminate spans of time.² I consider this argument and resort to Hebrews 4 as not sufficiently convincing, and his conclusion to lack the broad foundation that undergirds the literal-day interpretaton.

2. It is, as already mentioned, certain that the earth will perish, wear out like a garment, be rolled up and changed. The same is asserted of the heavens. To me the heavy presumption is that the whole universe will wear out and perish—in order then to be changed. I am not sure that in these declarations we have an intimation of the laws of thermodynamics. The emphasis is that the first creation was always appointed to give way to the new creation in Christ, and the words "wear out" refer

to time passage, not decay.

3. Scripture does not seem to forbid a surmise that God originally at creation may have appointed death to life forms less than man. However, I feel that vanity, predation, ravages of nature and most aspects of decay on earth resulted from Adam's sin. It appears that eating of flesh came after the fall. If animal life was originally subject to death even apart from man's sin, the death may have been sudden without preceding vexation and decay. One can argue whether the vanity discussed in Romans 8 encompassed the whole universe. Possibly in discussions of vanity and decay we have some connection with thermodynamics.

4. I have a strong conviction from Scripture that, even if there are gaps in genealogies, man has not been on earth for more than six to ten thousand years. I do not believe that in the creation period or since there has been any branching or descent of one kind to another.

5. What degree of the supernatural is associated with the various post-creation unusual occurrences revealed in Scripture? The end of the sixth day is not necessarily to be construed as meaning the cessation of *all* creative acts; incidental creative acts in God's ongoing govern-

ment are conceivable. Must we always opt for that degree of the supernatural least required to produce the phenomena? When the sun stood still for Joshua, instead of arranging an atmospheric condition or bending light, God may have stopped earth rotation. Thorns and thistles and pest forms of life may have been created after the fall and special creations may have attended the plagues on Egypt. Study of the Bible with close attention to detail, remembering that God is the God of wonders with nothing too hard for him, and consideration of reported natural phenomena and archaeological discoveries along with difficulties of more natural models, may lead us to at least presumptions concerning the extent of the supernatural.

6. In the light of the Scripture account and foregoing discussion, I can conceive of a high degree of the supernatural in connection with the flood, possibly even a special creation of some of the water, and alteration of rates of process during the flood and in the aftermath. The flood, considering the impact it had according to Scripture, must have left traces in the earth. Because there are present evidences of other judgments (e.g.,

Babylon, Egypt, Sodom and Gomorrah, the land of Canaan), one would expect to find evidence of the Flood. And so one does, Creationists believe; but, of course, it

has to be interpreted properly.

7. I have the impression of both instantaneousness and sequential developing process during the six creation days. Reference to God's forming the earth with His hands could imply a molding and forming by God which occupied some time. God's stretching out the heavens could imply an expansion process. Does Ezekiel's vision of the bones assuming life reflect man's original creation? I can conceive of development, even radioactive decay, fossilization of small life forms, volcanic action or meteoric impact on the moon or planets involved in the act of creation-but all or part at rates beyond our experience. From our time reference much perhaps would have appeared as a blur of extensive activity. The creation of trees, for instance, might have appeared, had anyone been there to see, like a motion picture speeded up, or like time-lapse photography.

Confrontation with Evolution

How stands it between Scripture, as I consider the areas of certainty and less than certainty advanced in this article, and the pervasive evolutionistic pronouncements? The answer is: antithesis.

In this confrontation we remind ourselves that we may never adequately discern the past from present or future observations of earth or the universe. Without Scripture, and beyond the bounds where it speaks with sufficient definitiveness, we may be left only or in major part to mercurial speculations. As creationists we know there are weaknesses in the evolutionists' evidences, that scientists share the common problem of bias or baser traits, and that man has an antipathy in mind and will against the sovereign Creator. We are thankful for evidences tending toward creationism and are interested to hear of observed processes that extrapolated backwards seem to indicate young age.

From the standpoint of debate, a crucial issue is time. Six billion years versus six days: that can shake a man

and assail the Bible. I do not believe in evolution and I hold to what I consider to be the more sure Scripture account of the creation period; but I must admit that in connection with the problem of time questions arise to which I do not know the answer.

The Time Problem

The scientist and historian must always have his Bible at hand. What God says about origins and earth and universe history is true. The general Scriptural impression

is one of rapid creation not too long ago.

But scientists bring forth an array of processes, methods, observations and reasonings which they assert preponderantly evidence past vast ages. Some therefore sneer that the Bible was wrong all along; others claim that it was not wrong, but we had misinterpreted and thus days become ages or other than actual periods of history. And some further invoke God to buttress their claim. God would be guilty of deception in creation if our conclusions of vast age were not substantially correct, they say.

God would not be a deceiver unless His purpose were to deceive (which it is not); and He has no obligation so to order all in creation that scientists can proclaim age from what they consider their favorite "clocks." Adam and the earth on the sixth day would have had an appearance of some age beyond his or its actual age. It would be absurd to call God a deceiver in this: and this would especially be so seeing that He by special revela-

tion has disclosed the rapidity of creation.

Now it might be another matter if God buried bones in the ground to look as if an animal that actually never existed had died and decayed. There is a difference between evidencing something that never existed or occurred and not accommodating every scientist who

wants a particular time signature.

But the scientist responds: It is not just a matter of one or two "clocks" but a whole convergence and correlation of different "clocks", age estimates of strata, thermoluminescent indications of actual decay, astronomical observations, and logical conclusions. When there are such an abundance of confirmations, God, if he is true, must have credited them.

This response is not frivolous, but we point out that there are processes seemingly indicating youth that scientists apparently desire to ignore, that there are some untidinesses in the scientists' assumptions, that much remains to be discovered and considered—and again finally that we have a Bible revelation in which God certainly does not deceive.

One argument of the evolutionistic cosmologist which I personally have some difficulty is the simple one: Because we can see stellar objects that are, at the known speed of light, millions or billions of light years distant, the universe must therefore be very old. Of course if the astronomer is wrong on constancy of light speed or distance, then the argument is rent.

Some creationists have answered by asserting that on the fourth day God not only created the distant stellar objects but also created a continuous span of light to

earth so that they then became visible.3

But there is some problem with this. We again face the argument about deceit. I personally can accept that God is not misleading just because with our present knowledge the universe may appear older than it is. The difficulty, however, is that the light span suggestion might mean we observe events that never occurred. Would God do this?

Astronomers observe events on what they believe to be very distant stellar objects. Light travelling at its known speed since the fourth day, would not yet have reached us. So the light which we see did not leave the star after its creation. Thus we may observe something which never occurred. Of course we could hypothesize that the light span might have contained the subsequent history of the object before it occurred. Would God do this? Possibly this is not misleading. But it certainly is contrary to current theories about light.

I have no solution and I leave this for others to think about. Christian astronomers and physicists may be able to help here. Meanwhile I continue to adhere to

Scripture.

Conclusion

We waver not from Scripture regardless of prevailing winds. We must be cautious to identify our certainties and less than certainties, and guard against being too dogmatic about conclusions which we impute to Scripture but which lack sufficient Scripture revelation. As to origins, it is likely that the just will always, as in the past have to live by faith, at least in this present world.

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CREATION RESEARCH SOCIETY

History The Creation Research Society was first organized in 1963, with Dr. Walter E. Lammerts as first president and editor of a quarterly publication. Initially started as an informal committee of 10 scientists, it has grown rapidly, evidently filling a real need for an association devoted to research and publication in the field of scientific creationism, with a current membership of about 500 voting members (with graduate degrees in science) and over 1600 non-voting members. The Creation Research Society Quarterly has been gradually enlarged and improved and is now recognized as probably the outstanding publication in the field.

Activities The Society is solely a research and publication society. It does not hold meetings or engage in other promotional activities, and has no affiliation with any other scientific or religious organizations. Its members conduct research on problems related to its purposes, and a research fund is maintained to assist in such projects. Contributions to the research fund for these purposes are tax deductible.

Membership Voting membership is limited to scientists having at least an earned graduate degree in a natural or applied science. Dues are \$10.00 (Foreign, \$11.00 U.S.) per year and may be sent to Wilbert H. Rusch, Sr., Membership Secretary, 2717 Cranbrook Road, Ann Arbor, Michigan 48104. Sustaining membership for those who do not meet the criteria for voting membership, and yet who subscribe to the statement of belief, is available at \$10.00 (Foreign, 11.00 U.S.) per year and includes subscription to the Annual Issue and Quarterlies. All others interested in receiving copies of these publications may do so at the rate of the subscription price for all issues for one year: \$13.00 (Foreign, \$14.00 U.S.).

Statement of Belief Members of the Creation Research Society, which include research scientists representing various fields of successful scientific accomplishment, are committed to full belief in the Biblical record of creation and early history, and thus to a concept of dynamic special creation (as opposed to evolution), both of the universe and the earth with its complexity of living forms.

We propose to re-evaluate science from this viewpoint, and since 1964 have published a quarterly of research articles in this field. In 1970 the Society published a textbook, *Biology: A Search for Order in Complexity*, through Zondervan Publishing House, Grand Rapids, Michigan 49506. Subsequently a Revised Edition (1974), a Teachers' Guide and both Teachers' and Students' Laboratory Manuals have been published by Zondervan Publishing House. All members of the Society subscribe to the following statement of belief:

- 1. The Bible is the written Word of God, and because it is inspired throughout, all its assertions are historically and scientifically true in all the original autographs. To the student of nature this means that the account of origins in Genesis is a factual presentation of simple historical truths.
- 2. All basic types of living things, including man, were made by direct creative acts of God during the Creation Week described in Genesis. Whatever biological changes have occurred since Creation Week have accomplished only changes within the original created kinds.
- 3. The great Flood described in Genesis, commonly referred to as the Noachian Flood, was an historic event worldwide in its extent and effect
- 4. We are an organization of Christian men of science who accept Jesus Christ as our Lord and Saviour. The account of the special creation of Adam and Eve as one man and woman and their subsequent fall into sin is the basis for our belief in the necessity of a Saviour for all mankind. Therefore, salvation can come only through accepting Jesus Christ as our Saviour.

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ANNOUNCING SPECIAL REPRINT

Some Christians believe that Charles Darwin, toward the close of his life, repudiated evolution and became enthusiastic for Christianity. That this did not occur has been reported by Dr. Wilbert H. Rusch, Sr., in a 1975 investigative paper on what Darwin wrote, and presumably believed, in the last two years of his life.

Now a special reprint of that paper "Darwin's Last Hours" is available for twenty-five cents (\$0.25)/postpaid per copy from the College Bookstore of Concordia College, 4090 Geddes Road, Ann Arbor, Michigan 48105. This will be a fine publication to give to those people who inquire about a possible Christian conversion of Darwin.