

THE STRANGE HOATZIN

FRANK L. MARSH*

Shown here is a mature Hoatzin, an adult of the young bird shown on the cover. This bird, the *Opisthocomus hoazin*, inhabits northern South America. When full-grown, it is about the size of a medium turkey.

Of interest to creationists is the fact that it has certain features which are like those attributed to the extinct *Archaeopteryx*. This is especially true of the claws on the wings. Presence and use of the claws can be seen clearly in the picture on the cover.

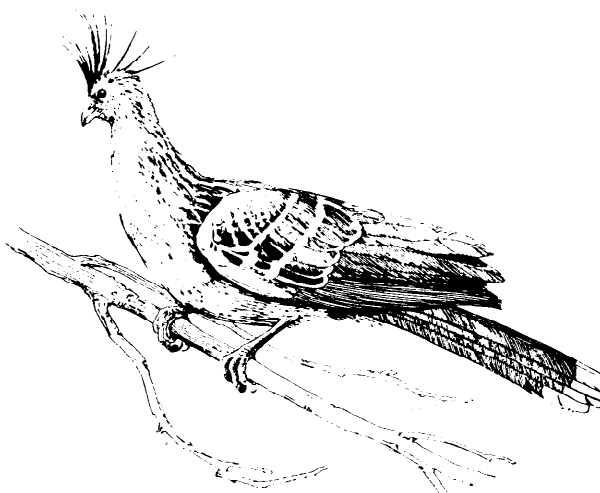
It is often maintained, on the basis of these claws, and some other features, that the *Archaeopteryx* was a transitional form, between reptiles and birds. But the living Hoatzin, which is clearly a bird, has similar wing structures.

Incidentally, is it not true that some bats have functional claws on their wings? Is any evolutionist going to claim that the *Archaeopteryx* was not a reptile on the way to becoming a bird, but rather a bird on the way to becoming a bat?

An article by Cousins deals with the similarities of the Hoatzin and the *Archaeopteryx* at greater length.¹ Also, an article in the *National Geographic Magazine*, some years ago, described the Hoatzin in its natural habitat.²

This picture of the mature Hoatzin is from

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Fundamentals of Ornithology by Josselyn Van Tyne and Andrew J. Berger, published in 1959 by John Wiley and Sons, Inc., New York, and is used here by permission of the publishers.

References

- ¹Cousins, Frank W. 1971. The alleged evolution of birds (in) Symposium on creation III. Edited by Donald W. Patten. Baker Book House, Grand Rapids, Michigan, pp. 87-99.
- ²Grimmer, J. L., and M. W. Williams. 1962. Strange little world of the Hoatzin. *National Geographic Magazine*, 122 (3):391-400 (September).

GOD'S PERSONALITY REVEALED BY NATURE†

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It seems that, in nature, no sooner is a rule formulated than an exception is identified. Sexual reproduction, for instance, is the rule among the higher living beings; yet parthenogenesis occurs occasionally. If the nature of living beings were controlled by some mechanical process of selection, it would be hard to see why there should be so much variety. But since creationists hold that the nature of living organisms is due to a Creator who might be considered an Artist and likes variety, all of this variety in nature is what should be expected. In fact, it might be one of the predictions of the Creationistic viewpoint that the more closely nature is examined the more variety will be found. At the same time, these facts show that the Creator is not a machine-like being, but One to whom personality may be ascribed.

Some Leaves Fall, Others Stay

Looking at my wild flower garden I was impressed by the difference among plants growing in the same habitat. The garden is a mere strip at the foot of a wall shaded by overhanging trees but a considerable population of tiny perennials

is crowded into it.

It seems that living things should reveal something about the Creator, just as, "The heavens declare the glory of God and the firmament showeth his handiwork."¹

The harbinger of spring, *Erigenia bulbosa*, and Dutchman's breeches, *Dicentra cucularia*, lost their leaves late last spring, retreating into the compact packages which are called corms and bulbs, respectively. These tiny plants open their leaves to the sun early in the spring to make and store food, then "close up shop" until the next

†This paper represents, in part, an expansion on some ideas set forth in a note in *The Naturalist*, Escondido, California, Vol. 25, No. 1, Spring, 1965.

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spring. They are well fitted to live under deciduous trees, ripening seeds and storing food for the next year before leaves come out on the trees to limit their supply of light.

But no sooner is this principle established about the spring wild flowers of the woods than exceptions are noted. For the bloodroot, *Sanguinaria canadensis*, one of the first to blossom, holds its leaves until late in summer. And to excite wonderment as to how it is done, the liverleaf, *Hepatica triloba*, holds its leaves all winter. The leaves may turn purple and brown in spots but they still hold some precious protoplasm and chlorophyll.

Deciduous trees do not dry out during the winter when water is frozen in the soil and therefore unavailable. The leaves, from which water is easily lost, fall off and the leaf scars are covered by a corky layer. Conifer trees hold their leaves, but they are thick and narrow, giving little area for transpiration. Yet the holly tree, *Ilex opaca*, has broad leaves and holds them all winter. They are covered by a coating of cutin which prevents undue transpiration.

What do these various observations suggest as to the formation and control of the world? Is God machine-like, or a person (not with human limitations of course, but having personality)? A machine works only in one way. When I strike the key on the typewriter marked "l", the letter "h" appears on the paper in the typewriter. If there is a variation, it is due to my action, not the typewriter, unless the machine is broken, but then it is useless. God, on the other hand, accomplishes His work in various ways. It is a characteristic of clover leaves that they have three leaflets, yet occasionally one with four leaflets is found. A machine would make all clover leaves with three leaflets, if it made them at all.

Variations in Reproduction

Now consider the complex process of reproduction for evidence as to the nature of God. It is a well-known fact that a machine does not reproduce itself. This, however, is not the point to which I am calling most attention. One might surmise that God had established some all-embracing principle in this process, and thus the production of a new generation would resemble the product of a modern, complex machine.

When Camerarius (1665-1721) established the fact that there is sex in plants,² it seemed that male and female parts are necessary throughout nature. Stamens, the "male" organs, form pollen grains while carpels, the "female" organs, form embryo sacs. The need for male and female animals was known previously of course.

But no sooner is a biological principle established than an exception is noted. It was observed that a queen bee that has not mated with a male

(drone) lays eggs and (contrary to the rule) the eggs hatch—but when full grown the resulting bees invariably are drones. Then it was established that all drones come from eggs which are not fertilized by union with a sperm. In other words, a drone bee has no father. This unusual process, called parthenogenesis, is found regularly in aphids, rotifers, and a few other animal groups.³

After Gregor Mendel finished his famous work on peas in 1865, a former teacher asked him to cross varieties of hawkweed.⁴ Mendel worked faithfully and ruined his eyes on the tiny flowers but could not interpret his results. No one at that time knew that hawkweed, like dandelion, reproduces by parthenogenesis.

In regular sexual reproduction there are two functions of the sperm: it brings in a set of chromosomes with certain genes, and also gives a stimulus to start growth. In parthenogenesis no sperm enters the egg and the start of growth comes as one event in a series of developments. Such a process is not likely to "evolve," being an unrelated and isolated occurrence.

Parthenogenesis was discovered by observation of plants and animals. It could not have been predicted by a study of scientific laws but rather, on the basis of scientific laws alone, would have been called impossible. Scientists, who find dealing with groups and generalizations (laws), most useful, tend to pass by, ignore, and even deny exceptions.

The birth of Jesus Christ was not by parthenogenesis; not a chance occurrence, but planned by God and carried out by the Holy Spirit.⁵ But perhaps God, in the beginning, started this exceptional method to demonstrate that He is not bound or limited by methods which He used on more numerous occasions.

Another latitude in reproduction is vegetative growth from cuttings. In this method, usually a plant starts from a portion of stem placed in water or soil, but African violets and some begonias start from a leaf. The growth of a plant from a cutting is an exception to the rule of development from a seed. If there were a country where this vegetative reproduction had never been observed, scientists there might rule it out as an impossibility. They would say that roots start from roots, not from stems or leaves.

The origin of the first woman from a portion of the side of the first man⁶ is considered by some persons, an impossible occurrence. If it had occurred many times, however, it could not be considered improbable. But an event does not have to occur twice in order to occur once.⁷

The Deists claim that God manifests Himself by setting up laws which govern the universe but that He does nothing more. They say indeed that nothing more is needed, for these laws are uni-

versal and cannot be broken. This ascribes a kind of mechanical action to God.

Exceptions to Physical Laws

What could be more universal than the law of gravitation? According to the old rule of thumb, "All that goes up must come down." But fine dust from the volcano Krakatoa encircled the earth and remained in circulation many months. Dissolved sodium chloride or copper sulfate in water never does settle. When particles are very small the effect of gravity upon the particles is less than other forces, such as molecular motion.

Perhaps the reader has seen the insect called water strider, *Gerris*, skimming along on the surface of the water. By experiment I have found that it is heavier than water but it floats upon the surface film, because the water strider is not heavy enough to break the surface film.⁸ In this instance also, the usual result from gravity is not noted; gravity is weaker than cohesion.

Deists make much of the regularity of the earth's movements. Indeed it is remarkable that days and years are predictable to a second of time. But modern researchers have shown that tiny particles, such as electrons, are not predictable as individuals. Individual motions of the myriads of particles that constitute a planet are canceled out, with the result that the planet's motion is regular.

Conclusions

To one who looks upon nature without prejudice, it would seem that personal control is revealed. God is not limited to one method, but uses a principle or force at His discretion. It is true that He works with the amount of regularity necessary to bring about concord, but what about the statement that God's laws cannot be broken? God is not limited by laws which He himself has made.

Scientists have done much to help humanity and it is greatly evident, especially in traveling, industry, and the healing arts. But effects of the scientific pursuit upon the philosophy of life, I greatly regret to say, have not always been good. This is even more true of the religion of evolution, which often, though not necessarily, accompanies science.

The person who worships science to the extent that he thinks there can be no exception to natural law has a ceiling over his belief. It may be such a low ceiling that he deletes the strongest passages in the Bible and robs himself of the grace of God.

The members of the Creation Research Society have learned to employ science rather than to worship it; and to reject the religion of natural origins which sometimes accompanies scientific study.

But contemplation of God should not stop with nature. The Bible reveals much more about the personality of God; He will be found to be not only powerful and wise, but also loving and forgiving.

References

- ¹Psalms 19:1.
- ²Sturtevant, A. H. 1965. *History of Genetics*, Harper & Row, p. 2.
- ³Moment, G. B. 1958. *General Zoology*, Houghton-Mifflin, pp. 132, 264.
- ⁴Iltis, Hugo. *Life of Mendel*.
- ⁵Luke 1:26-38.
- ⁶Genesis 2:18-23.
- ⁷Might it be suggested that the method by which Eve was created is analogous to that of growing a plant from a cutting? In both cases a pure strain, in Eve's case the line of Adam, is preserved. Humanly speaking, it is not possible to keep a human "cutting" alive long enough to reproduce the necessary organs; but "with God all things are possible."
- ⁸Lluham, Rosalie. 1923. *Introduction to Zoology through nature study*. Macmillan, p. 316.

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.