

WHAT IS THE AGE OF THE UNIVERSE?

Until the mid-1800s it was believed by virtually everyone in the West, whether Christian or not, that the universe is some 6000 years old or so. A check of almost any old history book from this period will verify this statement. The secular history book my great grandfather used in the 1870s teaching in a one-room schoolhouse begins, "All our readers know that the history of mankind begins with Adam and Eve, about 6,000 years ago ..." ¹ **This was the dominant belief among the body of Christ even before the Reformation.**

Most early church fathers, apart from some questionable exceptions, also asserted with the majority of Christians through the ages that the creation was recent. ² Fields shows that even Augustine of Hippo was hardly consistent in arguing for a long chronology. ³ Accommodationists continue to promote Augustine as one of the most aggressive early harmonizers of Genesis 1 with long ages, yet Augustine in places argued for literal days of creation: "Thus, the period from the creation of light to another morning was reckoned as one day. It is clear that those days began at dawn and ended, at the expiration of night, with the dawn of the next morning." ⁴ **This is a position consistent with a short chronology. It is not what accommodationists would prefer for Augustine to have said.**

THE CHRONOLOGICAL PARADIGM SHIFT

Even though the Church held to a short chronology for nearly 2000 years, by the end of the 1800s there had been a complete shift of public and Church opinion about chronology. Even evangelical Christians leaders were scrambling to force millions of years of evolutionary time into the Bible. What had happened to cause this shift?

By the late 1800s, evolutionary ideas had swamped Western culture as if there had never been a widespread belief in creation only a few decades before. In 1894 it was possible to state accurately that, "We cannot escape from [evolution]. Its technical phrases have become parts of current common speech. ... It does not matter to what sphere of human work we turn, for in all alike we meet with the same mental atmosphere. Are we students of physics or chemistry, we have no sooner mastered the elements of the science than we are plunged into questions which deal with the 'evolution' of the 'atom' or 'molecule' from simpler forms of matter" ⁵ **This statement is about the "Victorian era" that we stereotype as exceedingly conservative, yet it sounds modern and secular.**

As mentioned, evolution had so completely captured the heart of the Church that prominent evangelists were espousing evolutionary beliefs at this time. Evangelist R.A. Torrey rejected Genesis chapter 1 as a literal creation account, denied that the creation occurred over six ordinary days, and insisted that the evolutionary chronology must be accurate. ⁶

Numerous fundamentalists of the time pressed evolutionary thinking upon the Church. Torrey led the committee which edited the famous series of twelve volumes setting forth the beliefs that came to be known as

fundamentalism. ⁷ With Torrey in charge, perhaps it is not surprising that although the contributors to *The Fundamentals* gave lip service to biblical inerrancy, some mildly and others aggressively espoused evolutionary thought and chronology. ⁸

Yet the Author of the Bible declared the end of biblical revelation with the completion of the New Testament. For some 1800 years the Church was unified in understanding this finished revelation to mean a creation thousands of years old, not millions or billions. Why did the Church suddenly change its position after 1800 years? **Had the Church misunderstood the Bible for nearly two millennia? Since Jesus had promised that the Holy Spirit would guide Christians, the body of Christ, into all truth, it can hardly be true that the Church was wrong on this issue for so long.**

MODERN ACCOMMODATIONISM

Our culture typically assumes that knowledge inevitably improves as time passes. This illusion has been termed the "progressivist fallacy" and it has been uniformly refuted by serious historians of science. **Cultures and civilizations rise and fall, and their knowledge rises and falls with them.** "[C]ivilizations come into existence, rise and flourish, and go out of existence by a slow process which covers decades or even centuries ..." ⁹ **There is no law of progress.** Historian Jim Bailey deplores that, "We have been brought up to believe in the [myth] of steady and inevitable progress from the squalor and brutality of primitive life to the enlightenment and comfort of the modern academic world." ¹⁰

Yet due to the widespread acceptance of evolutionary progress, even "conservative" theologians and commentators conclude that modern evolutionary chronology must be an improvement on the old belief in a "young" creation. **The truth is that knowledge regresses as a culture moves away from the Bible as our culture has been doing for a long time.** The human heart is unknowably deceitful (Jeremiah 17:9), so people nearly always mistake such regression for improvement. **In today's apostasizing culture, most Christians try to adjust or "accommodate" the Bible to current thinking, rather than judging current thinking by the Bible.**

A typical accommodationist rejection of recent creation runs something like the following: "Scientific evidence does not indicate that the universe is only a few thousand years old. This is a large subject, and the most charitable description of this belief is that it is a gross oversimplification.

"Not only are there no convincing evidences the universe is young, there are an overwhelming number of evidences that seem to indicate chains of events extending many digits beyond 10,000 years. The evidences of young age listed in creationist books are almost all referring to the surface of the earth, and therefore if valid (which they are not) they indicate a recent catastrophe on the earth, not a recent creation of the universe. Evidences of a long past in the universe include long gas jets projecting from galaxy cores, pairs of interacting and colliding galaxies, spiral galaxy arms ..."

The proper starting point for the rebuttal of such accommodationist claims is the authority of Scripture. **The real problem with the accommodationist position is not**

TABLE 1. BIBLICAL CHRONOLOGY

A RESPONSE TO ACCOMMODATIONISM

In the next to last paragraph above, the third-to-last sentence invokes processes that would take a long time to go from start to finish. It assumes that all processes in the universe must have begun at some "zero condition." But apart from revelation, man cannot know the initial condition of the cosmos and its parts. To insist otherwise places man's reasoning above Scripture.

A process may require so much time to complete one cycle, but that is no proof that such an interval has passed. Seeing a watch run doesn't tell us how long it's been running, even if we know the battery is good for a year. We need "revelation" from the owner of the watch to know how long it's been ticking. Likewise, the Owner of the cosmos has told us how long it's been running.

Although the Milky Way Galaxy would require some 200 million years to rotate once, this tells us nothing about how long it has actually been rotating. With the age of the universe at some 6000 years, the Milky Way has finished much less than 1% of its first rotation. Process time or cycle time is therefore independent of age. The only exception would be if we are present at the beginning of a process and can document its chronological beginning. This "exceptional condition" does not hold for any processes proposed as chronometers in the typical accommodationist rationalization of long ages.

Thus the processes proposed by the accommodationist as "chronometers" are not chronometers at all. **This erroneous conclusion is possible only if we make a prior assumption of old age for the universe**, but since old age is what the accommodationist is trying to prove, this is circular reasoning.

On the other hand, the historical record in the Bible indicates that the universe at most can be on the order of a few thousand years old. Table 1 summarizes this information with creation dated at 4173 BC. The Creator fulfills the "exceptional condition" mentioned above, since He was present at the beginning of all cosmic processes. **He has not kept the time of this beginning a secret, but has included chronological data in the genealogies of His Word.**

BIBLICAL GENEALOGIES: DIVINE REVELATION

Since the biblical genealogies are just as much God's Word as other parts, we would do well not to treat them lightly. Thousands, maybe millions, will one day answer to God for the ridicule they have given these divinely-inspired passages.

The chronology in Table 1 is used by many Bible scholars and is based partly on the work of Thiele, especially the setting of 853 BC for the death of Ahab.^{11,12}

Accommodationists have claimed that this chronology has "gaps," so it could be expanded to cover a long interval.

The reality is that there are no time gaps in the genealogies preventing us from having a continuous chronology back to creation. Jude 14 calls Enoch "the seventh from Adam," which matches the listing of names in Genesis chapter 5. **This means that Enoch really was the**

<u>Biblical Reference</u>	<u>Years</u>	<u>Date, BC</u>
Gen. 1:1	0	4173 ³
Gen. 5:3-32	1556	2617 ^{4,5}
Gen. 11:10-32	390	2227
Gen. 12:4, Acts 7:4	60	2167
Gen. 21:5, 25:26, 47:9	290	1877
Ex. 12:40	430	1447
1 Ki. 6:1	480	967
1 Ki. 11:42; 14:20; 11:25 15:33; 16:8, 15, 23, 26	114 ¹	853 ²

Notes for Table 1:

- 1 Totals in these verses - 4 - 6 = 114 years. Solomon began the temple 4 years after his Reign began. Regnal years were rounded up, Hence we drop 6 years (a half year on both ends) from the reigns of 6 kings.
- 2 Assyrian eponym lists via eclipse dated at 763 BC, with Ahab's death 90 years prior.
- 3 Creation: 4173 BC.
- 4 Flood = 2617 - 100 = 2517 BC (Gen. 7:11).
- 5 Babel = Peleg's first year (?), 2418 BC (Gen. 11:18-19).

seventh person in the Messianic line from Adam, not just the seventh person listed with others missing. This suggests that the biblical genealogies, especially Genesis 5 and 11, are not merely representative, for it is ultimately the Holy Spirit, not Jude, making the assertion in Jude 14. Would the Holy Spirit have allowed Jude to write what people commonly believed if it were not true? No, since this would make God a liar, and God "cannot lie" (Titus 1:2).

Arthur Custance was the strongest modern proponent of the so-called gap theory, sometimes called the "ruin-reconstruction theory." The gap theory claims that an indefinite gap of time existed between Genesis 1:1 and Genesis 1:2. Some accommodationists (but not Custance) have supposed that the ages of evolutionary geology happened in the "gap" between these two verses. **Custance was certainly open to finding gaps in the Genesis genealogies, but could not.** He wrote, "We are told again and again that some of these genealogies contain gaps: but what is never pointed out by those who lay the emphasis on these gaps is that they only know of the existence of these gaps because the Bible elsewhere fills them in. How otherwise could one know of them? But if they are filled in, they are not gaps at all! Thus, in the final analysis the argument is completely without foundation."¹³

Even if the genealogies were missing some names, however, this would not affect the chronology of the Bible. Recent-creationist Bert Thompson explains: "[E]ven if there were gaps in the genealogies, there would not necessarily be gaps in the chronologies therein recorded. The issue of chronology is not the same as that of genealogy."¹⁴

One might expect that a recent creationist would make this claim, but accommodationist and old-earthier James Jordan

agrees: "Gaps in genealogies, however, do not prove gaps in chronologies. The known gaps all occur in non-chronological genealogies. Moreover, even if there were gaps in the genealogies of Gen. 5 and 11, this would not affect the chronological information therein recorded, for even if Enosh were the great-grandson of Seth, it would still be the case that Seth was 105 years old when Enosh was born, according to a simple reading of the text. Thus, genealogy and chronology are distinct problems with distinct characteristics. They ought not to be confused."¹⁵ **Thus one cannot buttress an old-earth belief by finding gaps in the chronologies.**

Lest the accommodationist object that the Bible is not a legitimate starting point for chronological study, the question should then be posed, Whose authority are we to recognize -- that of the Bible, or man's "proof" of long ages? **As a Christian, the accommodationist is bound to accept the Bible as the ultimate authority, even in chronology.** The difficulty is that the accommodationist has not yet conceded that the Bible is chronologically authoritative. **Thus accommodationism is really a spiritual problem whose root cause is found in reservations about biblical authority.**¹⁶

LONG CHRONOLOGIES: BASED ON AN OLD EARTH

As mentioned, there is an accommodationist claim that creationist books virtually all address the age of the earth but ignore chronologies in astronomy, presumably because these are beyond dispute. **However, solar system and cosmic chronologies are ultimately based on the presumed long age for the earth.** If the earth is not old, the basis for the evolutionary chronology of the universe collapses.

The sun, for example, is "dated" at billions of years based on the belief that the earth is that old. For several generations astronomers have said that this is the only real reason the sun is believed to have an age of billions of years. In the 1920s astrophysicist Arthur S. Eddington wrote, "It is not much use extending the age of the earth without extending the age of the sun"¹⁷ **In other words, the earth was supposed to be old, so the sun must be old as well.**

Eddington repeated this point elsewhere: "Geological, physical, and biological evidence seems to make it certain that the sun has warmed the earth for more than a thousand million years [now taken to be some 5 billion years]"¹⁸ In context, the "physical" evidence to which Eddington referred was nothing more than the supposed geological and biological "evidence" that the earth is old. Eddington was explicit about this: "On such an important question we should not like to put implicit trust in [astronomical arguments] alone, and we turn to the sister sciences for other and perhaps more conclusive evidence. ... The age of the older rocks [of the earth] is found to be about 1,200 million years ... The sun, of course, must be very much older than the earth and its rocks"¹⁹ Since Eddington's time, the evolutionary age of the oldest terrestrial rocks has expanded from 1.2 billion years to some 3.8 billion years.²⁰ **The sun's evolutionary age has expanded, too.**

Two generations ago, physicist and science popularizer George Gamow likewise described the dependence of solar dating on the evolutionary age of the earth: "Our sun is now only about 3

or 4 billion years old since the estimated age of our earth is of that order of magnitude."²¹

The same logic for dating the sun at billions of years continues to this day: "By the end of the nineteenth century, geological evidence had increased the estimated age of the Earth to several *hundred* millions of years, and the discovery of radioactivity at the close of the century made it possible to measure the Earth's age with even greater certainty at around 4.5 *billion* years. ... [It] is hard to imagine how the Earth could be much older than the Sun [emphases in original]."²²

Astronomer John Fix says, "Geologists have found rocks 3.5 billion years old that contain fossils of marine organisms. These discoveries clearly demonstrate that the Sun has warmed the Earth for at least 3.5 billion years and probably for as long as the Earth has existed."²³ **These astronomers agree that the evolutionary age of the earth must be consulted to know the evolutionary age of the sun.**

The evolutionary age of the earth has not been proved, so neither has the evolutionary chronology for the sun. Solar expert John Eddy echoed this fact when he said, "I suspect that the Sun *is* 4.5-billion years old. However, given some new and unexpected results to the contrary, and some time for frantic recalculation and theoretical readjustment, **I suspect that we could live with Bishop Ussher's value for the age of the Earth and the Sun. I don't think we have much in the way of observational evidence in astronomy to contradict that.** Solar physics now looks to paleontology for data on solar chronology [emphasis in original]."²⁴ **Thus Eddy affirmed with the other astronomers quoted that the conventional age of the sun is based ultimately on nothing more than the presumed evolutionary age of the earth.**

Nevertheless, this is a staggering statement, with Eddy admitting that there is really no hard evidence that the sun is very old. Eddy went so far as to propose the possibility of returning to Ussher's chronology putting the creation at 4004 BC. Of course, Eddy did not believe this would really happen. His statement did not mean that he desired to abandon a long chronology, but was a plea to provide an objective rationale for the long solar chronology. Eddy's statement should not be interpreted as support for a short chronology or recent creation.

Besides Eddy's acknowledgement that the long solar chronology lacks an objective basis, **evolutionists have acknowledged that an old age for the cosmos generally cannot be proved.** Evolutionary cosmologist George Ellis has written: "A modern cosmologist who was also a theologian with strict fundamentalist views could construct a universe model which began 6000 years ago in time and whose edge was at a distance of 6000 light years from the solar system. A benevolent God could easily arrange the creation of the universe ... It would be impossible for any other scientist on the Earth to refute this world picture experimentally or observationally; all that he could do would be to disagree with the author's cosmological premises."²⁵ This statement should not be taken to mean that Ellis wants to be a creationist. Like

POSITIVE EVIDENCE FOR SHORT CHRONOLOGY

Historical evidence points to a short chronology. Self-professed atheist Duncan Steele has observed, "Many disparate civilizations have, for unknown reasons, assumed beginnings of time occurring a few thousand years B.C.," and even more specifically, "within a few centuries of 4000 B.C."²⁶ **The straightforward explanation of this fact is that the world began at creation only a few thousand years ago,** not scores of thousands, let alone millions or billions.

Humanists view accommodation as illegitimate.

Accommodationist Hugh Ross defends astronomical, geological, and biological evolution, but insists Adam and Eve were recent. Other Christians reject biological evolution, but accept cosmic evolution which requires lengthening the days of Genesis 1. However, non-Christians condemn even these attempts to accommodate the Bible to evolution. **Non-Christians may disagree with biblical creation, but they see the stance of biblical creationists such as those at the Institute for Creation Research as more consistent with Genesis:**

"Many Christians have taken the dishonest way of lengthening the days into millions of years, but the creationists make it clear that such an approach is nothing but a makeshift that is unacceptable Biblically and scientifically. ... Creationists rightly insist that evolution is inconsistent with a God of love. ... they have cleared the air of all dodges, escapes and evasions made by Christians who adopt non-literal interpretations of Genesis and who hold that evolution is God's method of Creation."²⁷

Non-Christians generally realize that accommodationism is illegitimate. A professing atheist has stated, "When the theory of evolution was advanced, that was the date that the Judeo-Christian religion began the decline in which it now finds itself in the West. **The two theories are in point-blank contradiction with each other.** Any scientists, any educators, any religious persons who state to you that there is no conflict simply want to hang on to both worlds because they have not been able to divest themselves of the infantile belief system which was programmed into them when they were children. ... They are too cowardly to see [that] religion should be abandoned so they stand there one foot in and one foot out."²⁸

A straightforward biblical reading disallows long ages. Compromise views such as the day-age theory, progressive creation, and theistic evolution find little no acceptance in the humanist community. The only people enamored with such accommodations are compromising Christians. **Ironically, even some accommodationist Christians realize that reading Genesis in a straightforward manner disallows evolution and long ages.** One of these has stated: "If we were to understand Genesis 1 in completely literal fashion -- which some suppose to be the only proper principle of interpretation if the Bible is truly inerrant

and completely trustworthy -- then there would be no possibility of reconciliation between modern scientific [i.e., evolutionary] theory and the Genesis account."²⁹

Conclusions

The earth and universe are c. 6000 years old. Creation was 4173 BC according to Table 1. The Church accepted a short chronology until the early 1800s. Long chronologies are based ultimately on the assumed evolutionary age of the earth, but civilizations have dated their beginnings at around 4000 BC.

Notes. Bolding in quotations is added.

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