

## REFERENCES

- 1/ Ellen G. White, *Spiritual Gifts*, 4 vols. (Washington, D. C.: Review and Herald Publishing Association 1945), vol. 3, p. 90.  
White, *Patriarchs and Prophets* (Mountain View, California: Pacific Press Publishing Association 1958), p. 111.  
White, *Spirit of Prophecy*, 4 vols. (Battle Creek, Michigan: Steam Press of the Seventh-day Adventist Publishing Association 1870), vol. 1, p. 85.  
2/ White, *Testimonies to Ministers* (Mountain View, California: Pacific Press Publishing Association 1962), p. 136.  
3/ White, *Spirit of Prophecy*, pp. 86-87. See also *Spiritual Gifts*, pp. 94-95.  
4/ White, *Patriarchs and Prophets*, p. 115.  
5/ White, *Patriarchs and Prophets*, p. 112. See also *Spirit of Prophecy*, p. 88; *Spiritual Gifts*, p. 93.  
6/ White, *Patriarchs and Prophets*, p. 114.

# Evidence or Conjecture?

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With mounting concern I have read Donald E. Hall's two 1971 articles (SPECTRUM, Summer and Autumn). "The 23-Hour Day" causes me to wonder whether he is trying to prove too much. Since I have not checked his sources, my comments are based on his report of them.

My first observation is that the phenomenon of one-per-day growth "rings" in marine life is perhaps only a coincidence, albeit a somewhat convincing one. I believe that this is an obscurantist position. Unless someone has observed a mollusk making a ring each day for an extended period, I think caution would be advisable.

Without a certainty that these creatures produce one ring per day as a general rule, are we justified in making conclusions such as Hall's? If "modern" marine animals (I presume he means present-day species) produce 360-370 rings per grand division (assumed to be a year), this means that some of them are making more than one ring per day. If some produce 360 per year, they are failing to make at least one per day; the ones who make 370 per year may have made less

than one per day at times and more than two per day at other times. As Hall states, this is similar to tree-ring growth, which is also erratic. Furthermore, ancient animals may have produced more rings per year than their modern counterparts because of some factor with which we are not familiar. If modern animals seem to have the ability to make more than one ring per day, why not prehistoric animals?

If we assume, for the sake of argument, that these creatures always produce about one ring per day and that tidal friction is slowing the earth's rotation, how can we be sure that this friction has always acted at a constant rate or that this is the only mechanism that could have slowed the earth's rotation? Such an assumption gives a conveniently small factor of drag if we are looking for a product of many millions of years as the age of the planet. But Hall calls it a "hypothesis" — which immediately places us on shaky ground.

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According to the graph in Hall's FIGURE 2, the rate of change, as he points out, was not only inconstant, but seemed to have reversed itself at least once, during the Triassic period, if his "error bars" are correct. Would this be true if tidal drag were responsible for a continuous braking of the earth's rotation? And why would the days per synodic month (I presume the graph should have said "month" instead of "year") remain constant, if not reversed, for nearly 200 million years between the Pennsylvanian and Upper Cretaceous epochs?

This seeming halt of the change in days per synodic month might reflect, in a diluvialist model, the thinking of workers who believe that a rapid flood action extended only up through the Mesozoic deposits (although this would not explain the change before a flood).

One wonders also if sufficient sampling was involved in the research Hall cites. It would not take many "counterexamples" of variant counts in ancient specimens to refute the conjecture in his article. Speaking of counterexamples, is the relationship of the 23-hour-day scientist to the 6,000-years-ago creationist the same order of relationship as the squaring of 2 to Hall's proposition A? The elementary procedure of counting from one to four gives firm epistemological grounds for dismissing his proposition A. On the other hand, what may be coincidence is combined with an assumption built on a hypothesis; and on this basis we are asked to doubt what God seems to say in regard to Creation and its date.

Admittedly, no one can "prove" the exact age of the earth. But even if God did not see fit to give us the exact date of Creation, we have accounts, guidelines, and hints of God's methods of creation, together with continuous genealogies from Adam to Christ (though these are open to some study).

It is obvious that no one has yet produced coercive proof for an age of our earth greater than 6,000 years. We cannot measure forces that operated in ancient

times. I do not wish to be equivocal or to belabor the old argument of dual explanations, but we cannot settle these questions by assigning probabilities to either side. There will always be room for doubt. Ellen White stated: "If you refuse to believe until every shadow of uncertainty, and every possibility of doubt is removed, you will never believe."\* Christ posed the rhetorical question: "When the Son of man cometh, shall he find faith on the earth?" (Luke 18:8). A six-day Creation week is the heart of the Sabbath commandment. The 6,000-years-ago date for Creation is not as firmly settled by the Bible. But if language means anything at all, a Creation *week* tells me that God used forces we know little about at a rate which indicates it was a once-for-all event.

What we know as matter and energy are present through processes in which we have had no experience and cannot explain with certainty. Man is confined to one small area of the universe — with a life-span of a very small order and with senses limited by dirty air and narrow-band response. As he strives to know both the universe and the atom, his physical limitation prevents him from comprehending either of these with certainty. This inability to receive information — which Einstein defines in his special theory of relativity — also limits the accuracy of our observations.

The history of science records repeated and humbling examples of reevaluation of evidence and rejection of models. Such findings ought to make us cautious about premature judgment.

I do not deprecate the efforts of scientists to gather and organize information. But a summary statement on the topic would be: "The evidence is not all in yet." As Hall suggests, I expect that God will have to provide the final evidence, and I am willing to wait until then.

Occasionally scientist contributors to SPECTRUM have expressed a desire for the Bible to have information value, but they seem to have decided in advance what information it will give. Such circular (and unproductive) thinking and methods of study are not in the mainstream of the search for truth.

\*/ Ellen G. White, *Testimonies for the Church*, 9 vols. (Mountain View, California: Pacific Press Publishing Association 1882), vol. 5, pp. 68-69.