



Can the Bible Survive the Scrutiny of Modern Science?

by John H. Ogwyn

We are within five years of the dawn of the next century. This past century has seen the most incredible scientific advancements in the entire history of humanity. Men have gone to the moon and returned safely. Computers have become a part of everyday life in a way absolutely unimaginable a mere 25 years ago. There has been an astonishing explosion of scientific knowledge. Yet today's number one bestseller remains the Bible—not some science book! The Bible was written in faraway places a long time ago. How can it possibly be relevant to the soon-dawning 21st Century? Perhaps the most persuasive reason for the Scriptures' continuing popularity is that it claims to be the infallible word of the Creator God (2 Tim. 3:16).

With all of the increase in knowledge about the past due to archaeological discoveries, how well does the Bible really stand up to careful scrutiny? Does it really hold up as historically accurate?

The Bible and Modern Scrutiny

In the 17th Century an intellectual movement called the Enlightenment arose in Europe. It was a reaction to the climate of superstition and ignorance of the natural world that had so characterized the medieval period. A mood of inquiry began stimulating leading thinkers to try and take a fresh look at virtually every subject. Though the Bible was regarded by early Enlightenment scholars as the Word of God—gradually—skepticism about some of its claims was introduced. By the 18th Century, many of the leading thinkers regarded themselves as "Deists." They believed in a Creator, as a rational conclusion deduced

from the creation. However, though the Bible was seen as a source of inspiration and moral instruction, any account not viewed as "rational" was regarded with skepticism. These Deist scholars, and even many theologians, considered the Bible as a humanly contrived "husk" which merely contained a "grain" of divine truth. A skeptical approach toward the miracles of the Bible was politically correct among those who regarded themselves as educated men. Belief that the Bible was historically accurate when describing events such as Noah's flood or Jericho's falling walls fell into disfavor.

This view flourished among the intellectual classes during the 19th Century, though popular religious belief among the working and middle classes actually increased during that period. The 20th Century opened with many intellectuals confidently predicting the demise of the Bible as relevant to the modern world. In a society that increasingly viewed itself as modern, sophisticated and scientific, it seemed that the Bible would have to be regarded as hopelessly out of date. After all, wouldn't increased scientific knowledge about the past expose the accounts given in the Bible as being merely myths and legends—legends that were, in reality, only written down many centuries after the events which they purported to describe?

It was in this vein that "higher criticism" of the Bible arose in German universities at the end of the 18th Century. By 1878, Julius Wellhausen had formulated his famous "Documentary Hypothesis." For more than a century his theory has been highly respected in most scholarly circles. This theory argues that Moses couldn't have written the books traditionally assigned to him (Genesis through Deuteronomy).

Rather, it is asserted, documents from four different sources were anciently cobbled together to produce the first six books of the Bible, the five books of Moses plus Joshua. These "documents" were imagined to have originated, in chronological order, with four different groups of people. Early on, this hypothesis holds, there were worshippers of Yahweh, ("Jahwists," German spelling), who recorded their legends. A little later, the theory states, worshippers of Elohim ("Elohists") recorded their myths and traditions. Later, in the time of King Josiah (early 7th Century B.C.), legal reformers ("Deuteronomists") supposedly forged the Book of the Law which they then proceeded to "find" in the Temple. This theory goes on to hold that finally a "Priestly school" of editors, which flourished during and after the Babylonian exile, put together the books that have come down to us.

Wellhausen, who wasn't the initial author of this idea, "restated the Documentary Theory with great skill and persuasiveness, supporting the JEDP sequence upon an evolutionary basis. This was the age in which Charles Darwin's Origin of Species was capturing the allegiance of the scholarly and scientific world, and the theory of development from primitive animism to sophisticated monotheism as set forth by Wellhausen and his followers fitted admirably... [with] Darwinian evolutionism. The age was ripe for the Documentary Theory, and Wellhausen's name became attached to it as the classic exponent of it. The impact of his writings soon made itself felt throughout Germany... and found increasing acceptance in both Great Britain and America" (Gleason Archer, A Survey of Old Testament Introduction, p. 79). Using this evolutionary model, the critics "determined" that Moses certainly couldn't be the author of the books traditionally ascribed to him. The religion of Israel must have gradually developed, they reasoned. Some even went so far as to assert that the Hebrew alphabet didn't exist in the days of Moses. The Israelites were illiterate, they postulated, and simply developed oral legends which were written down by much later generations. How much real proof existed for such revolutionary assertions? None whatsoever! For all of their talk of scientific rigor, the critics showed themselves to be most unscientific. They started from a premise that rejected a real God who intervenes in the affairs of men. If there is a God, they reasoned, He must be remote and not actively involved in running the cosmos. Therefore, they thought, the Bible cannot be what it claims to be, the revealed and infallible Word of that Creator God.

Science Looks at the Bible

Throughout the 1960s and 1970s, a virtual wave of archaeological discoveries shed new light on the Bible and the accounts contained in it. U. S. News & World Report noted that such discoveries were affirmed

"that the Bible is more historically accurate than many scholars thought" (Aug. 24, 1981). Most Bible critics and scholars long ago dismissed as myth the account of the destruction of Sodom and Gomorrah (Gen. 19). The existence of those cities themselves was considered highly doubtful. "Now two highly regarded American archaeologists, Walter E. Rast and R. Thomas Schaub, believe they may have found the remains of those cities, plus the three other settlements referred to in Genesis as the 'cities of the plain.' The ruins lie where the Bible indicates they would be—within a few miles of the Dead Sea. Moreover, at least three of the cities appear to have been destroyed by fire, which the Bible says was rained down by God in vengeance" (U.S. News, pp. 38-39).

Another set of discoveries, which not only corroborates the existence of Sodom and Gomorrah as historical cities, but also sheds light on many other biblical narratives, are the clay tablets of Ebla. The ancient city of Ebla was located in the northern part of what is modern Syria. Excavations at the site of this ancient metropolis have produced a treasure trove of information. An Italian professor, Giovanni Pettinato, has translated cuneiform tablets found there which contain commercial transactions that involved both the cities of Sodom and Gomorrah. As Time magazine noted, "Findings from Ebla may have an even broader impact. Many liberal Bible scholars treat Abraham not as a historical figure but as a sort of Semitic King Arthur. Their view is that the stories about Abraham and the other patriarchs must have been written down more than 1,000 years later than the events they purport to describe. Now in the area of the world that produced the Bible, Ebla has established that a sophisticated and extensive written culture existed well before Moses and even Abraham... After Ebla, we've got to take the Bible much more seriously as a historical document" (Sept. 21, 1981, p. 77).

In addition to information relating to the patriarchs and to the cities of Sodom and Gomorrah, Ebla's excavations provide information relating to the Exodus of Israel from Egypt. According to prominent Johns Hopkins University Egyptologist Hans Goedicke, an Ebla tablet not only tells of the Exodus from an Egyptian perspective, but also dates the event to around 1475 B.C. This is about two centuries earlier than conventional scholarly opinion, yet it is in general accord with the time frame set by the Bible itself. What about the theory of multiple authorship of the traditional books of Moses? According to Time, Bible scholar Yehuda Radday of Haifa's Israel Institute of Technology reported that a five-year computer study of the book of Genesis showed that it is the work of a single writer. Professor Radday and three associates studied the words of the Hebrew text and concentrated on 56 criteria of language behavior that are outside the conscious control of an author. He reached the conclusion from his analysis that Genesis is the work of a single writer and that the JEDP hypothesis, therefore, must be rejected.

On and on we could go. What we find when we shine the light of scientific scrutiny on the Bible's historical accuracy is that the critics are the ones shown to be lacking—not the Bible. It is the God-rejecting scholars whose views will not stand the careful, objective examination of time.

Did the Walls of Jericho Really Come Tumbling Down?

There have been few, if any, historical accounts in the Bible more lampooned by scholars than the fall of Jericho. The Bible tells of the Israelites walking around its city wall for seven days. On the final day its walls simply tumbled down when the priests blew the trumpets and the people shouted. This has seemed farfetched to skeptics. There have been two major excavations at the site of ancient Jericho. Both were conducted by British archaeologists. The first "dig" was directed by John Garstang from 1930 to 1936 and the second was led by Kathleen Kenyon from 1952 to 1958. Dr. Kenyon died in 1978 without having lived to see final publication of her work at Jericho. However, in 1982 and 1983, two volumes on pottery excavated at Jericho were finally published. This, together with the 1981 publication of stratigraphic data from the excavation, has finally made possible an independent assessment of previous conclusions about Jericho. This assessment was made by Dr. Bryant Wood and published in Biblical Archaeology Review magazine in its March-April 1990 issue.

Kathleen Kenyon had ascribed the date of the fall of Jericho to a period over a century prior to the time of

Israel's invasion. She decided that the biblical account must have been a fabrication. How did she reach such a conclusion? "Kenyon based her opinion almost exclusively on the absence of pottery imported from Cyprus and common to the Late Bronze period.... In other words, Kenyon's analysis was based on what was not found at Jericho rather than what was found.... To make matters worse, Kenyon based her conclusions on a very limited excavation area—two 26-foot by 26-foot squares. An argument from silence is always problematic, but Kenyon's argument is especially poorly founded. She based her dating on the fact that she failed to find expensive, imported pottery in a small excavation area in an impoverished part of a city located far from major trade routes!"(p. 5).

Garstang and Kenyon both found in their excavations at the Jericho site that the city they labeled as City IV was burned and destroyed. Did the destruction of City IV occur at the time the Bible says Israel entered the Promised Land under Joshua? Or was it merely an ancient catastrophe totally unrelated to events recounted in the pages of the Bible? "Dr. Wood gives clear evidence that the destruction of City IV discovered by archaeologists must be dated to about 1400 BC. This is the time when the Bible clearly shows that Joshua was leading Israel into the land of Canaan. Notice a couple of proofs Dr. Wood gives. '[One] of chronological significance is a scarab series discovered by Garstang. Scarabs are small Egyptian amulets shaped like a beetle with an inscription (sometimes the name of a pharaoh) on the bottom. In his excavation of the cemetery northwest of the city, Garstang recovered a continuous series of Egyptian scarabs extending from the 18th century B.C.E. (the XIIIth Dynasty) to the early 14th century B.C.E. (the XVIIIth Dynasty)... the continuous nature of the scarab series suggests that the cemetery was in active use up to the end of the Late Bronze period.'

"Finally, one Carbon-14 sample was taken from a piece of charcoal found in the destruction debris of the final Bronze Age city. It was dated to 1410 B.C.E. plus or minus 40 years, lending further support to the view that the destruction of City IV occurred around the end of the Late Bronze period, about 1400 B.C.E" (pp. 52-53). Even if Jericho was destroyed about 1400 B.C. when the Israelites entered the Promised Land, is there any evidence to show that it was destroyed as the Bible said? Absolutely !

In her excavations Kathleen Kenyon found red mudbricks from the collapsed city wall outside the city proper. As Dr. Wood states: "It appears that a wall made of red mudbricks existed... until the final destruction of City IV. The red mudbricks came tumbling down, falling over the outer revetment wall at the base of the tell [mound built up over the centuries due to successive layers of occupation]. There the red mudbricks came to rest in a heap. Thus, in Kenyon's opinion, the pile of bricks resting against the outer face of the revetment wall came from the collapsed city wall. "Here is impressive evidence that the walls of Jericho did indeed topple.... When the wall was deposited in this fashion at the base of the tell, the collapsed mudbricks themselves formed a ready ramp for an attacker to surmount the revetment wall.

"According to the Biblical account, the Israelites who encircled the city 'went up into the city, every man straight before him' (Josh. 6:20) Note that the Bible states that they went up into the city" (pp. 54, 56). There are various other facets of the excavations at Jericho that confirm the details of the biblical account. One of these is the presence of large amounts of grain found amidst the charred remains. This shows that the city wasn't looted as was normal custom. God had forbidden Israel to take a spoil from Jericho. The quantity of grain present also makes plain that the siege must have been short. The Bible shows that it only lasted seven days. Simply put, when the record of archaeology directly touches on incidents described in the Bible, and when that record is correctly interpreted, it inevitably shows the details of the biblical account to be correct! The Bible has nothing to fear from scientific scrutiny. Rather, it is the theories and ideas of men that cannot stand the test of time.

Is the Bible on the verge of being shown to be obsolete and irrelevant? Not on your life! There has never been a book MORE relevant than the Bible. Not only that, but there has never been a TIME when that book has been more needed to answer the big questions in people's lives than today!

So, Has Modern science discredited the Bible?

“Answer:” Probably the most basic reason for the modern widespread Rebellion against traditional values in every realm—social, moral, political, educational, religious—is the widespread impression that Biblical principles have been outdated by the discoveries of modern science. Our constitution and our entire American culture were permeated in their origins with a strong national faith in God and His Word. The gradual undermining of confidence in the Scriptures, resulting from the rise of uniformitarianism and evolutionism in the nineteenth century, inevitably was followed by a revolt against the social and political institutions erected on that faith. It is no accident that religious liberals are almost always moral and political liberals, and vice versa.

The fact is, however, that true science has always confirmed the Bible! It is not science but scientism (that is, the extension of the scientific theories to a supposedly complete philosophy of life and meaning) that has attacked the Bible.

“Science” means “knowledge” and therefore includes only that which we actually know, by direct observation and experience. It is the organized body of factual knowledge and relationships. The “scientific method” necessarily involves experimental reproducibility and verification. Thus science, in its proper sense, can deal only with the processes of the world as they now exist. It can tell us nothing for certain about prehistoric events and processes, nor can it predict future events and processes with certainty.

Many scientists (not science as such, but scientists—men who are just as biased, fallible, sinful and human as any other men) have assumed that these present processes are eternal processes, and therefore that they can explain everything that ever has been or ever will be in terms of what exists now! This is the philosophy of “uniformitarianism” and is the ruling philosophy in the modern scientific establishment. It necessarily leads to “evolutionism,” which seeks to explain the origin and development of all things in terms of present natural processes. But this assumption itself violates the two most fundamental laws of science, the First and Second Laws of Thermodynamics! These laws deal with the all-embracing entity known as “energy,” which includes all the phenomena of the physical universe. All processes are basically interchanges of energy—even matter itself is fundamentally a type of energy, which can, under the right circumstances, be converted into other forms. The First Law of Energy Conservation, which states that nothing is now being created or destroyed. The Second Law is the Law of Energy Decay, which states that in all real processes there is a net loss of energy available for further work. All natural processes, without any exception whatever, operate within the framework of the Two Laws.

Thus all processes are conservative and disintegrative, not creative and integrative.

The Bible, instead of being discredited by science, has actually anticipated modern science. The Two Laws were stated in the pages of the Scriptures thousands of years before their recognition by nineteenth-century scientists. In fact, the institution of the First Law by God is commemorated every Sabbath Day. “For in six days the Lord made heaven and earth, the sea, and all that in them is, and rested the seventh day” (Exodus 20:11). All of His “works were finished from the foundation of the world” (Hebrews 4:3). He is now “upholding all things by the Word of His power” (Hebrews 1:3). Thus, He is not now creating anything, but neither is He allowing anything to be annihilated.

The Second Law expresses in a formal way the fact that something is intrinsically wrong with the world. Everything gets old, wears out, runs down, and finally dies. In all processes, some energy becomes degraded to low-level heat energy and can no longer be used. Every ordered system, left to itself, tends to become disorganized. Complex structures tend to break up and become simpler. The “entropy” (that is, the disorder, or randomness) of a system tends to increase, and this tendency can only be superseded, locally and temporarily, if there is an excess supply of ordering energy brought in from outside the system.

In the Bible, this Law is called the “bondage of corruption” (literally, “decay”) under which the “whole creation is groaning” (Romans 8:21, 22). It is nothing less than God’s primeval Curse on man and his entire dominion (Genesis 3:17), which God invoked when man first brought sin into God’s originally perfect creation.

This Second Law teaches that, unless God Himself intervenes, the universe is proceeding inexorably toward an ultimate “heat death,” when all available energy will have been degraded to low-level heat and no more work can be done. Since this state has not yet been reached, the universe is not infinitely old and thus must have had a definite beginning!

The First Law states that, since all present processes are conservative, not creative, the beginning of all things required by the Second Law must have been accomplished by means of creative processes which are not now in existence {[1] The biblical, theological, and scientific implications of the First and Second Laws are treated more fully in the author’s book, “The Biblical Basis for” “Modern Science” (Grand Rapids: Baker Book House, 1984), pp. 185-215.} Therefore, they are inaccessible to science, and anything we are ever to learn about them must come by revelation from the creator Himself.

Thus the basic framework of science, confirmed by Biblical revelation, leads us inexorably and irrefutably to the first words ever written and the most profoundly important truth ever comprehended: “In the beginning God created the heaven and the earth.” (Genesis 1:1).

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An excellent magazine on creation is “Ex Nihilo”. You can find out how to get a copy by writing:

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“In the beginning, God created the heaven and the earth. (Ge. 1:1)”