

The Bible: scientific drivel?

RESPECT FOR ARISTOTLE LED THE medieval Church to misinterpret various passages of Scripture, imagining that Scripture and Aristotle must concur. Paradoxically, many who reject the authority of the historical Church accept its interpretations of Scripture. They believe that the Bible actually says what the church used to say it says. Never mind that the church itself has recognised some of those errors and changed its understanding.

In this chapter, we'll take a brief introductory excursion into the fascinating world of science in the Bible, looking at some of the most common examples of alleged scientific nonsense.

The scientific ignorance of Bible writers

What better place to begin than with Moses? See if you can spot the difference between the real natural world and the one described here:

All winged insects that go upon all fours are an abomination to you (Lev. 11:20).

Insects have six legs, not four. Oh, the depths of ignorance of Moses.

Moses was also rather untutored about the powers of heavenly objects. He seems to have swallowed antique superstitions, such as the following:

And of Joseph he said, Blessed of the LORD be his land, for the precious things of heaven, for the dew, and for the deep that coucheth beneath, and for the precious fruits brought forth by the sun, and for the precious things put forth by the moon (Deut. 33:13-14).

The sun's rays play a major role in the growth of plants. And the belief that the moon has a big influence on agricultural cycles has some support even among cool-headed scientists. But as for the apparent teaching here that the moon is responsible

for output in some manner, well, that's absurd.

But Moses was not alone in his apparent belief that the moon enjoys significant influence over human affairs. An unknown Psalmist goes much further than Moses, even asserting that the moon can somehow harm those who spend too long moonbaking.

The LORD is thy keeper: the LORD is thy shade upon thy right hand. The sun shall not smite thee by day, nor the moon by night (Ps. 121:5-6).

Though the moon's cycle cues activities among many animals, and maybe plants, any educated person today knows the moon has no real influence on earthly affairs. Not only can it not produce fruits, it certainly can't harm anyone. Yet the Psalmist here seems to be saying just that. Cohen (1969, p. 421) confesses:

The danger from the moon was "lunacy", the word revealing the old belief that the moon had the power to derange human reason.

On another matter, how does one explain the references that seemingly postulate psychic or spiritual functions to parts of the human anatomy. Thus, distress can be felt by the liver (Lamentations 2:11), spiritual love is concentrated in the bowels (Philippians 1:8), and godly character resides in the kidneys (Jeremiah 11:20).

Some folks turn these seemingly embar-

rassing references into a stinging indictment against the Bible's credibility, and use them to justify jettisoning Holy Writ entirely. If God supposedly inspired Scripture, surely He would know that insects have six legs, not four. After all, he claims to have created them!

The scientific ignorance of intellectuals

But let's be fair. If allegedly embarrassing pericopes from Scripture demand its dismissal, then surely we must do the same with any and all other works found to be equally guilty. For instance, should we automatically dismiss the entire corpus of Voltaire's writings on account of his scientific gaffes? When famous eighteenth century naturalist, Georges Buffon, suggested that mountains once lay under the sea and had later been uplifted, Voltaire, one of the most famous atheists in history, actually sided with the church in condemning Buffon's suggestions.

Buffon's evidence? Shells of ancient marine molluscs and fossilised fish bones had been found adorning the slopes of mountain tops. Phooey, said Voltaire. They were not evidence of upheaval at all. The shells had been left by passing pilgrims; the bones had been discarded by littering picnickers (Taylor 1967, p. 79)!

Dare one slur the name of a scientific saint, Charles Darwin? But he wrote it to be read; it's in his book. So let's read it.

In North America the black bear was seen by Hearne swimming for hours with widely open mouth, thus catching, like a whale, insects in the water. Even in so extreme a case as this, if the supply of insects were constant, and if better adapted competitors did not already exist in the country, I can see no difficulty in a race of bears being rendered, by natural selection, more and more aquatic in their structure and habits, with larger and larger mouths, till a creature was produced as monstrous as a whale (Darwin 1968, p. 215).

Wide-mouthed black bears turning gradually into whales! Well I'll be. But do people discount his entire thesis on the grounds of one embarrassing descent from his usual caution? Nobody does that; but they want to do so with the Bible.

Were Bible writers wrong?

But should we allow for some scientific errors in Scripture, as long as they are small

enough? No. Was Moses just plain wrong in talking about insects on four legs? Note that nowhere does Leviticus actually say "insects have four legs". Though the only Old Testament uses of the phrase "going on all fours" are found in the eleventh chapter of Leviticus, leaving us no choice but to guess at its real meaning, it seems distinctly likely that the expression was a Hebrew colloquialism denoting bilaterally symmetrical animals with a small number of legs whose axis of orientation is parallel to the ground. In 11:27 it is applied to mammals. In modern colloquial English we sometimes speak of a person who is down on his hands and knees as being "on all fours". We don't mean that he has four legs.

In sum, it would be silly to suggest that Moses had no idea about insect leg counts, or that God whispered error into his ear. The Bible was written in the market language of the day, and used contemporary expressions.

As for the moon. Well now. The RSV translates the offending passage in Deuteronomy as: "with the choicest fruits of the sun, and the rich yield of the months." The Hebrew word translated "moon" in the KJV is actually in the plural number. The KJV translation fails to indicate that. The word appears only four places in the entire Old Testament



Voltaire (1694-1778), famous French author renowned for his atheism.

in the plural form, the other three being Exodus 2:2, Job 3:6 and 39:2, and in all cases months, not the moon, are clearly intended. Different fruits and vegetables appear seasonally, and thus each month does give produce. What appears at first glance to be a factual blunder makes perfectly good science sense when you check into it.

We simply have to reserve judgement about the meaning of the verse from Psalms about the moon smiting one by night. Pushing modern superstitions about lunacy being linked to the moon thousands of years backwards must be stricken from the record. Certainly, the New Testament twice uses a Greek word, *seleniazomai*, that is the exact etymological equivalent of “lunatic” to describe a medical complaint. But to insist that the word shows that Greeks of the time held the moon responsible for some illnesses cannot be sustained. The word could have originated any number of ways. For all we know, the term “moon struck” was facetiously coined by some wag after observing a wild party under a full moon. Deducing past beliefs from the etymology of terms is fraught with risk.

It’s hard to know what the Psalmist may have meant. Our problem often lies in ignorance of meaning. What did a given phrase or saying mean to them? The term “smiting moon” may well have made reference to the bitter cold in many desert areas on moonlit nights. That possibility would make great sense of the Psalm, telling us that neither the heat of a desert day, nor the cold of its night, will harm one under God’s providential care. To make a case against the Bible’s credibility based on our ignorance of original meaning redounds to our dishonour, not Scripture’s.

Scripture contains no untruthful teachings. But it uses “inaccurate” colloquialisms, such as “the four corners of the earth”. To quibble over such expressions would be trivial-mindedness to say the least. If God were inspiring the book of Genesis today, might he just prompt his scribe to write that in Noah’s time it “rained cats and dogs for forty days and forty nights?” Would future generations jump on such an expression, decrying Scripture for its anti-scientific bias!?

Rough enough is good enough

Folks will go to amazing lengths to discredit God’s Word. Take the following cheery piece taken off the world wide web:

To the creation “scientists”, of course, the crux of the matter is the Bible’s reliability as it applies to scientific matters, particularly to the events described in Genesis. But here, too, the Bible demonstrates itself to be no more sophisticated than were the simple goat-herders who wrote it. In First Kings 7:23, we are told of a large vessel that was made for King Solomon: “And he made a molten sea, ten cubits from the one brim to the other . . . and a line of thirty cubits did encompass it round about.” (I Kings 7:23) The ratio of the diameter of a circle to its circumference is known as “pi”, and pi has a numeric value of approximately 3.15 . Thus, a circular vessel of diameter ten cubits would have measured about 31.5 cubits round, not 30 as described here (and if the vessel were not circular, the circumference would have been even larger). Either the measurements cited here are incorrect, or the Bible is claiming that the value of pi is 3.0.

Charming, indeed. Goat herders, indeed! How do we honestly handle the objection raised above? Simply! The measurements given here are approximate only, rounded down in this case, and only intended that way. Even scientific experiments sometimes use approximations when all that is sought is a general piece of information. Rounding up and rounding down is quite common when precision is not called for.

The author of 1 Kings made no effort to establish 100% accuracy in commensuration, and made no pretence of it. He or she was presenting an artist’s conception, not a draftsman’s. A freehand painting is not “unscientific” when compared with a blueprint. They simply serve different purposes. Branding the Bible as unscientific over trifles like that is like charging a TV chef with unscientific behaviour for suggesting a “pinch” of some ingredient. The genre is narrative, not a specification sheet.

Strange behaviour of servants of God

Some men and women of God appear to be guilty of scientific ignorance. Surely God’s servants should not have been guilty of believing old wives’ tales. But God never has committed himself to purging his servants of erroneous scientific ideas. His concern is to purge their minds of spiritual error and sin.

Genesis 30:14-15 is often raised as an example of ignorance:

In the days of wheat harvest Reuben went and found mandrakes in the field, and brought them to his mother Leah. Then Rachel said to Leah, "Give me, I pray, some of your son's mandrakes." But she said to her, "Is it a small matter that you have taken away my husband? Would you take away my son's mandrakes also?" Rachel said, "Then he may lie with you tonight for your son's mandrakes."

Leah and Rachel both believed that the mandrakes, a kind of herb, were effective in affairs of the heart. Leah, it seems, may have looked upon them as an aphrodisiac; what she wanted more than anything was Jacob's affection. She may have slipped them into Jacob's evening bowl of stew. Rachel, on the other hand, who already enjoyed Jacob's attentions, wanted children; evidently she believed the mandrakes would aid conception. If that is the case, she would have eaten them herself.

Perhaps Leah and Rachel were acting from ignorance in this instance. But who will condemn any human being for scientific ignorance? Every one of us is ignorant of matters

that in due time will become common knowledge. To dismiss Scripture simply because it recounts incidents of ignorance on the part of servants of God would be absurd.

However, there is more to this case than would appear at first glance. Consider it a little more carefully.

To begin with, who will reject, in principle, the assertion that many herbs contain effective active substances that make them suitable for medicinal purposes? One should not stigmatise the ancients for such belief even when misguided in specifics. It is neither ignorant nor superstitious. Being wrong in the details simply makes you wrong, not ignorant. Maybe herbalists back then knew better than their counterparts today.

But of greater significance is the gloss to this whole account. Verse 17 says:

And God hearkened to Leah, and she conceived and bore Jacob a fifth son.

Rachel conceived because God worked a miracle. Moses gave the herbs no credit. No charge can be levelled against the Bible for teaching botanical drivel. It merely reported what people, and God, did.

Summary

One can logically argue that failing to correct the presumed biological error suggests tacit approval of erroneous ideas. Equally reasonably, one can interpret it to mean that God was honouring a right attitude and responding to endless prayer, choosing not to chastise His servants over scientific ignorance. Even if the narrative does expose ignorance on the part of God's servants, it does not teach that ignorance as if it were truth.

In addition, the absence of any formula along the lines of "and when Rachel used the mandrakes, God caused her to conceive..." does imply understanding on the part of Moses, or God who inspired him, that such notions were faulty. A final verdict is impossible.

Please discard any residual biases against Scripture. Forget the old line, "It 'ain't necessarily so — the things that you're liable to read in the Bible", because they are necessarily so.

By the way, we didn't answer the question about the Bible's use of parts of the anatomy as centres of psychic activity. We'll get back to that in a later chapter.



Mandragora officinarum, the plant believed by scholars to be the "mandrakes" used by Rachel in the hopes of aiding pregnancy. Millions of people use herbal remedies today for every possible medical problem, yet few would accuse such people of being superstitious.